

**COLLEGE OF  
HEALTH AND  
BIOMEDICINE  
HANDBOOK 2017**

# **DISCLAIMER**

The information contained in Victoria University's 2017 College of Health and Biomedicine was current at 28 November 2016

In today's university environment, changes to courses occur far more frequently than in the past. For current information on Victoria University's courses, readers are advised to access the University's online courses database at [www.vu.edu.au/courses](http://www.vu.edu.au/courses)

If you have difficulty in accessing this material electronically, please phone (03)9919 6100 for assistance.

# **IMPORTANT INFORMATION**

The course details in this handbook (Plus details of all other Victoria University courses) can also be searched on the University's online courses database at [www.vu.edu.au/courses](http://www.vu.edu.au/courses)

This handbook can be downloaded as a pdf file from the Victoria University website at [www.vu.edu.au/courses/course-handbooks-and-guides](http://www.vu.edu.au/courses/course-handbooks-and-guides)

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# HOW TO USE THIS HANDBOOK

Victoria University's 2017 College of Health and Biomedicine Handbook is designed to provide students with detailed information on course structures and unit details for undergraduate and postgraduate courses offered by the college in 2017.

The definition of fields used in course tables throughout this handbook include:

Credit Point – the number of credit points a unit contributes towards the total points needed to complete a course.

## PLEASE NOTE

This handbook provides a guide to courses available within Victoria University's College of Health and Biomedicine in 2017.

Although all attempts have been made to make the information as accurate as possible, students should check with the college that the information is accurate when planning their courses.

NOTE: Prospective students are strongly advised to search the University's online courses database at [www.vu.edu.au/courses](http://www.vu.edu.au/courses) for the most up-to-date list of courses.

This handbook includes descriptions of courses that may later be altered or include courses that may not be offered due to unforeseen circumstances, such as insufficient enrolments or changes in teaching personnel. The fact that details of a course are included in this handbook can in no way be taken as creating an obligation on the part of the University to teach it in any given year or in the manner described. The University reserves the right to discontinue or vary courses at any time without notice.

## OTHER INFORMATION

Information about course fees, articulation and credit transfer, recognition of prior learning, admission and enrolment procedures, examinations, and services available to students can be accessed on the University's website or by contacting the University directly.

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## SPECIALISATIONS

## UNITS

# College of Health and Biomedicine

Below are details of courses offered by the College of Health and Biomedicine in 2017.

This information is also available online on the University's searchable courses database at [www.vu.edu.au/courses](http://www.vu.edu.au/courses)

NOTE: Courses available to international students are marked with the (I) symbol.

## Bachelor of Applied Science

**Course Code:** HBAS

**Campus:** Footscray Park, St Albans.

**About this course:** The Bachelor of Applied Science is a three year course which offers majors in Applied Human Nutrition, Public Health Nutrition, Food Service and Food Science. Students are offered opportunities to take several different majors/minors to broaden and enrich their learning and diversify employment opportunities. The Bachelor of Applied Science commences with a broad discipline base that is extended in subsequent years and provides a context for the acquisition of further specialist knowledge and skills, enabling graduates to successfully compete in professional settings within the public health sector, community nutrition and food service and food science areas and/or pursue post-graduate study. Graduates seeking to become Accredited Practising Dietitians, registered with the Dietitians Association of Australia are required to complete an accredited Masters degree. While entry requirements into accredited Masters degrees may vary between different institutions, students will be required to complete at least the major in Applied Human Nutrition and the minor in Biomedical Nutrition.

**Course Objectives:** On completion of the Bachelor of Applied Science (HBAS), graduates of this degree will be able to:

- Critically review selected anthropometric, dietary, and biochemical techniques and approaches to assessing the nutritional status of populations and individuals across the lifespan;
- Evaluate and justify the use of evidence-informed methods to investigate and propose solutions to contemporary, emerging and future-oriented issues in human health and disease;
- Apply a broad and coherent knowledge base and skills to analyse predictable, unpredictable, and sometimes complex problems that reflect the multi-faceted nature of nutrition-related health, well-being and disease;
- Conceptually map the role of culture, values, ethics, economic, social, regulatory, and environmental factors in human health and disease;
- Critically review and interrogate the research literature in human nutrition;
- Critically review selected technologies used in food processing, product development, preservation and safety and explain their roles in both local and global food industry contexts;
- Evaluate and justify the use of evidence-informed methods and technologies to investigate and propose solutions to contemporary, emerging and future-oriented issues in the global food supply;

- Apply a broad and coherent knowledge base and a solid foundation in scientific design and experimental methods to analyse predictable, unpredictable, and sometimes complex problems involved in the global trade and supply of food products and components within differing regulatory environments;
- Conceptually map the role of culture, values, ethics, economic and social factors in developing a more equitable and sustainable global food supply.

**Careers:** The Bachelor of Applied Science offers Majors and Minors including Applied Human Nutrition, Public Health Nutrition, Food Service and Food Science. Students are offered opportunities to take several different majors/minors to broaden and enrich their learning and diversify employment opportunities. The Bachelor of Applied Science commences with a broad discipline base that is extended in subsequent years and provides a context for the acquisition of further specialist knowledge and skills, enabling graduates to successfully enter professional settings within the public health sector, community nutrition and food service and food science sectors and/or pursue post-graduate study. Graduates of the Bachelor of Applied Science will have experienced a range of educational settings and curricula and be equipped for entry into a constantly changing local and global workforce requiring intellectual, analytical, organisational, personal and interpersonal skills. Graduates completing the Food science major will be equipped to work in a range of occupations where knowledge of the food industry, food composition, food safety, food quality assurance, and processing are required. Graduates are expected to find employment in food processing industries, education and research institutes, government food laboratories, food wholesale and retail industries, food safety and regulation bodies, product marketing and food quality assurance. Graduates completing the Applied Human Nutrition major will be equipped to work in a range of community settings where knowledge of nutrition is required. Graduates seeking to become Accredited Practising Dietitians, registered with the Dietitians Association of Australia are required to complete an accredited Masters degree. To meet the entry requirements of accredited Masters degrees, students complete the major in Applied Human Nutrition and the minor in Biomedical Nutrition. Accredited Practising Dietitians (APDs) typically work in clinical settings (hospitals), community settings (outpatients or non-for-profit agencies), food service (managing hospital food service systems), government (FSANZ), not-for-profit organisations (e.g., Heart & Stroke Foundations), or may be self-employed (e.g., sports dietitians). Graduates completing the Public Health Nutrition major will develop careers relating to humanitarian assistance and international development work. Graduates will be prepared for the Master of Public Health (Global Nutrition and Active Living) following the Bachelor of Applied Science. Graduates from the Food Service major will be uniquely prepared for work in food service systems, including hospital settings and aged care residences, where they may be diet monitors, food service assistants and advance to take on supervisory roles. Students will be prepared for subsequent postgraduate study in fields such as Hospital Administration, Quality Assurance, Management and Aged Care.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4: a study score of at least 25 in English (EAL) or at least 20 in English other than EAL.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following

subjects: Biology, Chemistry, Physics or Mathematics PLUS IELTS (or equivalent):  
Overall score of 6 with no band less than 6.0.

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience will be considered for admission to the course.

#### COURSE STRUCTURE

To successfully attain the Bachelor of Applied Science, students will be required to complete 288 credit points (equivalent to 24 units) consisting of:

- 96 credit points (equivalent to 8 units) of Core College studies;
- 96 credit points (equivalent to 8 units) of Major studies (from the list below);

Plus One (1) of the following: Option A:

- 96 credit points (equivalent to 8 units) of Major studies (from the list below);

Option B:

- 96 credit points (equivalent to 8 units) of Minor studies (Two (2) Minor sets in total from the list below).

Students that complete the first year of Core studies can graduate with the following double Majors (Option A):

- Applied Human Nutrition / Food Science, or
- Applied Human Nutrition / Food Service, or
- Applied Human Nutrition / Public Health Nutrition, or
- Public Health Nutrition / Food Science, or
- Public Health Nutrition / Food Service, or
- Public Health Nutrition / Applied Human Nutrition.

Students that complete the first year of Core studies with their chosen Major, can graduate with two minors to complement their Major studies (Option B), as follows :

- Applied Human Nutrition, with Minors in Food Science or Public Health Nutrition or Biomedical Nutrition or Analytical Chemistry or Global Leadership or Global Indigenous Challenge;
- Food Science, with Minors in Applied Human Nutrition or Public Health Nutrition or Biomedical Nutrition or Analytical Chemistry or Global Leadership or Global Indigenous Challenge;
- Food Service, with Minors in Applied Human Nutrition or Public Health Nutrition or Biomedical Nutrition or Analytical Chemistry or Global Leadership or Global Indigenous Challenge;
- Public Health Nutrition, with Minors in Applied Human Nutrition or Biomedical Nutrition or Analytical Chemistry or Global Leadership or Global Indigenous Challenge.

#### Core Units

##### Year 1, Semester 1

HPC1000	Introduction to Human Nutrition and Food	12
RBM1518	Human Physiology 1	12
RBM1820	Nutrition, Society and Communication	12
RCS1110	Chemistry for Biological Sciences A	12

##### Year 1, Semester 2

HPC1001	Food Components	12
HHN1203	Inter-Professional Skills	12
RBM1528	Human Physiology 2	12
RCS1120	Chemistry for Biological Sciences B	12

#### Majors

HMAFSC	Food Science
HMAFSE	Food Service
HMAAHN	Applied Human Nutrition
HMAPHN	Public Health Nutrition

#### Minors

ESPIDG	Global Indigenous Challenge
ESPLP	Global Leadership
HMFSC	Food Science
HMAHN	Applied Human Nutrition
HMPHN	Public Health Nutrition
HMBNU	Biomedical Nutrition
HMACH	Analytical Chemistry

### Bachelor of Biomedicine

**Course Code:**HBBM

**Campus:**Footscray Park, St Albans.

**About this course:**The HBBM Bachelor of Biomedicine degree will prepare student's eligibility for entry into postgraduate medical courses following completion of the degree. As such, it will cover necessary physiology, anatomy and biochemistry pre-requisites, as well as up to date information on local and global disease and current therapeutic approaches. Students will also gain a solid foundation in designing and critically analyzing research methodologies and findings, with a particular emphasis on prevention and exercise interventions in medicine. Opportunity to undertake a research project will provide a platform to undertake a research degree. The application of the fundamentals of medical techniques to a range of practical scenarios including workplaces and community settings will offer students a blend of theoretical and experiential learning.

**Course Objectives:** The Bachelor of Biomedicine curriculum will align learning outcomes with modern teaching and assessment strategies, based on a thematic and workshop model, to better prepare graduates for the workplace. Units have been developed integrating Victoria University's core graduate capabilities and Victoria University's learning and teaching strategies such as work-integrated learning, internationalisation, eLearning, sustainability and language, literacy and numeracy. On successful completion of the course, students will be able to:

- Demonstrate a broad knowledge of biomedicine, including physiology, anatomy, biochemistry, pathophysiology, genetics and biostatistics.
- Critically apply biomedicine theoretical knowledge to practical situations in simulated learning environments, using current therapeutic approaches and exercise regimes for the treatment of chronic diseases.
- Evaluate current advances in medical interventions/therapeutics to investigate and propose solutions to global contemporary, emerging and future-oriented issues in biomedicine.
- Select and review research literature, critically analyse data and conceptually map the principles of scientific research and experimental design.
- Apply ethical and safe practice in all aspects of research and laboratory based work.
- Communicate information in oral and written forms to a range of associates including supervisors, peers, research teams; community and industry partners.
- Reflect on their own learning and career goals and the development of strategies for achieving them.

**Careers:** Students that complete the Bachelor of Biomedicine are eligible to apply for a variety of post-graduate programs, specifically medicine or other medical-related courses, Honours or research Masters. Graduates could also enter the workforce as researchers in a variety of fields including medical, exercise and nutrition sciences, and in medical and diagnostic application services.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4 - a study score of at least 30 in English (EAL) or at least 25 in English other than EAL; and a study score of at least 25 in two of Biology, Chemistry, and any Physics or Mathematics.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following subjects: Biology, Chemistry, Physics or Mathematics OR Successful completion of an Australian Diploma or Advanced Diploma (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience may be considered for admission to the course.

#### COURSE STRUCTURE

To attain the Bachelor of Biomedicine, students will be required to complete 288 credit points (equivalent to 24 units), consisting of:

- Four (4) units of Core College studies (equivalent to 48 credit points);

- Sixteen (16) units of Core Professional studies (equivalent to 192 credit points), and;
- Four (4) units (equivalent to 48 credit points) of Minor studies, one (1) Minor set in total, from the list below:

Year 1

Semester 1:

RBM1518	Human Physiology 1	12
RCS1110	Chemistry for Biological Sciences A	12
HBM1101	Gene and Evolutionary Biology	12
RBM1100	Functional Anatomy of the Trunk	12

Semester 2:

RBM1528	Human Physiology 2	12
RCS1120	Chemistry for Biological Sciences B	12
HBM1102	Medical Statistics and Experimental Design	12
RBM1200	Functional Anatomy of the Limbs	12

Year 2

Semester 1:

RBM2530	Pathophysiology 1	12
RBM2560	Medical Biochemistry	12
RBM2133	Cell and Molecular Biology	12

(Plus one unit from the selected Minor)

Semester 2:

RBM2540	Pathophysiology 2	12
RBM2800	Cardiorespiratory and Renal Physiology	12
RBM2200	Functional Anatomy of the Head and Back	12

(Plus one unit from the selected Minor)

Year 3

Semester 1:

HBM3104	Exercise Is Medicine	12
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(HBM3104 is a Capstone Unit)

HBM3102	Medical Imaging	12
HBM3200	Bioinformatics Methods	12

(Plus one unit from the selected Minor)

Semester 2:

RBM3640      Advanced Neurosciences      12

HBM3205      Clinical Genetics and Cellular Basis of Disease      12

(HBM3205 is a Capstone Unit)

HBM3106      Reproductive and Developmental Biology      12

(Plus one unit from the selected Minor)

Minors

ESPGLP      Global Leadership

HMIPH      Integrative Physiology

HMINUT      Nutrition

HMIMM      Immunopharmacology

## Bachelor of Biomedical Science

Course Code: HBBS

Campus: St Albans.

**About this course:** The Bachelor of Biomedical Science is a relevant and topical program that provides an innovative and comprehensive course where students obtain a strong foundation in the medical sciences, and practical experimentation through advanced laboratory skills. The course comprises core areas of study in a broad range of topics including Physiology, Anatomy, Biochemistry, Cell Biology, Medical Microbiology, Immunology, Molecular Biology and Human Genetics. The course provides in-depth understanding of how the body works from the molecular level through to physiological functions. Students gain a combination of theoretical and practical scientific skills through activities ranging from online interactive learning through to hands-on experiments. Students will expand and apply their knowledge of human biomedical science, to the causes, diagnosis and treatment of disease at molecular, cellular and system levels. The course ensures students have the skills and capabilities required for a diverse range of careers in biomedical science and post graduate study. The new curriculum offers a quality syllabus that emphasizes critical thinking and active learning via an inquiry team based learning a strategy producing skilled, knowledgeable and lifelong learners.

**Course Objectives:** The Bachelor of Biomedical Science enables students to experience a range of educational processes and curricula that will equip graduates for entry into a constantly changing local and global biomedical workforce requiring intellectual, analytical, organisational, personal and interpersonal skills. On completion of the Bachelor of Biomedical Science, graduates will be able to:

- Critically review biological determinants of health, well-being and disease and explain how they manifest in both local and global contexts;
- Critically analyse and interrogate primary literature in biomedical science and map the principles of scientific research and experimental design including the use of statistical methods relevant to biomedical science;

- Apply and adapt a broad and coherent knowledge base in physiology, anatomy, molecular cell biology and applied research to analyse complex problems in health and disease;
- Evaluate current advances in medical interventions/therapeutics to investigate and propose solutions to contemporary, emerging and future-oriented issues in Biomedical Science;
- Critically apply biomedical science based theoretical knowledge to practical situations in state of the art laboratory learning environments, and industry settings;
- Conceptually map key ethical and professional components within the domain of Biomedical Science;
- Effectively and analytically communicate complex ideas in Biomedical science in both written and oral formats to both professional and lay audiences including supervisors, peers, research teams, community and industry partners.

**Careers:** As a graduate of VU's Bachelor of Biomedical Science, students could enter a vast range of health-related industries including medical research, genetic engineering, the pharmaceutical industry, pharmaceutical/medical sales and laboratory technology. Students may be employed in technical and scientific positions on research projects funded by the National Health and Medical Research Council and other agencies in government and private sector laboratories in universities, hospitals and pharmaceutical companies. Students can advance to honours or postgraduate studies, either in more specialised areas of biomedical science (which will enhance their professional development as a scientist), or in other disciplines (which will complement the students scientific training and broaden their career opportunities). Other areas include administration or education that requires biomedical science knowledge. Alternatively, a biomedical science degree is a prerequisite for postgraduate medicine (subject to meeting pre-requisites) and a pathway entry into other allied health courses, such as, physiotherapy, dentistry, osteopathy or radiology.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4 - a study score of at least 25 in English (EAL) or 20 in any other English and one of Biology, Chemistry, Health & Human Development, any Mathematics or Physical Education.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following subjects: Biology, Chemistry, Physics or Mathematics OR Successful completion of an Australian Diploma or Advanced Diploma (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience may be considered for admission to the course.

### COURSE STRUCTURE

To attain the Bachelor of Biomedical Science students will be required to complete 288 credit points (equivalent to 24 units) consisting of:

- 96 credit points (equivalent to 8 Units) of Core studies;
- 96 credit points (equivalent to 8 units) of one (1) Major study, from the list below;



Plus One (1) of the following: Option A:

- 96 credit points (equivalent to 8 units) of one (1) Major study, from the list below;

OR Option B:

- 96 credit points (equivalent to 8 units) of Minor studies. Two (2) Minor sets in total, from the list below:

Please Note: Students that select Option A (total of two (2) Major studies), must choose 12 credit points (one (1) unit) in place of HBM3202 Applied Biomedical Science, as this unit is covered in the first Major study. Students are able to select a unit from within any of the Minors offered in this course, in consultation with the Course Coordinator and according to unit pre-requisites.

Core Units:

HBM1002	Biological Systems	12
HBM1003	Applied Mathematics and Biostatistics	12
RBM1100	Functional Anatomy of the Trunk	12
RBM1200	Functional Anatomy of the Limbs	12
RBM1518	Human Physiology 1	12
RBM1528	Human Physiology 2	12
RCS1110	Chemistry for Biological Sciences A	12
RCS1120	Chemistry for Biological Sciences B	12

Majors

HMAHPH	Human Physiology
HMAMCB	Molecular Cell Biology

Minors

AMIPSY	Psychology
NMIPCH	Pharmaceutical Chemistry
HMHPH	Anatomy & Integrated Physiology
HMMCB	Molecular Cell Biology
HMIAPP	Applied Research

## Bachelor of Dermal Sciences

**Course Code:** HBDS

**Campus:** Online, City Queen.

**About this course:** The overall goal of HBDS - Bachelor of Dermal Sciences is to produce Dermal Sciences graduates who can provide competent, efficient and compassionate clinical care in the Dermal profession. Clinical Placements: Students

will be trained in a wide variety of dermal treatments using some of the most advanced, evidenced based technologies. Students will practice these under supervision within the Victoria University Health Clinics. Students will also be given external placement opportunities.

**Course Objectives:** On completion of the Bachelor of Dermal Sciences, graduates will be able to:

- Identify, evaluate and manage the physical, psychological and social needs of clients and members of the community undergoing dermal assessment and treatment, and apply problem solving skills when planning and implementing out-of-clinic care;
- Perform dermal skills and techniques within dermal protocols and exhibit knowledge of dermal science necessary for safe, efficient and effective practice within dermal clinic environments;
- Interpret the dermal needs of clients and members of the community within a holistic framework and apply an integrated holistic approach in dermal practice;
- Manage themselves effectively and safely as an independent practitioner and as a member of a health care team in a dermal environment;
- Predict and respond effectively to relevant issues relating to socially and culturally diverse communities when providing dermal services;
- Critically review current research and developments in dermal practice and evaluate their implications for dermal therapists and the profession.

**Careers:** Graduates of the Bachelor of Dermal Sciences will obtain knowledge and skills that will allow them to work comfortably in a wide range of health care settings. Career paths include:

- Working in plastic, cosmetic and dermatology medical practices;
- Working in dermal therapies clinics; performing aesthetic medical treatments, such as laser, on clients;
- Work together with Plastic and Cosmetic Surgeons as well as other healthcare and allied health professionals to enhance aesthetic outcomes in areas like cosmetic, plastic and re-constructive surgery;
- Work in the vocational education sector as beauty educators;
- Conducting training for medical aesthetic companies.

**Course Duration:** 4 years

**Admission Requirements:** Year One (1) Entry Only: Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4: a study score of at least 25 in English (EAL) or 20 in any other English.

**Admission Requirements International:** Year One (1) Entry: IELTS (or equivalent): Overall score of 6 with no band less than 6.0 Year Two (2) Entry: Successful completion of a cognate (similar discipline) Australian Diploma of Beauty Therapy (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Year One (1) Entry: Applicants with relevant work, education and/or community experience will be considered for admission to the course.

**Admission Requirements VET:** Year Two (2) Entry: Successful completion of a cognate (similar discipline) Australian Diploma of Beauty Therapy (or equivalent) will be granted advanced standing of a maximum 96 credit points. Applicants with other qualifications such as Cert IV in Beauty Services or Diploma of Nursing will also be considered and entry points will be mapped accordingly.

**Admission Requirements Other:** Policy requirement: All students must comply with the Clinical Practicum Policies (see [www.vu.edu.au/mclpolicy](http://www.vu.edu.au/mclpolicy)). All students enrolled in clinical units must provide mandatory documentation to the College's Clinical Learning Office prior to the commencement of semester 1 each year, this includes: Police check: Students must complete a National Police Records check prior to undertaking clinical practice & placements. Working with Children Check: Students must complete a working with children check prior to undertaking clinical practice & placements. Health Status: Students must be prepared to declare their health and immunisation status prior to undertaking clinical practice & placements.

#### COURSE STRUCTURE

To attain the Bachelor of Dermal Sciences, students will be required to complete 384 credit points (equivalent to 32 units), consisting of:

- Forty-eight (48) credit points (equivalent to four (4) units) of College Core studies;
- Two-hundred and forty (240) credit points (equivalent to twenty-eight (28) units) of Core Dermal Science studies.

In fourth (4) Year of second semester, students will have the option of completing either of the following units (eight (8) credit points):

- HBD4204 Group Research and Independent Project 2 (Capstone unit);

OR

- HIP4001 Interprofessional Practice.

Year 1

Semester 1:

HBS1101 Patient, Practitioner and Health System 1 12

HBS1102 Evidence for Practice 1 12

HPC1000 Introduction to Human Nutrition and Food 12

RBM1174 Human Physiology 12

Semester 2:

HBD1201 Introduction to Dermal Sciences 12

HBD1202 Communication and Dermal Services 12

HBD1203 Facial and Body Treatments 12

HBD1204 Electrology 12

Year 2

Semester 1:

HBD2101 Dermal Studies and Philosophy 12

HBD2102 Dermal Sciences 1 12

HBD2103 Occupational Health and Safety in Dermal Practice 12

HBD2104 Cognition in the Dermal Workplace 12

Semester 2:

HBD2201 Dermal Research Methods 12

HBD2202 Dermal Sciences 2 12

HBD2203 Laser Principles and Safety 12

HBD2204 Legal and Ethical Dermal Practice 12

Year 3

Semester 1:

HBD3101 Hair Reduction Procedures 12

HBD3102 Clinical Skin Analysis 12

HBD3103 Chemistry for Dermal Sciences 12

HBD3104 Dermal Sciences 3 12

Semester 2:

HBD3201 Applied Electrotherapy 12

HBD3202 Wound Biology and Management 12

HBD3203 Lymphatic Biology and Management 12

HBD3204 Dermal Sciences 4 12

Year 4

Semester 1:

HBD4101 Resurfacing Science: Theory and Practice 12

HBD4102 Advanced Laser 1 12

HBD4103 Clinical Dermal Practicum 1 12

HBD4104 Independent Project and Group Research 1 12

(HBD4104 is a Capstone Unit)

Semester 2:

HBD4201 Plastics: Aesthetics and Reconstructive Procedures 12

HBD4202 Advanced Laser 2 12

HBD4203	Clinical Dermal Practicum 2	12
HBD4204	Independent Project and Group Research 2	12

(HBD4204 is a Capstone Unit)

OR:

HIP4001	Interprofessional Practice	12
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## Bachelor of Biomedical and Exercise Science

**Course Code:** HBES

**Campus:** Footscray Park, St Albans.

**About this course:** Be part of a growing demand for graduates with training in the field of exercise and biomedical sciences. Victoria University's Bachelor of Biomedical and Exercise Science is a dual disciplinary degree. It integrates biomedical science and exercise science into a compelling new area of study covering the fundamentals of anatomy and physiology, pathophysiology, biochemistry, biomechanics, kinesiology and psychology in the environment of physical activity, sport, and health research. You will learn to apply theoretical knowledge and analytical techniques to a range of practical and clinical scenarios including Learning in the Workplace and Community projects in industry and community settings. You will also gain experience and develop a solid foundation in designing research methodologies, and performing analytical research by participating in interdisciplinary research as a team member. Victoria University is equipped with new medical research facilities at Sunshine Hospital, and exercise and sport science facilities at the Footscray Park campus. The course is closely linked with:

- The University's Institute of Sports, Exercise and Active Living (ISEAL)
- Western Centre of Health, Research and Education (WCHRE) and
- The Australian Institute of Musculoskeletal Science (AIMSS).

This course provides a framework for the acquisition of further specialist knowledge and skills, enabling graduates to successfully enter professional settings within the health sector, including industry and research or pursue post-graduate studies in allied health courses.

**Course Objectives:** The Bachelor of Biomedical and Exercise Science enables students to experience a range of educational processes and curricula that will equip graduates for entry into a constantly changing local and global workforce requiring intellectual, analytical, organisational, personal and interpersonal skills. On completion of the Bachelor of Biomedical and Exercise Science, graduates should be able to:

- Apply a broad and coherent knowledge of the fundamentals of anatomy, physiology, kinesiology, biomechanics, psychology to investigate health and disease, nutrition and exercise science;
- Apply theoretical knowledge to practical situations in laboratory simulated learning environments, and community and industry settings, independently and as part of a research team;
- Critically review the principles of scientific research, experiment design and project design and consider social, cultural, and environmental issues;
- Critically analyse and synthesise biomedical and exercise science literature and data;

- Elucidate written and oral knowledge to a range of associates including supervisors, peers, research teams; community and industry partners;
- Reflect on own learning and career goals and the development of strategies for achieving them.

**Careers:** The Bachelor of Biomedical and Exercise Science course provides a platform for a pathway to pursue further specialist knowledge and skills, enabling graduates to successfully enter professional settings within the medical, public health and sporting sectors, including government, industry and research sectors, or pursue post-graduate studies in allied health courses.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4 - a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in two of Biology, Chemistry, Health And Human Development, any Mathematics or Physical Education.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following subjects: Biology, Chemistry, Physics or Mathematics OR Successful completion of an Australian Diploma or Advanced Diploma (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience may be considered for admission to the course.

### COURSE STRUCTURE

To attain the Bachelor of Biomedical and Exercise Science students will be required to complete 288 credit points (equivalent to 24 units) consisting of:

- 48 credit points (equivalent to 4 units) of College Core studies;
- 240 credit points (equivalent to 20 Units) of Professional Core studies.

Year 1:

Semester 1:

RBM1518	Human Physiology 1	12
RCS1110	Chemistry for Biological Sciences A	12
AHE1101	Structural Kinesiology	12
AHE1106	Exercise Psychology	12

Semester 2:

RBM1528	Human Physiology 2	12
RCS1120	Chemistry for Biological Sciences B	12
AHE1202	Biomechanics	12
AHE2202	Functional Kinesiology	12

## Year 2

### Semester 1:

RBM2530	Pathophysiology 1	12
HBM2103	Digestion, Nutrition and Metabolism	12
RBM2560	Medical Biochemistry	12
AHE2006	Exercise Interventions for Healthy Populations	12

### Semester 2:

RBM2540	Pathophysiology 2	12
RBM2800	Cardiorespiratory and Renal Physiology	12
AHE2127	Motor Learning	12
AHE2102	Sports Biomechanics	12

## Year 3

### Semester 1:

HBM3104	Exercise Is Medicine	12
(HBM3104 is a Capstone Unit)		
AHE3100	Advanced Exercise Physiology	12
RBM2100	Rehabilitation Anatomy	12
RBM3264	Advanced Nerve and Muscle Physiology	12

### Semester 2:

AHE3126	Motor Control	12
RBM3265	Exercise Biochemistry and Integrated Metabolism	12
(RBM3265 is a Capstone Unit)		
RBM3610	Biomedical Science, Ethics and Values	12
HBM3105	Research Project	12

## Bachelor of Health Science

**Course Code:** HBHL

**Campus:** St Albans.

**About this course:** Graduates of the Bachelor of Health Science could expect to find employment in a number of public health and health science fields at local, national and international level. This include working in the areas of health promotion; health and education, health administration; international health; research and various international community development programs; Graduates also have the opportunity to continue on with Masters of Public Health or to pursue postgraduate level studies in medical or allied health fields.

**Course Objectives:** The Bachelor of Health Science enables students to experience a range of educational processes and curricula that will equip graduates for entry into a constantly changing local and global workforce requiring intellectual, analytical, organisational, personal and interpersonal skills. On completion of the Bachelor of Health Sciences, graduates will be able to:

- Critically review selected social, biological, economic, political and environmental determinants of health, well-being and disease and explain how they manifest in both local and global contexts
- Evaluate and justify the use of best-evidence based methods and technologies to investigate and propose solutions to contemporary, emerging and future-oriented issues in public health.
- Apply a broad and coherent knowledge base and skills in the health sciences to analyse predictable, unpredictable and sometimes complex problems which reflect the multi-faceted nature of health, well-being and disease.
- Conceptually map key ethical, legal and professional components within the domain of health.

**Careers:** Graduates of the Bachelor of Health Science could be expected to find employment in a number of public health and health science fields such as: Health Promotion: which involves evaluating the public's health needs and working to design, implement and evaluate programs. Programs could be designed from a community level through to the global level, and are conducted by organisations such as Government, NGO's, divisions of General Practice and Industry. Public Health Educator: specifically this role is to design and implement effective Health Education programs and strategies for organisations such as government departments, consumer advocacy organisations, Health Foundations (Heart, Cancer) and may work in the following settings, schools, community centres, workplaces. Public Health Administration: the focus of this area is usually on policy development and / or administration of Health programs. International Health: working with Non-Governmental Organisations (NGO) in disease prevention and control in emerging nations. Epidemiology: involves recording the incident of disease and examining patterns of diseases to develop effective interventions. Public Health Research Programs: within Universities, Hospitals, Health Foundations, Government. As graduates have a breadth of skills they could also be employed in roles such Volunteer Coordinator, or marketing for voluntary health organisations, representatives for pharmaceutical industries, and within consulting firms. Graduates also have the opportunity to continue on with HMPG Masters of Public Health (Global Nutrition and Active Living), or to pursue postgraduate level studies in medical or allied health fields.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4: a study score of at least 25 in English (EAL) or 20 in any other English.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following subjects: Biology, Chemistry, Physics or Mathematics OR Successful completion of an Australian Diploma or Advanced Diploma (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience will be considered for admission to the course.

**Admission Requirements Other:** Applicants who do not meet the normal admission requirements but who possess appropriate educational qualifications, work or life experiences which would enable them to successfully undertake the course, will be considered for admission. Students enrolled in the Bachelor of Health Science degree may be required to undergo a Victoria Police Check, Working with Children check, a medical check and a physical capacity test dependent upon elective units chosen.

#### COURSE STRUCTURE

To successfully attain the Bachelor of Health Science, students will be required to complete 288 credit points (equivalent to 24 units) consisting of:

- 96 credit points (equivalent to 8 units) of Core College studies;
- 96 credit points (equivalent to 8 units) of the Public Health Major.

Plus One (1) of the following: Option A:

- 96 credit points (equivalent to 8 units) of Indigenous Health Major;

Option B:

- 96 credit points (equivalent to 8 units) of Minor studies (Two (2) Minor sets in total from the list below).

Students that complete the first year of College Core studies can elect to graduate with the following (Option A) double Major:

- Majors in Public Health and Indigenous Health.

Students that complete the first year of College Core studies and a single Major in Public Health, can elect to graduate with (Option B) two minors to complement their Major, as follows:

- Indigenous Health (HMIIND);
- Health (Sport Science Minor) (SMIHEA);
- Health and Nutrition (HMIHNU), and;
- Bioscience (HMBIO).

#### CORE UNITS

Semester 1:

HHB1104	Introduction to Public Health and Wellness	12
HHB1105	Evidence and Health 1	12
HHB1106	Professional Pathways in Health Sciences	12
RBM1103	Bioscience 1: Body Structure & Function	12

Semester 2:

AEK2103	Aboriginal Health and Wellbeing	12
HHB1204	Australian Health and Social Care Systems and Policy	12

HHB1205	Challenge: a Healthy West	12
RBM1202	Bioscience 2: Body Structure & Function	12

#### Majors

HMAPBH	Public Health
HMAIND	Indigenous Health

#### Minors

SMIHEA	Health (Sport Science Minor)
HMIHNU	Health and Nutrition
HMIIND	Indigenous Health
HMBIO	Bioscience

### Bachelor of Midwifery/Bachelor of Nursing

**Course Code:** HBMA

**Campus:** St Albans.

**About this course:** The Bachelor of Midwifery/Bachelor of Nursing is a four (4) year full-time double undergraduate degree in which students will be eligible to apply as Registered Midwives and Registered Nurses with the Nursing and Midwifery Board of Australia. Our course has a woman-centred approach in the Bachelor of Midwifery. In the Bachelor of Nursing there is a balanced wellness and illness-based approach to person-centred care quality care across the lifespan. Students undertake a varied, yet extensive program which will give them competency and confidence to work as a midwife and nurse. Graduates will enter the professional fields with a sound understanding of the expectations and responsibilities of maternity and nursing care. The Bachelor of Midwifery/Bachelor of Midwifery is based around some key learning criteria within the units of study:

- up-to-date and evidence-informed;
- awareness and understanding of cultural safety and sensitivity with women and patients;
- woman-centred and person-centred quality care;
- development of professional relationships and workplace integration.

**Audience:**

- School leavers with basic knowledge and interest in maternity and nursing care, and;
- Non-Year 12 (mature age) entrants.

**Course Objectives:** Graduates of this course will meet currently accepted standards and competencies of midwifery and nursing practice, as determined by NMBA National Competency Standards (2010), and will be eligible for registration with AHPRA as a registered midwife and registered nurse. On completion of the course, students will achieve the following Course Learning Outcomes:

- Utilise comprehensive health assessment of the client, including consideration of the physical, psychological, sociological, spiritual and cultural factors.

- Advocate for principles of culturally sensitive woman-centred and person-centred care across the lifespan.
- Adopt a wellness and preventative health approach to woman-centred and person-centred care using principles of health promotion.
- Synthesise bioscience and pharmacology knowledge and apply this to midwifery and nursing practice.
- Interrogate evidence relating to midwifery and nursing philosophy and practice to inform planning, implementation and evaluation of care.
- Exhibit behaviours of the legal, professional, and ethical expected standards for midwifery and nursing practice.
- Utilise effective and therapeutic communication skills in the healthcare context.
- Reflect on their identity as a developing health professional and articulate their plan for lifelong learning.

**Careers:** Graduates of the Bachelor of Midwifery/Bachelor of Nursing program (HBMA) will be deemed competent to practice midwifery and nursing in Australia and be eligible to apply for registration with the Nursing and Midwifery Board of Australia as a Registered Midwife/Registered Nurse (Division 1) in the Australian health care system. This course is due to be accredited by the Australian Nursing and Midwifery Accreditation Council in late 2016.

**Course Duration:** 4 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4: a study score of at least 30 in English (EAL) or 25 in any other English PLUS Units 3 and 4 with a study score of at least 25 in one of the following: Biology, Chemistry, Physics (any) or Mathematics (any)

**Admission Requirements Mature Age:** Applicants with relevant work, education and/or community experience will be considered for admission to the course.

**Admission Requirements VET:** Successful completion of a cognate (similar discipline) Australian Diploma or Advanced Diploma (or equivalent) will be granted advanced standing of a maximum of 96 credit points (Diploma) or 144 credit points (Advanced Diploma). OR Successful completion of a non-cognate (not similar) Australian (or equivalent) Diploma or Advanced Diploma will be granted advanced standing on a case by case basis.

**Admission Requirements Other:** Police check: Students must complete a National Police Records check prior to undertaking hospital/agency placements on an annual basis. Working with Children Check: Students must complete a Working with Children Check prior to undertaking clinical placements. Health status: Students must be prepared to declare their fitness for practice and immunization status prior to undertaking hospital/agency placements.

#### COURSE STRUCTURE

To successfully attain the Bachelor of Midwifery / Bachelor of Nursing, students will be required to complete 384 credit points (equivalent to 29 units) of Core Midwifery and Nursing studies.

Year 1

Semester 1:

HBM1001	Anatomy and Physiology 1	12
HNB1103	Professional Studies 1	12
HNB1104	Foundations of Nursing and Midwifery 1	24

Semester 2:

ASE1201	Population Health	12
HBM1202	Anatomy & Physiology 2	12
HNB1204	Foundations of Nursing and Midwifery 2	24

Year 2

Semester 1:

AEK2103	Aboriginal Health and Wellbeing	12
HNB2104	Nursing and Acute Care 1	12
HNB2107	Nursing Professional Practice 1	12
RBM2101	Pathophysiology & Quality Use of Medicines 1	12

Semester 2:

HMB2201	Complex Midwifery 1	12
HMB2202	Midwifery Professional Practice 1	12
HNB3123	Working With Evidence	12
RBM2202	Pathophysiology & Quality Use of Medicines 2	12

Year 3

Semester 1:

HMB3101	Complex Midwifery 2	12
HMB3102	Midwifery Professional Practice 2	12
HNB2205	Nursing and Acute Care 2	12
HNB3102	Nursing Professional Practice 2	12

Semester 2:

HIP3001	Interprofessional Practice	12
HMB3201	Complications of the Newborn	12
HNB3227	Mental Health and Nursing	12
HNB3229	Nursing Professional Practice 3 - Mental Health	12

Year 4

Semester 1:		
HMB4101	Supporting Maternal and Newborn Wellbeing	12
HMB4102	Midwifery Professional Practice 3	12
HMB4104	Professional Studies 2	12
HNB3141	Nursing and Complex Care	12

Semester 2:		
HMB4201	Midwifery Professional Practice 4	12
HNB3209	Nursing and the Community	24
HNB4201	Nursing Professional Practice 4	12

## Bachelor of Midwifery

**Course Code:** HBMW

**Campus:** St Albans.

**About this course:** The Bachelor of Midwifery is a 3 year full-time undergraduate degree which prepares students to register to practise as midwives with the Nursing & Midwifery Board of Australia on completion. It comprises theoretical hours integrated with clinical practice to gain the necessary experience to prepare for practice.

**Course Objectives:** The aim of the course is to prepare a competent midwife who can practise in a variety of maternity settings to the full capacity of the internationally defined role and scope of practice of the midwife, and according to the ANMC 'National Competency Standards for the Midwife' (2006) and the ANMC 'Code of Ethics for Midwives' (2008). The course will prepare midwives who will be expected to:

- practise competently and confidently at a beginning level in a variety of maternity settings and demonstrate practice which is evidence-informed;
- demonstrate practice that reflects cultural safety and sensitivity with woman;
- reflect attitudes which are congruent with the philosophy of being woman-centred with woman aiming for continuity of care within professional relationships;
- work both as a primary carer and in collaboration with other healthcare professionals in providing comprehensive care through women's reproductive lives and experiences; and,
- achieve employment in a variety of maternity care settings.

**Careers:** The Bachelor of Midwifery will prepare graduate midwives with a thorough knowledge of contemporary midwifery who are able to practise competently and confidently at a beginning practitioner level and demonstrate practice which is evidence-informed. Furthermore, graduates of the course will be 'marketable' in a wide variety of maternity settings. These settings can include both public and private maternity and women's health care settings.

**Course Duration:** 3 years

**Admission Requirements:** Units 1 and 2: satisfactory completion in two units (any study combination) of any Mathematics or Units 3 and 4: any Mathematics; AND a study score of at least 30 in English (EAL) or at least 25 in any other English.

**Admission Requirements Mature Age:** Non-Year 12 applicants are selected into the course using the criteria as set out in the VTAC guide.

**Admission Requirements VET:** Pathway from Diploma of Nursing under consideration.

**Admission Requirements Other:** Aboriginal and Torres Strait Islander applicants: Persons of Aboriginal or Torres Strait Islander descent are encouraged to apply for admission. Applicants will be assessed on an individual basis to determine the suitability and potential for success in the course. Portfolio Partnerships Program: Victoria University is committed to strengthening partnerships with schools and communities in its local region. The Portfolio Partnership Program is an alternative entry scheme available to students in participating secondary schools in Western metropolitan, Sunbury and Macedon regions. Recognition of Prior Learning: Applicants who have undertaken part of a Bachelor of Midwifery degree or a nursing degree may be given advanced standard according to the University's 'Recognition of Prior Learning (RPL)' policy. Each case is dealt with on an individual basis. This is carried out through the College's RPL Committee (convened under University guidelines).

## COURSE STRUCTURE

**Course duration:** The course is 6 semesters in length and is offered to fulltime students over three years. The University has a maximum length of course policy that for three year degree units, stipulates that the maximum time a student can take to complete a course of that length is 10 years unless a shorter time is stipulated. Apart from the clinical practicum units, all units are currently offered in an 'on campus' mode, however there are online components to some units. In the future more use may be made of this teaching medium with some units being offered in 'off campus' or 'mixed' mode. The University recognises its responsibility to notify the Australian Nursing and Midwifery Accreditation Council (ANMAC) of any changes to the course before they can be implemented. Brief outline of the course: Year 1: Lays the foundations for the following years with foundational studies in both professional topics and normal midwifery theory and skills, supported by psychology, sociology and anatomy & physiology. The study of midwifery theory commences with a focus on normal pregnancy, labour and birth and early parenting. This includes introduction to medications. The philosophy of 'with woman' is emphasised with the students commencing follow-throughs with women through formulation of professional relationships within the Continuity of Care program. Year 2: With a focus on the pathophysiology of childbearing, students are introduced to the theory and skills related to childbearing complications and women's health across the lifespan with a focus on consolidating clinical skills and medication management learnt thus far. Working with women from diverse backgrounds will also be highlighted. Students will have further opportunities to facilitate follow-through relationships with women. Year 3: Childbearing complications theory and skills will be examined further supported by additional studies in medication management. The role of the midwife will encompass the development of skills used for enhanced practice to provide a basis for students as graduates to practice within midwife-led models of care. Students will also undertake studies related to babies needing extra care. A consolidation unit will also be undertaken to prepare students for the world of professional midwifery practice.

Year 1, Semester 1		
RBM1121	Anatomy & Physiology 1	12
HMB1101	Foundations in Midwifery	12
HMB1102	Midwifery Practice 1	12
APT1310	Psychology 1	12
Year 1, Semester 2		
RBM1222	Anatomy & Physiology 2	12
ASE1325	Sociology of Indigenous Health	12
HMB1203	Supporting Women Becoming Mothers	12
HMB1204	Midwifery Practice 2	12
Year 2, Semester 1		
HMB2105	Working as a Professional 1	12
RBM2123	Pathophysiology in Midwifery	12
HMB2106	Complex Pregnancy and Birth 1	12
HMB2107	Midwifery Practice 3	12
Year 2, Semester 2		
HMB2208	Quality Use of Medicines for Midwifery 1	12
HMB2209	Diversity in Midwifery Practice	12
HMB2210	Women's Health	12
HMB2211	Midwifery Practice 4	12
Year 3, Semester 1		
HMB3112	Quality Use of Medicines for Midwifery 2	12
HMB3113	Complex Pregnancy and Birth 2	12
HMB3114	Midwifery Practice 5	12
HMB3115	Working as a Professional 2	12
Year 3, Semester 2		
HMB3216	Working with Evidence in Midwifery Practice	12
HMB3217	Complications of the Newborn	12
HMB3218	Midwifery Practice 6	12
HMB3219	Midwifery Practice 7: Consolidation	12

## Bachelor of Nursing

**Course Code:** HB NB

**Campus:** St Albans.

**About this course:** Follow your calling to be a health care professional. This 3 year course is designed to meet the needs of contemporary health care, where you will develop the knowledge and skills for practice at a beginning level as a general or mental health nurse. This course equips you with the qualification to gain Division 1 registration with the Nursing and Midwifery Board of Australia  
<http://www.nursingmidwiferyboard.gov.au/>

**Course Objectives:** Graduates completing the course will have developed theoretical knowledge and clinical skills needed by competent beginning-level registered nurses who can practice within a diverse range of health care contexts and practice settings of the 21st century. Graduates of this degree will be able to:

- meet currently accepted standards of nursing practice as determined by the Australian Nursing and Midwifery Council (ANMAC) National Competencies for the Registered Nurse;
- provide culturally sensitive nursing care to the diverse Australian community;
- provide quality nursing care in a range of healthcare settings and contexts;
- use an evidence based approach in providing nursing care;
- apply a health promotion and educational focus to their work;
- undertake a team based, multidisciplinary and interprofessional approach to care;
- have well-developed clinical decision-making and reflective practice knowledge and skills; and
- adopt a lifelong approach to learning.

**Careers:** Registration as a Registered Nurse (Division 1).

**Course Duration:** 3 years

**Admission Requirements:** To qualify for admission to the three year course applicants must: 1. have successfully completed the Victorian Certificate of Education (VCE) or equivalent and meet all extra requirements and selection procedures listed through VTAC. Units 1 and 2: satisfactory completion of any Mathematics or Units 3 and 4: any Mathematics; AND a study score of at least 30 in English (EAL) or at least 25 in any other English.

**Admission Requirements International:** For international students the following English language requirement is needed for entry to the course where the international students' education was conducted in a language other than English. An International English Language Testing System (IELTS) Academic test score of at least 6.5 in Reading and Listening, a score of at least 6.5 in Writing and Speaking, and an overall band score of at least 6.5 or equivalent is required. Students require this level of English proficiency because they will be practising and communicating in the workplace from semester 2 of the course. Registration requirements. Please refer to the Nursing and Midwifery Board of Australia website <http://www.nursingmidwiferyboard.gov.au> for the most current registration requirements that may impact on an applicant's registration application. English language requirements for registration may exist for students schooled outside of Australia.



**Admission Requirements VET:** For applicants who are currently registered (or eligible to register) as an Enrolled nurse (formally Div 2) having successfully completed a Certificate IV in Nursing. Enrolled nurses may apply for and may be offered a place in either the three year or admitted directly into the second year of the course. Students with a Diploma of Nursing from Victoria University may be admitted directly into the second year of the course.

**Admission Requirements Other:** Applicants who do not meet the normal admission requirements but who possess appropriate educational qualifications, work or life experiences which would enable them to successfully undertake the course, will be considered for admission. Persons of Aboriginal or Torres Strait Islander descent are encouraged to apply for admission. Applicants will be assessed on an individual basis to determine their suitability and potential for success in the course. Applicants who consider their capacity to qualify under normal entry provisions have been limited by some disadvantage, for example, illness, disability, economic hardship or isolation may apply to be considered as a disadvantaged person. Applicants will be assessed on an individual basis to determine their suitability and potential for success in the course. Policy requirement: Students must comply with the Clinical Practicum Policies (see [www.vu.edu.au/mclpolicy](http://www.vu.edu.au/mclpolicy)). Police check: Students must complete a National Police Records check prior to undertaking hospital/agency placements). Working with Children Check: Students must complete a working with children check prior to undertaking clinical placements). Health Status: Students must be prepared to declare their health and immunisation status prior to undertaking hospital/agency placements.

#### COURSE STRUCTURE

To attain the Bachelor of Nursing students will be required to complete 288 credit points (equivalent to 24 units) consisting of:

- 276 credit points (equivalent to 22 units) of Core studies, and;
- 12 credit points (equivalent to 1 unit) of Elective studies.

#### Year 1, Semester 1

RBM1103	Bioscience 1: Body Structure & Function	12
AEK1203	Indigenous Health and Wellbeing	12
HNB1102	Foundations in Nursing 1	12
HNB1103	Professional Studies 1	12

#### Year 1, Semester 2

RBM1202	Bioscience 2: Body Structure & Function	12
ASE1201	Population Health	12
HNB1205	Foundations in Nursing 2	12
HNB1206	Professional Practice 1	12

#### Year 2, Semester 1

RBM2101	Pathophysiology & Quality Use of Medicines 1	12
HNB2104	Nursing and Acute Care 1	12

HNB2105	Nursing and Mental Health 1	12
HNB2106	Professional Practice 2	12

#### Year 2, Semester 2

RBM2202	Pathophysiology & Quality Use of Medicines 2	12
HNB2205	Nursing and Acute Care 2	12
HNB2206	Nursing and Mental Health 2	12
HNB2207	Professional Practice 3	12

#### Year 3, Semester 1

HNB3123	Working With Evidence	12
HNB3124	Professional Practice 4	12
HNB3140	Professional Studies 2 & Interprofessional Practice	12
HNB3141	Nursing and Complex Care	12

#### Year 3, Semester 2

HNB3209	Nursing and the Community	24
HNB3210	Professional Practice 5	12

#### ELECTIVES:

HNB3200	Neonatal Nursing	12
HNB3208	Directed Studies for Nursing	12
HNB3253	Interprofessional Practice	12
HNB3217	Cardiac Nursing	12
HNB3218	Paediatric Nursing	12
HNB3219	Perioperative Nursing	12
HNB3220	International Project	12
HNB3224	Mental Health and Illness	12
HNB3225	History of Nursing	12

### Bachelor of Health Science (Paramedic) (Conversion Degree)

**Course Code:** HBPA

**Campus:** Online.

**About this course:** This course is designed as a professional development program for currently employed or experienced ambulance paramedics. The aim is to provide a route to a Bachelor degree qualification for those who hold paramedic Diploma level qualifications and who have an appropriate level of experience in working in an emergency patient transport environment. This course is not intended as a basic training programme for employment with an emergency ambulance service. Applicants will have a paramedic qualification at the Diploma level or equivalent plus

a minimum of one year in the emergency patient transport (ambulance) industry. Recognizing equivalency allows the qualifications of overseas students to be recognised. Overseas students may have qualifications with different titles but mapping the requirements of their qualifications can identify that (the requirements of) those qualifications align with Australian Diploma level qualifications. The intention of this course is to build on the qualifications and experience of paramedics to bring their qualifications up to the currently required professional level, develop professional thinking and behaviours and to enable them to function more effectively in their role.

**Course Objectives:** Applicants who meet the entry requirements for this course will be trained and practising paramedics who have the skills and knowledge to perform the technical requirements of their role. This course aims to build on prior knowledge and experience to develop further the professionalism of an already competent paramedic. Paramedics who qualified at the previously required Diploma (AQF 5/6) level typically have not covered, in depth or at a Bachelor degree level, areas like evidence based practice, accessing and using research findings, law and ethical concepts related to paramedic practice or sociological concepts and their relation to health or pharmacological precepts and knowledge. Graduates of this course will be able to:

- Apply and integrate new knowledge to their professional paramedic practice in the workplace in order to address the issues arising from an expanding scope of practice and the associated changing context of paramedic work. This will be achieved through learning activities that promote the ability to identify, anticipate and solve problems that range in complexity and, most importantly for the paramedic context, to enhance the capacity for making decisions;
- Reflect on, and evaluate their practice and its impact in order to develop the capacity to make informed and reasonable decisions about how best to respond to the needs of their patients. This is achieved through learning activities that develop the capacity to access, evaluate and analyse information as well as the capacity to plan and organize themselves and others;
- Evaluate and use research evidence as it relates to paramedic practice in the paramedic's local context through the application of evidence based principles. This is accomplished through learning activities that promote the development of the abilities to identify, anticipate and solve a range of multifarious problems, the abilities to access, assess and evaluate information, the understanding of how to develop and implement new ideas and the ability to make decisions that meet the needs of the patient in their social context;
- Assess and critique the social context in which paramedics practice and its impact of the health status and current condition of their patients. This learning outcome is achieved through developing the ability to solve a range of problems as well as developing intercultural understanding and the capacity to contribute to their local community, in particular, in addition to the general global community;
- Demonstrate the capacity to work autonomously. This outcome is attained through providing opportunities to develop the ability to solve a range of problems, communicate effectively and think critically as well as the enduring facility to engage in lifelong learning to achieve personal and work goals;

- Develop and maintain professional relationships. This outcome is achieved through the provision of opportunities to develop effective communication and interpersonal skills in addition to the using new ideas, planning and organising and making decisions; and
- Communicate effectively with fellow professionals and other members of the health care system. This outcome is also achieved through the provision of opportunities to develop effective communication and interpersonal skills as well as to develop the ability to use and implement ideas and organisational proficiency.

**Careers:** Most graduates are already working as paramedics and this course enables them to pursue career objectives within the ambulance industry or provides a pathway that leads to other professions. Graduates can also obtain employment in the natural resources industry both in Australia and world-wide. This course also provides the potential to move into post graduate studies.

**Course Duration:** 1 year

**Admission Requirements International:** International applicants must demonstrate equivalency to these entry requirements (described above). International applicants need to provide sufficient verifiable documentation to enable their qualifications and experience to be mapped against the entry requirements. In some instances (e.g. Canadian applicants) overseas qualifications have been mapped against entry criteria for this course. IELTS: For international students the following English language requirement is needed for entry to the course where the international students' education was conducted in a language other than English. An International English Language Testing System (IELTS) Academic test score with an overall band score of at least 7, with no band less than 7 (or equivalent test result) is required. An IELTS test result is required at the time of application. Applications received that do not include an IELTS (or equivalent) test will not be assessed until the test result is received. Packaging of an English course with this degree is not available. Applicants must meet the language entry requirement at the time of application.

**Admission Requirements Mature Age:** Applicants for the course are qualified and experienced paramedics and must meet the requirements listed below. To qualify for admission to the course, applicants must: - have an Associate Diploma of Health Science (Ambulance Officer), Diploma of Health Science (Paramedic), or equivalent; - be eligible for registration as a paramedic by the relevant Government recognised body within the applicant's state or country of residence OR hold a Certificate or Authority to Practice issued by a recognised Government authority AND the requirements for registration or practice must be equivalent to those required for practice in the State of Victoria, Australia; and - have a verifiable minimum of one-year post-qualification experience in the emergency response (patient transport) ambulance industry or equivalent.

**Admission Requirements Other:** In general, to qualify for admission to the course, applicants must meet the following criteria: - have an Associate Diploma of Health Science (Ambulance Officer), Diploma of Health Science (Paramedic), or equivalent; - be eligible for registration as a paramedic by the relevant Government recognised body within the applicant's state or country of residence OR hold a Certificate or Authority to Practice issued by a recognised Government authority AND the requirements for registration or practice must be equivalent to those required for practice in the State of Victoria, Australia; and - have a verifiable minimum of one-year post-qualification experience in the emergency response (patient transport) ambulance industry or equivalent.

## COURSE STRUCTURE

This course is offered over one year on a full-time basis or part-time equivalent, as demand requires. Students are required to successfully complete eight (8) units of study (a total of 96 credit points), which must include seven (7) Core Units and one (1) Elective Unit, in order to meet graduation requirements. Students are encouraged to contact the Course Co-ordinators, David Dawson or Shaunagh Darroch, prior to the selection of Core and Elective units.

### YEAR 1, SEMESTER 1

#### Core Units:

HFB3111	Professional Basis of Paramedic Practice 1	12
HFB3301	Issues in Prehospital Health Service Delivery	12
HFB3401	Prehospital Ethical and Legal Issues	12

### SEMESTER 2

#### Core Units:

HFB3122	Professional Basis of Paramedic Practice 2	12
HFB3125	Research in Paramedic Practice	12
HFB3211	Integration of Paramedic Practice 1	12
HFB3222	Integration of Paramedic Practice 2	12

Plus ONE Elective Unit (12 credit points) from the General Electives Units list

OR

Students may choose an Online Elective Unit (12 credit points) from any other higher education course within the College of Health and Biomedicine, subject to the approval of the Course Coordinator.

## GENERAL ELECTIVES

### SEMESTER 1:

HFB3123	Advanced Pharmacology	12
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### SEMESTER 2:

HFB3226	Major Incidents	12
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Recognition of Prior Learning/Credits/Units of Study Exemptions No recognition of prior learning is permissible.

### Course Regulations

The following should be read in conjunction with the College Regulations detailed earlier in this Handbook, and the University Statutes and Regulations.

### Student Assessment and Progress

For information regarding the University's Student Assessment and Progress Policy, please refer to the information prepared by the Student Advocacy Service 2014

available on the Victoria University website.

### General Electives

Students may choose an elective from any other higher education course within the College of Health and Biomedicine, subject to the approval of the Course Co-ordinator. Elective contact hours may be greater than three (3) contact hours and may be available in either semester. Choice of electives may be limited by online availability.

## Bachelor of Paramedicine

### Course Code: HBPD

**Campus:** St Albans, CLINICAL PLACEMENTS Clinical placements operate on a year-round basis. Paramedic Science students will be required to attend clinical placements on a rotation basis, including outside of semester hours, to maintain a public service and provide continuity of clinical care..

**About this course:** HBPD Bachelor of Paramedicine is a health science degree with a pre-service training component. The overall goal of the degree is to produce paramedic science graduates who can provide competent, efficient and compassionate clinical care at a basic entry level in the paramedic profession. **CLINICAL PLACEMENTS:** Clinical placements operate on a year-round basis. Paramedic Science students will be required to attend clinical placements on a rotation basis, including outside of semester hours, to maintain a public service and provide continuity of clinical care.

**Course Objectives:** On completion of the Bachelor of Paramedicine, graduates will be able to:

- Analyse, evaluate and manage the physical, psychological and social needs of patients and members of the community undergoing paramedic assessment, treatment and transport, and apply problem solving skills when planning and implementing out-of-hospital care;
- Perform effective evidence based paramedic skills and techniques within paramedic protocols and apply paramedic knowledge necessary for safe, efficient and effective practice within paramedic environments;
- Interpret the paramedic needs of patients and members of the community within a holistic framework and apply an integrated holistic approach of evidence based paramedic practice;
- Perform effectively and safely as an independent person and as a member of a health care team in paramedic environments;
- Be sensitive to contemporary issues within socially and culturally diverse communities and predict and respond effectively to such issues when providing paramedic practice;
- Critically review current research and evidence based developments in paramedic practice and evaluate their implications for paramedics and the profession.

**Careers:** Graduates should have obtained the necessary clinical practice skills, knowledge and personal attributes necessary for making an application for entry level employment as emergency paramedics. The skills, knowledge and attributes should provide graduates with a competitive advantage for selection and promotion in the emergency paramedicine career pathways. Graduates are eligible to apply for membership of Paramedics Australia.

**Course Duration:** 3 years

**Admission Requirements:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including Units 3 and 4 - a study score of at least 25 in English (EAL) or at least 20 in English other than EAL; and a study score of at least 20 in two of Biology, Chemistry, and any Physics or Mathematics.

**Admission Requirements International:** Successful completion of an Australian Senior Secondary Certificate (VCE or equivalent) including at least one of the following subjects: Biology, Chemistry, Physics or Mathematics OR Successful completion of an Australian Diploma or Advanced Diploma (or equivalent) PLUS IELTS (or equivalent): Overall score of 6 with no band less than 6.0

**Admission Requirements Mature Age:** Non year 12 applicants may make a direct application to the University. Applicants should provide an overview and verifiable documentation of their entire educational history. Applicants must complete and submit a Personal Statement. Applicants must include details of their interest in the course and any relevant work experience. Applicants should demonstrate an understanding of the pre-hospital profession and the role of the paramedic in their Personal Statement and their application. Inherent requirements must be met.

**Admission Requirements VET:** Successful completion of a cognate (similar discipline) Australian Diploma or Advanced Diploma (or equivalent) such as HLT51015 Diploma of Paramedic Sciences, or its equivalent, may apply for Advanced Standing and will be considered for entry into HBPD Bachelor of Paramedicine. Inherent requirements must be met.

**Admission Requirements Other:** All students enrolled in the Bachelor of Paramedicine degree will be required to undergo an annual National Police Check, a Working with Children Check (valid for 5 years), a medical check and a physical capacity test. Additionally, they must have vaccination documentation and a serology report that satisfies industry requirements before commencing placements in the clinical practice units of study. Annual police checks via Fit2Work and Working with children checks need to be completed prior to census date of Semester 1 of each year throughout the program. Prospective and continuing students should be aware that not passing relevant police checks and a Working with Children check may restrict access to placements necessary for graduation. inherent requirements must also be met. Applicants who do not meet the normal admission requirements in categories described above (i.e. Senior Secondary, International, TAFE/VET or Mature Age) but who possess appropriate educational qualifications, work or life experiences which would enable them to successfully undertake the course, will be considered for admission.

## COURSE STRUCTURE

To successfully attain HBPD Bachelor of Paramedicine students will be required to complete 288 credit points (equivalent to 12 units) consisting of:

- 48 credit points (equivalent to 4 units) of Core College studies;
- 240 credit points (equivalent to 20 Units) of Core Paramedic studies;

Students will have the opportunity to complete two (2) specialist units in third year, as follows:

- 24 credit points (equivalent to 2 units) of Specialist Paramedic studies.

In the final third year, Students will have the option of completing HIP3001 Interprofessional Practice in either Semester 1 or 2, or alternatively, HFB3200 Pinnacle Venture in Semester 2.

### Year 1

#### Semester 1:

HBM1001	Anatomy and Physiology 1	12
HFB1110	Foundations of Professional Paramedic Practice	12
HFB1112	Paramedic Clinical Practice 1	12
HFB1113	Pre-Hospital Ethical and Legal Issues	12

#### Semester 2:

HBM1202	Anatomy & Physiology 2	12
HFB1207	Principles of Drug Actions for Health Professionals	12
HHB1204	Australian Health and Social Care Systems and Policy	12
HFB1213	Paramedic Clinical Practice 2	12

### Year 2

#### Semester 1:

HHB2000	Social Epidemiology	12
HFB2104	Introduction to Research Methods	12
HFB2117	Clinical Practice 3	12
HFB2121	Paramedic Clinical Science 1 (Medical Emergencies 1)	12

#### Semester 2:

HFB2223	Clinical Practice 4	12
HFB2232	Paramedic Clinical Science 2 (Trauma)	12
HFB2233	Paramedic Clinical Science 3 (Medical Emergencies 2)	12
HFB2234	Evidence Based Practice	12

### Year 3

#### Semester 1:

HFB3130	Paramedic Clinical Science 4 (Mental Health and Mental Illness)	12
HFB3134	Paramedic Clinical Practice 5 (HFB3134 is a Capstone Unit)	12
HFB3135	Paramedic Clinical Science 5 (Special Populations)	12

Select either ONE (1) of the following units:

HFB3136 Career and Professional Development 12

OR:

HIP3001 Interprofessional Practice 12

Semester 2:

HFB3202 Paramedic Health and Wellbeing 12

HFB3226 Major Incidents 12

(HFB3226 is a Capstone Unit)

HFB3234 Paramedic Clinical Practice 6 - Extended Practice 12

Select either ONE (1) of the following units:

HFB3200 Pinnacle Venture 12

OR:

HIP3001 Interprofessional Practice 12

## Bachelor of Science (Osteopathy)

Course Code:HBSO

Campus:City Flinders.

**About this course:**Build a career in osteopathy with the Bachelor of Science (Osteopathy). Osteopathy is a state licensed profession and to become a registered osteopath you need to complete the following double degree program:

- Bachelor of Science (Osteopathy)
- Masters of Health Science (Osteopathy).

VU offers one of only three of these accredited double degree programs in Australia. Core studies include anatomy, osteopathic science, physiology and biochemistry. Students undertake fieldwork and clinical practice to prepare them for their osteopathy career. Clinical Training: Our Osteopathy teaching clinic operates 47 weeks of the year and prepares students with real-world experience. As part of this program you are required to attend clinical sessions on a rotation basis including outside of semester hours to maintain a public service and provide continuity of patient care.

**Course Objectives:**On completion of this course, students will be able to:

- Critically reflect on the philosophy and position of osteopathy in the broader healthcare system;
- Critically review scholarly literature related to osteopathic philosophy and practice, as well as the broader healthcare field/area;
- Formulate diagnoses of musculoskeletal disorders based on interpretation of physical, neurological, orthopaedic, osteopathic examination findings and clinical evidence;
- Synthesise biomedical science knowledge and apply to their osteopathic practice;
- Adopt osteopathic manual techniques and clinical examinations to musculoskeletal presentations;

- Exhibit professionalism and effective communication when interacting with the patient community, peers and colleagues;
- Interrogate the physical, socio-economic, psychological, spiritual and cultural factors contributing to a patient's presenting complaint;
- Integrate osteopathic principles and theoretical science concepts including researched evidence for practice to inform the rationale of osteopathic treatment;
- Advocate wellness and preventative health in patient centred care;
- Reflect on their identity as a developing health professional and articulate their plan for lifelong learning;
- Engage in intra- and inter-professional education and peer review to ensure optimal patient management.

**Careers:**Careers This degree, which pathways into the Master of Health Science (Osteopathy), will enable you to pursue a range of careers in osteopathy. VU is held in extremely high regard in the industry for its hands-on approach and extensive clinical placements. Registration With the dual-qualification in osteopathy, you can gain:

- registration with the Osteopathy Board of Australia
- registration as an Osteopath in all other Australian states and in New Zealand
- membership with the Australian Osteopathic Association

For further information about registration requirements, visit the Australian Health Practitioner Regulation Agency. Organisations employing osteopathic graduates Osteopaths can work in private clinics or a variety of healthcare settings including hospitals, maternal health centres and community organisations. Employment rates Osteopathy was rated as the fastest growing health discipline in Australia in 2012. The number of people choosing to visit an osteopath has increased by 48 per cent over the past two years (Private Health Insurance Administration Council). Placements Treating clients at our Osteopathy Clinics at St Albans and City Flinders Campuses ensures you have extensive clinical experience with patients.

**Course Duration:**3 years

**Admission Requirements:**Units 3 and 4: a study score of at least 25 in English (EAL) or at least 20 in any other English; AND a study score of at least 20 in one of Biology or Chemistry; AND a study score of at least 20 in one of any Mathematics or Physics.

**Admission Requirements International:**Applicants are expected to have: obtained an IELTS (academic module) result of 6.5 (no band less than 6) or equivalent; completed a secondary school qualification equivalent to an Australian Year 12 qualification; completed studies (as part of this qualification) in the field of chemistry, physics or mathematics. In addition you also need to provide a Police Check from your usual country of residence prior to commencing practical placements.

**Admission Requirements Mature Age:**Academic record including GPA. Year 12 prerequisites also apply for non-school leavers.

**Admission Requirements Other:**Some applicants may be required to attend an interview (an alternative may be provided if you cannot physically attend an interview).

## COURSE STRUCTURE

To attain the Bachelor of Science (Osteopathy), students will be required to complete 288 credit points (equivalent to 24 units) of Core studies.

### Year 1

#### Semester 1:

HBS1101	Patient, Practitioner and Health System 1	12
HBS1102	Evidence for Practice 1	12
HBS1103	Scientific Basis for Osteopathy 1	12
HBS1104	Clinical Skills 1	12

#### Semester 2:

HBS1201	Patient, Practitioner and Health System 2	12
HBS1202	Evidence for Practice 2	12
HBS1203	Scientific Basis for Osteopathy 2	12
HBS1204	Clinical Skills 2	12

### Year 2

#### Semester 1:

HBS2301	Patient, Practitioner and Health System 3	12
HBS2302	Evidence for Practice 3	12
HBS2303	Scientific Basis for Osteopathy 3	12
HBS2304	Clinical Skills 3	12

#### Semester 2:

HBS2401	Patient, Practitioner and Health System 4	12
HBS2402	Evidence for Practice 4	12
HBS2403	Scientific Basis for Osteopathy 4	12
HBS2404	Clinical Skills 4	12

### Year 3

#### Semester 1:

HBS3501	Patient, Practitioner and Health System 5	12
HBS3502	Evidence for Practice 5	12
HBS3503	Scientific Basis for Osteopathy 5	12
HBS3504	Clinical Skills 5	12

### Semester 2:

HBS3601	Patient, Practitioner and Health System 6	12
HBS3602	Evidence for Practice 6	12
HBS3603	Scientific Basis for Osteopathy 6	12
HBS3604	Clinical Skills 6	12

## Graduate Diploma in Care Coordination

**Course Code:**HGCC

**Campus:**Footscray Park, City Flinders, St Albans.

**About this course:**The Graduate Diploma in Care Coordination provides students with student-centred learning opportunities in care coordination for complex and chronic disease management within interprofessional healthcare teams. The course gives emphasis to the complementary role of different professional groups and the interdependency among them for models of person-centred care. A unique feature of this course will be that students are provided with learning opportunities with care coordination interprofessional teams that comprise of different disciplines and community support workers, which in turn, enables students to learn from each other. This exposure in redefining teamwork will enable the conceptualization of relational and functional competence in working as a team. The students are able to exit at the graduate certificate level.

**Course Objectives:**On successful completion of the HGCC Graduate Diploma in Care Coordination, students will be able to:

- Integrate advanced care coordination concepts and related theory to inform care coordination practice and person centred delivery;
- Investigate, analyse and apply evidence-based practice to complex care coordination situations at the clinical level, exercising a repertoire of advanced skills including a high level of personal autonomy and accountability;
- Critically review theories of care coordination management to inform the implementation of all aspects of quality assurance;
- Interpret and implement policy, legislation and discipline specific knowledge at an advanced level to the legal, technical, ethical and cultural aspects of care coordination;
- Critically reflect upon care coordination decision making processes from a systems perspective by formulating, implementing and evaluating professional practice activity within community-based care;
- Exhibit advanced management and leadership skills that promote holistic coordination of care for people with complex and chronic healthcare needs;
- Exhibit effective communication and advocacy skills within the healthcare team environment that fosters integrated care for persons with complex healthcare needs;
- Implement research design and methodologies to applied health care coordination practice.

**Careers:**The integration of health services delivery requires an educational framework so as healthcare professionals can effectively manage complex healthcare needs within an interprofessional team environment. Typically, the Care Coordinator is located within their organisation, as a health care professional and a coordinator of

care, within an interprofessional team. Members of this interprofessional team are ideally located internally but may be located externally to their organisation (as large as a public hospital or as small as a general practice), and is driven by the diversity of complex care needs and the size and type of organisation. The healthcare professional that completes the Care Coordination course will be prepared with the skill sets to apply cognitive and communicative capabilities and skills to chronic and complex disease management; design and implement person-centred care for individuals and families with complex health care needs; evaluate quality outcomes for care coordination; lead teams that support care coordination and advocate for the person and their family.

**Course Duration:** 1 year

**Admission Requirements:** Successful completion of a cognate (similar discipline) Bachelor/Honours Degree; AND: Students must be currently employed in a care coordination role where they coordinate the healthcare of people in healthcare organisations (eg. hospitals, community services). Students that have successfully completed units of study deemed equivalent to the graduate diploma units by the University, may apply for advanced standing.

**Admission Requirements International:** In addition to satisfying the Bachelor/Honours Degree or Mature Age admission requirements, International Students must provide evidence of proficiency in the English language as demonstrated by: International English Language Testing System (IELTS or its equivalent) - overall score of 6.5 and no individual band score less than 6; AND: A Bachelor degree (or equivalent) in a health related discipline.

**Admission Requirements Mature Age:** Mature age applicants with significant professional experience in a health related discipline, without a Bachelor Degree (or equivalent), may qualify for admission into this course.

## COURSE STRUCTURE

To attain the award of HGCC Graduate Diploma in Care Coordination, students must successfully complete the following:

- Ninety-six (96) credit points (equivalent to seven (7) units of twelve (12) Credit point each and one (1) unit of twenty-four (24) credit point unit) Core units.

After successful completion of the first four (4) units, students are eligible to exit the course with a Graduate Certificate in Care Coordination.

Semester 1:

HCC5101	Complex Care Coordination in the Community	12
HCC5102	Management of Complex Healthcare Needs	12
HCC5103	Ethics and Social Responsibility in the Management of Complex Needs	12
HCC5104	Leadership and Innovation for Complex Needs	12

Semester 2:

HCC6100	Quality Management in Care Coordination	12
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HCC6900 Applied Research Design and Methods 12

HCC6901 Industry Project 24

## Master of Health Science (Osteopathy)

**Course Code:**HMOP

**Campus:**City Flinders.

**About this course:**The Master of Health Science (Osteopathy) degree prepares its graduates for entry into the workplace as a fully trained Osteopath. Graduates will have fulfilled all the requirements for full professional registration. Core studies include Osteopathic Science, Clinical Practicum, Imaging and Medical Sciences. During clinical practicum classes, students have the opportunity to consolidate their clinical skills by treating patients whilst being carefully supervised and mentored by experienced clinicians.

**Course Objectives:**On successful completion of HMOP students will be able to:

- Critically apply knowledge of osteopathic theories, specialist concepts and advanced practical skills in patient diagnosis, management and treatment in both simulated and authentic clinical contexts.
- Interrogate the evidence base to investigate factors associated with specialised health conditions which impact on musculo-skeletal integrity in both contemporary and emerging contexts.
- Design, operationalise and evaluate innovative, sustainable, evidence-based clinical interventions which take into account divergent and complex patient identities, ethnicities, societies and cultures.
- Present clear and coherent expositions of knowledge and ideas to a variety of audiences in order to advance and defend efforts to promote the benefits of osteopathic interventions.
- Plan and execute a research project, professional project or piece of scholarship which demonstrates intellectual independence and contributes to the evidence-base in osteopathy and clinical health care.
- Critically appraise learning skills in relation to attainment of career goals and implement effective and creative strategies to promote lifelong learning in their professional practice
- Exemplify the requisite characteristics for professional membership and practice appropriate to specific purposes, projects and contexts involving inter-professional practice.
- Be eligible to be registered as an osteopath with the Osteopathy Board of Australia following completion of the double degree program.

**Careers:**Students exiting the course will be eligible to apply for registration to practice as Osteopaths in Victoria, and via mutual recognition, throughout Australia. Based on information gained from alumni since the inception of the VU Osteopathy Programme, once registered a number of career options are available to graduates, including: Private Osteopathic practice in Australia Private Osteopathic practice in New Zealand, the United Kingdom and Europe. Graduates will first need to meet local registration requirements in the country they wish to practice. Osteopath working for insurance companies (claims management, injury management) Academia: VU graduates continue to be in demand to work at university and private colleges as lecturers, tutors and in clinical roles. Graduates have taught, and continue to teach in Australia, Europe, the UK, New Zealand and the USA. Clinical research: one graduate is the research coordinator at a UK hospital Private enterprise: at least 3 graduates are CEO's of private companies with interests in the health sector. Upon completion

of this course work Masters students may be eligible to obtain H2A equivalence, which would enable them to enroll in a doctoral degree. However, the process of obtaining H2A equivalence differs between Universities, therefore students receiving this course work masters degree may not meet the requirements with some institutions making them ineligible for enrolling in doctoral studies. It is envisaged that the career options available to graduates will continue to expand steadily, as they have over the last 15 years.

**Course Duration:** 2 years

**Admission Requirements:** To qualify for admission into the Master of Health Sciences (Osteopathy) program, applicants must have satisfactorily completed the Bachelor of Science (Clinical Sciences) (HBOP), or equivalent Bachelor degree with major in osteopathy. Applicants may also be required to attend a selection interview during which their suitability for entry into the course will be further assessed.

**Admission Requirements Other:** National Police Certificate: Successful applicants will be required to obtain a National Police Certificate before commencing field or clinical placements. Victoria Police provide this documentation for a fee. A current National Police Certificate must be provided by students enrolled in the programme on an annual basis. Prospective and continuing students should be aware that not passing relevant police checks may restrict access to clinical placements which are necessary for graduation. First Aid: All HMOP students require a current Level 2 first Aid certificate in order to participate in their clinical placement in the VU Osteopathic teaching clinics at Flinders Lane and St Albans campus. Students must have this certificate before enrolling in the Masters degree.

#### COURSE STRUCTURE

To qualify for the award of Master of Health Science (Osteopathy) a total of 192 credit points is required to be completed.

##### Year 1, Semester 1

HHX4181	Diagnostic Imaging 1	6
HH4186	Clinical Diagnosis and Management 5 (Rheumatology)	6
HHL4180	Introduction to Research Methods	6
HHO4181	Osteopathic Science 7	6
HHU4185	Clinical Practicum 5	12
HHY4185	Pathology 5 (Rheumatology)	6
HHS4182	Counselling Skills for Health Professionals	6

##### Year 1, Semester 2

HHX4282	Diagnostic Imaging 2	6
HMM4281	Pharmacology 1	6
HHL4281	Statistical Methods & Analysis	6
HHO4284	Osteopathic Science 8	6

HHU4286	Clinical Practicum 6	12
HHS4285	Identifying Psychopathology in Clinical Practice	6
HHN5181	Nutrition for Primary Care	6

##### Year 2, Semester 1

HH5287	PBL-Gerontology	12
HMM5182	Pharmacology 2	6
HHO5183	Osteopathic Science 9	6
HHU5187	Clinical Practicum 7	12
HHL7901	Research Project 1	12

##### Year 2, Semester 2

HH5188	PBL (Obstetrics/Pediatrics/Psychiatry)	12
HHO5280	Osteopathic Science 10	12
HHU5288	Clinical Practicum 8	12
HHL7902	Research Project 2	12

### Master of Public Health (Global Nutrition and Active Living)

**Course Code:** HMPG

**Campus:** St Albans.

**About this course:** Demographic transition in low and middle income countries has led to changes in the health needs of populations which now face the double burden of disease with both infectious and non-communicable disease co-existing as public health problems. These countries are also particularly vulnerable to the effects of disasters, both natural and man-made. The Masters of Public Health (Global Nutrition and Active Living) has been developed in response to the changing global context in public health and the need for health professionals with the capabilities to respond to these changes. By bringing together nutrition and active living and focusing on working with diverse communities the course is both unique and innovative. The course equips graduates with the specialist knowledge and skills to pursue a career in public health practice either in Australia or globally in emergencies or development. Students can elect to specialise in one of the two streams offered at the university, either global public health nutrition or public health and active living.

**Course Objectives:** On completion of their course students will be able to:

- Critically apply knowledge of public health theories and specialist concepts in nutrition and active living to address existing and emergent health problems in global contexts, but particularly in low and middle income countries.
- Select, evaluate and justify the use of descriptive and analytic epidemiology to identify and investigate factors associated with various health conditions.
- Design, operationalise and evaluate innovative, sustainable, evidence-based public health interventions to address health, nutrition and lifestyle problems which take into account divergent and complex



ethnicities, societies and cultures in humanitarian and development contexts.

- Identify and advocate for inclusive public health policies and implementation strategies which promote equity in health systems
- Present clear and coherent expositions of knowledge and ideas to a variety of audiences in order to advance and defend efforts to promote health and prevent disease
- Plan and execute a research project, professional project or piece of scholarship which demonstrates intellectual independence and contributes to the evidence-base in public health and particularly global nutrition and/or active living.
- Critically appraise their learning skills in relation to attainment of career goals and implement effective and creative strategies to promote lifelong learning in their professional practice
- Exemplify the requisite characteristics for team leadership and membership appropriate to specific purposes, projects and contexts both within the sphere of public health and in inter-sectoral collaborations.

**Careers:** Potential career outcomes for graduates of the Master of Public Health include working in;

- Global health, nutrition, physical activity research and teaching
- Community development work in health, nutrition and food security
- Delivering health, food and nutrition programs in response to emergencies
- Health policy development
- Program planning, development and evaluation
- Specific population focused health interventions (e.g., older adults, culturally and linguistically diverse communities, chronically diseased populations)
- Inclusive physical activity programming
- Physical activity and sedentary behaviour measurement

Graduates are expected to find work opportunities both in Australia and internationally within:

- National, state and local governments
- The United Nations and other International Health Organisations (WHO, UNICEF, ACSM, International Coalition for Aging and Physical Activity)
- Non-Government Organisations/ not for profit organisations
- Academic institutions and research institutions

**Course Duration:** 2 years

**Admission Requirements International:** Recognised undergraduate degree in nutrition, health sciences, biosciences, community development or sports and exercise science or related discipline. Applicants are expected to have: obtained an IELTS (academic module) result of 6.5 (no band less than 6) or equivalent. In addition you also need to provide a Police Check from your usual country of residence prior to commencing practical placements.

**Admission Requirements Mature Age:** Recognised undergraduate degree in nutrition, health sciences, nursing, biosciences, community development or sports and exercise science or related discipline.

**Admission Requirements Other:** Recognised undergraduate degree in nutrition, health sciences, nursing, biosciences, community development or sports and exercise science or related discipline.

## COURSE STRUCTURE

To complete the Master of Public Health (Global Nutrition and Active Living) students will be required to complete 192 credit points. In the first year of the course students study six core units of 12 credit points each comprising Foundations of Public Health, Public Health Practice, Epidemiology, Biostatistics, Culture and Society in Public Health and Global Health Challenge - Non-Communicable Disease. Students then study two selective units of 12 credit points each in their selected stream. In the global nutrition stream these are Nutrition for Global Health and Global Food Systems and Food Security. In the active living stream these are Social Ecology of Active Living and Behavioural Aspects of Active Living. In the second year students take one core unit of 12 credit points in semester 1 in Research Methods in Public Health. In second semester they choose to do either a Professional Project or Minor Thesis. They then choose five electives over the year relevant to their selected stream. Elective units may be chosen from within or across the global nutrition and active living streams but students are required to take at least one unit from each stream.

### Year 1

#### Semester 1:

##### Core Units:

HMG7100	Foundations of Public Health	12
HMG7110	Epidemiology	12
HMG7120	Global Challenge - Non-Communicable Disease	12

Select one (1) of the following elective units:

HMG7130	Nutrition for Global Health	12
SMG7240	Behavioural Aspects of Active Living	12

#### Semester 2:

##### Core Units:

HMG7200	Public Health in Practice	12
HMG7210	Biostatistics	12
HMG7220	Culture and Society in Public Health	12

Select one (1) of the following elective units:

HMG7230	Global Food Systems and Food Security	12
SMG7140	The Social Ecology of Active Living	12

### Year 2

#### Semester 1:

Core Unit:		
HMG7950	Research Methods in Public Health	12

Select TWO (2) of the following elective units:

HMG7310	Nutrition Assessment and Program Management	12
HMG7320	Migration and Health	12
SMG7340	Active Living Programs	12

AND

Select ONE (1) unit (12 credit points) from the following electives:

HMG7130	Nutrition for Global Health	12
HMG7230	Global Food Systems and Food Security	12
SMG7140	The Social Ecology of Active Living	12
SMG7240	Behavioural Aspects of Active Living	12

Semester 2:

Core Unit:

HMG7400	Professional Project	24
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OR

HMG7430	Minor Thesis	24
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Select TWO (2) of the following elective units:

HMG7410	Concepts in Humanitarian Assistance	12
HMG7420	Nutrition in Emergencies	12
SMG7440	Policy and Promotion for Physical Activity	12

## Master of Nursing (By Research)

**Course Code:**HRNR

**Campus:**St Abans.

**About this course:** Masters Degree (Research) in the field of Nursing The Masters Degree (Research) allows you to develop your knowledge and skills in planning and executing a substantial piece of original research in an area that is of interest to you and to the University, industry and the community, with the assistance of an experienced research supervisory team. This degree requires you to apply an advanced body of knowledge in a range of contexts for research and scholarship and potentially as a pathway to a PhD or Professional Doctorate. It involves supervised study and research, through completion of a major research thesis in an approved thesis format for examination, as well as research training and independent study. Feedback is provided face-to-face and online by the supervisory team, and co-curricular opportunities for receiving feedback are available through activities in which you are strongly encouraged to participate, such as involvement in support and adjunct programs offered by the university or externally; collaborative publication of academic articles with supervisors and peers; presentation at academic conferences

including those organised within VU for graduate researchers and staff; and other presentations to a variety of audiences. This course is normally a 2 year (full time) and 4 year (part time) research-based degree.

**Course Objectives:** The course objectives are to produce graduates who have the following knowledge and skills:

- a body of knowledge that includes the understanding of recent developments in one or more discipline
- advanced knowledge of research principles and methods applicable to the field of work or learning
- cognitive skills to demonstrate mastery of theoretical knowledge and to reflect critically on theory and its application
- cognitive, technical and creative skills to investigate, analyse and synthesise complex information, problems, concepts and theories and to apply established theories to different bodies of knowledge or practice
- cognitive, technical and creative skills to generate and evaluate complex ideas and concepts at an abstract level
- cognitive and technical skills to design, use and evaluate research and research method
- communication and technical skills to present a coherent and sustained argument and to disseminate research results to specialist and non-specialist audience
- technical and communication skills to design, evaluate, implement, analyse, theorise and disseminate research that makes a contribution to knowledge

This knowledge and these skills will be demonstrated through the planning and execution of a substantial piece of research:

- with creativity and initiative
- with a high level of personal autonomy and accountability, demonstrating expert judgement, adaptability and responsibility as a learner

**Careers:** Research related career options in the healthcare field and platform to undertake higher studies like PhD.

**Course Duration:** 2 years

**Admission Requirements International:** In addition to meeting the University requirements (See: Admission Requirements - Other) international applicants who will be studying in Australia must satisfy the English language qualifying requirement for gaining an entry visa to Australia for applicants from their country.

**Admission Requirements Other:** (a) Academic achievement and preparation to a level that is sufficient to undertake masters level research demonstrated in any one or more of the following: i. Qualified, at minimum, for a bachelors degree at a standard considered by the University to be sufficiently meritorious (normally Distinction average in the final year); or ii. Qualified for any other award judged by the University to be of a relevant and appropriate standard and have: •Produced evidence of professional experience; and •Fulfilled any other conditions relating to prerequisite studies which the University may impose. (b) Demonstrated competency in English sufficient to work at research masters level, through meeting one or more of the following criteria: i. Successful completion of one of the degrees stipulated

under a) i) – ii) above with English as the language of instruction and assessment and undertaken in a predominantly English speaking context; or ii. Been taught for two of the past five years at a tertiary institution where English was the primary language of instruction; or iii. Achieved an overall band score of not less than 6.5 in an International English Language Testing Service (IELTS) test with no individual band score below 6.0; or iv. Achieved a score of not less than 92 and no section score less than 22 in the internet-based Teaching of English Foreign Language (TOEFL) test; or v. Documented evidence of English proficiency equivalent to the above.

## COURSE STRUCTURE

The standard duration of a Masters Degree (Research) is two years of full-time study or part-time equivalent, although in certain circumstances the degree may be completed in eighteen months. In some cases the student may be required to complete approved coursework units such as laboratory skills or research design as part of the Masters Degree (Research).

HNM6800	Research Thesis (Full-Time)	48
HNM6801	Research Thesis (Part-Time)	24

## Graduate Certificate in Exercise Prescription for Manual Therapy

**Course Code:**HTEO

**Campus:**City Flinders.

**About this course:**The Graduate Certificate in Exercise Prescription for Manual Therapy is aimed at practising health professionals in the field of manual therapy who wish to extend their skills in the area of exercise prescription. The course has been designed to cover those areas of exercise prescription most relevant to manual therapists, including underlying exercise physiology principles, the rehabilitation of common musculo-skeletal conditions, as well as an introduction to rehabilitation of the orthopaedic surgery patient, and preventive exercise for all age groups, but especially the older patients who form an increasing part of manual therapists' workload. The later will serve as an introduction, as these topics will be developed more in the graduate diploma. The course will equip practitioners with the skills required to meet the needs of third party payers such as Work Cover and TAC, who are increasingly demanding that manual therapists incorporate exercise prescription into their patient management plans. In order to allow practitioners to undertake the course while still practising full time, and to allow interstate applicants to complete the course while continuing to work, it will be delivered online apart from 4 burst mode residentials to teach practical skills and a face to face introduction to studying at VU, using the library etc. There is a growing body of research evidence indicating that manual therapy for musculoskeletal conditions is at its most effective when combined with the prescription of exercises, both for purposes of rehabilitation and injury prevention. However, many practitioners have little or no training in exercise prescription, as it was not a part of pre-professional training courses other than physiotherapy until recent years. The aim of the Graduate Certificate in Exercise Prescription for Manual Therapy is to provide manual therapists with foundation knowledge of the principles of exercise prescription, and of the current state of research evidence regarding its efficacy. They will be able to apply this knowledge to the assessment of patients for suitability and safety of exercise programs, and to the development of patient-specific programmes. The course is designed for manual therapists such as osteopaths and chiropractors, whose original training may not have included detailed instruction in exercise rehabilitation and prescription of preventive exercises. It will allow practitioners to study theory units online, and to develop practical skills in the

community via application of their knowledge to their own patients. The program is designed to meet the needs of third party providers, who increasingly require therapists to be able to prescribe evidence-based exercises for patients. It also provides an avenue of continuing professional development for manual therapists, which has now become compulsory under the national registration system. If they wish to do so, graduates will be able to progress to further study at VU in exercise science and exercise rehabilitation for sports. Theory components of the course will be taught online, through a combination of data presentations, video podcasts and online readings using the VU Collaborate platform. The course will take advantage of the student engagement tools such as online forums set up to facilitate discussion of topics, and the conduct of assessments. Practical units will be taught in burst-mode workshops held over weekends at VU City Flinders Campus to allow practitioners to attend without significantly impacting on their practice. Two sessions will be in the first semester, and the other two in the second semester. The practical units will be assessed by a practical/viva exam. All other units will be assessed via clinic-based assignments.

**Course Objectives:**The aim of the Graduate Certificate in Exercise Prescription for Manual Therapy is to provide manual therapists with a contextualised and contemporary understanding of the principles of exercise and exercise prescription. Students will learn how to apply this knowledge to the assessment of patients for suitability and safety of exercise rehabilitation interventions, and to the development of efficacious patient-specific programmes. The course is designed for manual therapists such as osteopaths and chiropractors, to extend their pre-professional training in exercise rehabilitation and exercise prescription. On completion of this course students will be able to:

- Contextualise their clinical skills and knowledge of the biomedical sciences to the application of exercise for rehabilitation and injury management;
- Design and implement patient-centred, evidence-informed exercise rehabilitation programs for common acute and chronic musculoskeletal conditions;
- Critically review the physiological and pathological concepts related to exercise and injury, and theories relating to various types of exercise;
- Critique the current evidence for exercises and interventions appropriate for common musculoskeletal conditions;
- Elucidate patient preferences for exercise rehabilitation interventions and design programs accordingly; and
- Advocate exercise prescription as part of the scope of practice of manual therapy to a range of audiences including patients, other health professionals and third party providers.

**Careers:**The course will improve the ability of practitioners to provide evidence-based and personally tailored exercise programmes for their patients, which will meet the needs both of patients and third party providers. It is anticipated that this qualification will improve employment prospects for graduates in a competitive market, and will also act as a lead-in to potential further study and/or research into this field for those who wish to pursue this pathway.

**Course Duration:**0.5 years

**Admission Requirements:**AQF7 level qualification or equivalent in a manual therapy discipline such as osteopathy, chiropractic, physiotherapy or myotherapy and currently working in clinical practice.

**Admission Requirements International:** Practitioners who are currently registered osteopaths, chiropractors or physiotherapists in New Zealand will be eligible for admission.

**Admission Requirements Mature Age:** All applicants will be mature age as this is a post-professional qualification

**Admission Requirements VET:** Therapists who have completed a relevant cognate TAFE award (e.g. Advanced Diploma in Rehabilitation Therapy/Myotherapy) and have a minimum of five years of relevant clinical practice are eligible for admission.

**Admission Requirements Other:** None

#### COURSE STRUCTURE

To attain the Graduate Certificate in Exercise Prescription for Manual Therapy, students will be required to complete 48 credit points (equivalent to 4 units).

HE05100	Principles of Exercise for Manual Therapy	12
HE05101	Principles of Exercise Rehabilitation for Manual Therapy	12
HE05201	Designing and Writing Exercise Programmes for Manual Therapy Patients	12
HE05202	Management of Common Musculoskeletal Conditions for Manual Therapy Patients	12

#### Bachelor of Science (Honours) (Biomedical Sciences)

**Course Code:** SHBM

**Campus:** Werribee, Footscray Park, City Flinders, St Albans.

**About this course:** This course comprises a research project including two oral presentations, a literature review and the project thesis.

**Course Objectives:** This course promotes the development of research skills and training, including ethics; critical appraisal of the literature; and the production of a scholarly piece of writing.

**Careers:** Medical research, research assistant, further studies to PhD and academics.

**Course Duration:** 1 year

**Admission Requirements:** Successful completion of a three year science-based degree with a credit average in the 3rd year of the Biomedical Sciences or equivalent degree.

#### COURSE STRUCTURE

The Honours course is a one year (full-time) or two year (part-time) commitment. Students enrol in RBM4002 for two semesters, receiving a single, final mark and grade at the completion of the course. A part-time option is available in which the same structure, content and assessment items are undertaken over four semesters through enrolment in RBM4011. Honours comprises completion of a research project, including oral presentations, a literature review and research thesis. Honours coursework comprises areas of study in advanced research design, and research conduct, ethics and training. In special cases undergraduate units of studies may be substituted for course work when a student requires further studies of a specialised nature. The lecture or reading programs that make up the course work

units will be determined by student's preferences in consultation with the student's approved supervisor(s). Course work will be assessed by oral presentations, written assignments or a written examination.

#### FULL-TIME

##### Semester 1

RBM4002	Science Honours 2	48
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##### Semester 2

RBM4002	Science Honours 2	48
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#### PART-TIME

##### Semester 1

RBM4011	Science Honours (Part Time)	24
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##### Semester 2

RBM4011	Science Honours (Part Time)	24
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##### Semester 3

RBM4011	Science Honours (Part Time)	24
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##### Semester 4

RBM4011	Science Honours (Part Time)	24
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#### Bachelor of Science (Honours) (Nutrition and Food Sciences)

**Course Code:** SHNF

**Campus:** Werribee.

**About this course:** The aim of this honours program is to provide advanced study at a fourth year level which builds on the knowledge and skills developed at degree level, and to prepare students for postgraduate research by developing skills in working independently, critical analysis of information, problem-solving, devising, designing and conducting experimental work and written and oral communication.

**Course Objectives:** An Honours program is available in each of the degree specialisations. The aim of the honours program is to provide a course of advanced study at a fourth year level which builds on the knowledge and skills developed at degree level, and to prepare students for postgraduate research by developing skills in: working independently, critical analysis of information, problem-solving, devising, designing and conducting experimental work and written and oral communication

**Careers:** Nutrition and food research, further studies to PhD, research assistant.

**Course Duration:** 1 year

**Admission Requirements:** To qualify for entry to the honours program, applicants must hold a degree or equivalent with major studies in a relevant discipline and have obtained a 'credit' average, or equivalent, in the final year of the degree.

**Admission Requirements International:** Achieved an IELTS (Academic Module) result with an overall score of 6.5 (no band less than 6), or equivalent, and completed a

Masters degree or a relevant four year undergraduate degree with Honours or its equivalent at a high standard.

**Admission Requirements Mature Age:** To qualify for entry to the honours program, applicants must hold a degree or equivalent with major studies in a relevant discipline and have obtained a 'credit' average, or equivalent, in the final year of the degree, or have substantial research experience in a relevant area.

#### COURSE STRUCTURE

The courses are offered on a full-time basis over one year or equivalent if on a part-time basis. Entry to the Honours program can be either at the beginning of the academic year (February) or at a mid-year intake (July).

##### Semester 1

RBM4002	Science Honours 2	48
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RBM4011	Science Honours (Part Time)	24
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##### Semester 2

RBM4002	Science Honours 2	48
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RBM4011	Science Honours (Part Time)	24
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# SPECIALISATIONS

## HMAAHN Applied Human Nutrition

**Locations:**Werribee, Footscray Nicholson, Footscray Park, St Albans

The Applied Human Nutrition major provides an integrated group of units in Applied Human Nutrition. It builds on the minor in Applied Human Nutrition by recognizing both the biological and the social facets of human nutrition. It focuses on nutrition from a preventive, maintenance and therapeutic perspective, all of which require a thorough understanding of the related biological sciences and of selected aspects of the behavioural sciences. Students learn about nutrition and its application to the maintenance of health and the prevention and treatment of disease. They also learn about individual and social behaviour, particularly in family settings, and the implications of behavioural factors in the establishment of good nutrition status from conception through to old age. Assessment tasks for the major include short exercises, group projects, oral presentations, essays, and formal examinations. The major includes capstone units, which provide students with the opportunity to draw on their learning in their major, and develop the capacity to apply this learning in new contexts.

HHN2001	Family Health and Nutrition Through the Lifespan	12
HHN2401	Nutrition & Physical Activity Assessment	12
HHN2402	Diet & Disease	12
HHN3502	Community & Public Health Nutrition	12
HHN3601	Nutrition Communication & Education	12
HHN3603	Nutrition Project	12
HHN3605	Nutrition Challenges	12
RBM3960	Nutritional Frontiers	12

## HMAFSC Food Science

**Locations:**Werribee, Footscray Nicholson, Footscray Park, St Albans

This major provides an integrated group of units in Food Science. It builds on the minor in Food Science and deepens students understanding of problems in the field and provides them with tools to create solutions to complex problems with ethical and social impacts within local and global communities. The Food Science major will prepare students to play an important role in meeting the expanding needs of the local and international food industries. The discipline of food science offers potential career opportunities within the food industry, government, agricultural, marine, trade and other organizations, both in Australia and internationally. Assessment tasks for the major include short exercises, group projects, oral presentations, essays and formal examinations. The major includes capstone units, which provide students with the opportunity to draw on their learning in their major, and develop the capacity to apply this learning in new contexts.

HFS2001	Properties of Food	12
HFS2002	Food Safety and Preservation	12
HFS2003	Food Microbiology	12

HFS3001	Food Processing	12
HFS3233	Managing Food Enterprises	12
RBF3151	Food Quality Assurance	12
RBF3256	Food Product Development	12
RBF3900	Project	12

## HMAFSE Food Service

**Locations:**Werribee, Footscray Nicholson, Footscray Park, St Albans

This major provides an integrated group of units in Food Services. It builds on the minors in Food science and Applied Human Nutrition and deepens students understanding of contemporary challenges through theory and practice of management, community nutrition and assessment relevant to food service systems. Students will be qualified for employment in hospitals and aged care residences as diet monitors, food service assistants, and supervisors of meal systems and staff in institutional kitchens and community services. Assessment tasks for the major include short exercises, group projects, oral presentations, essays, and formal examinations. The major includes a capstone unit with a work placement component, which provide students with the opportunity to draw on their learning in their major, and develop the capacity to apply this learning in new contexts.

HFS2001	Properties of Food	12
HFS2002	Food Safety and Preservation	12
HFS2003	Food Microbiology	12
HFS2004	Food Quality Assurance	12
HHN3503	Introduction to Food Service	12
HHN3602	Food Service Systems	12
HHN3604	Food Service Challenges	24

## HMAHPH Human Physiology

**Locations:**St Albans

The Human Physiology major provides an integrated suite of units which builds upon the fundamentals of anatomy and physiology covered in the College core units. Specifically, students will learn about regional and rehabilitation anatomy, cardiorespiratory, renal and neuromuscular physiology and associated diseases. The relationships between gastrointestinal function, diet, nutrition, metabolism and human health will be covered, including examining the role of diet in chronic diseases and its importance in growth and development. In the final year, students will draw on their knowledge and apply their learning in different contexts in the two capstone units, Applied Biomedical Sciences and Integrative Physiology.

HBM2103	Digestion, Nutrition and Metabolism	12
HBM3202	Applied Biomedical Science	12
HBM3203	Integrative Physiology	12
RBM2100	Rehabilitation Anatomy	12

RBM2200	Functional Anatomy of the Head and Back	12	HBM3204	Biomolecular Mechanisms of Disease	12
RBM2800	Cardiorespiratory and Renal Physiology	12	RBM2133	Cell and Molecular Biology	12
RBM3264	Advanced Nerve and Muscle Physiology	12	RBM2560	Medical Biochemistry	12
RBM3640	Advanced Neurosciences	12	RBM3720	Immunology	12

### HMAIND Indigenous Health

#### Locations: St Albans

The Indigenous Health Major builds on the Indigenous Health Minor to provide students with a complete context and understanding of the cultural and historical factors that need to be considered when developing and implementing health programs for Indigenous populations. Students explore, analyse and deconstruct disciplinary and lived perspectives, impacts and outcomes for Indigenous individuals and communities in the 21st Century. Topics that are explored include history, human rights, traditional owners, sovereignty, governance and societal structures, and colonial systems of power, and how these influence the health outcomes of Indigenous populations and groups. In addition to this students will learn about and explore traditional health interventions used in Indigenous communities and their relationship to the conventional western medicine construct. A group project will be presented through a United Nations type 'mini summit' and 'final summit' in relation to Indigenous health, representing discipline and multi-disciplinary approaches through detailed action plans.

AEK1105	Aboriginal Traditions and Policy	12
AEK1204	Aboriginal History and Political Movements	12
AEK2201	Learning in Indigenous Australian Communities	12
AEK2202	Global Indigenous Issues	12
AEK3000	Indigeneity in a Changing Global World	12
AEK3202	Global Indigenous Leadership	12
HHB3000	Traditional and Contemporary Health Interventions	12
HHB3001	Indigenous Health Research Project	12

### HMAMCB Molecular Cell Biology

#### Locations: St Albans

The Molecular Cell Biology major builds on the knowledge of introductory cell function and molecular mechanisms, acquired from the first year core units. The suite of units offered in this major focuses on the investigation of the human body at the molecular and cellular levels, with emphasis on the molecular basis of disease. Understanding the molecular techniques utilized in molecular biomedicine will underpin this major. Students will develop both theoretical and laboratory skills essential for becoming successful professionals in both research and clinical based biomedical science.

HBM2105	Medical Microbiology and Immunity	12
HBM2106	Human Genetics	12
HBM3202	Applied Biomedical Science	12

### HMAPBH Public Health

#### Locations: St Albans

The Public Health Major provides students with knowledge and skills in Public Health and Health Promotion. The major develops the student's knowledge base in Public Health and Health Promotion and focuses on the application of knowledge, policy, and research in improving the health of populations. Students completing this major will have an understanding and perspective on how to address contemporary health problems related to critical social and behavioural factors that influence health outcomes.

HHB2301	Health Promotion	12
HHB2302	Health Culture and Society	12
HHB2303	Health and Behaviour	12
HHB2402	Health Program Planning and Evaluation	12
HHB3003	Health Priority in the Western Region	12
HHB3502	Health Research	12
HHB3602	Global Health	12
HHB3603	Health Challenge	12

### HMAPHN Public Health Nutrition

#### Locations: Footscray Park, St Albans

The Public Health Nutrition major provides an integrated group of units in Public Health Nutrition. It builds on the minors in Applied Human Nutrition and Public Health Nutrition. This major is an area of concentration emphasizing the application of food and nutrition knowledge, policy, and research to the improvement of the health of populations. Students completing this major will have understanding and a perspective on addressing contemporary problems related to critical social, behavioural, and food and nutrition-related factors that affect health. Students will have knowledge to propose ways to design, implement, and evaluate programs that can improve the nutritional status of the population or subgroups in the population. They will be able to assess how nutrition and food related public policies affect health, especially in vulnerable populations and how global, national, state, and local community programs can be designed to improve the nutritional status of the population as a whole and those at particular risk. Assessment tasks for the major include short exercises, group projects, oral presentations, essays, and formal examinations. The major includes capstone units, which provide students with the opportunity to draw on their learning in their major, and develop the capacity to apply this learning in new contexts.

HHB1104	Introduction to Public Health and Wellness	12
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HHB2301	Health Promotion	12
HHB2402	Health Program Planning and Evaluation	12
HHB3000	Traditional and Contemporary Health Interventions	12
HHB3502	Health Research	12
HHB3602	Global Health	12
HHB3603	Health Challenge	12
HHN3603	Nutrition Project	12

### HMIACH Analytical Chemistry

**Locations:** Footscray Park, St Albans

After developing a solid grounding in science, this group of units allows students to pursue a breadth minor in Analytical Chemistry. Analytical chemistry is a cornerstone of the chemical industry and has many applications including food, forensic, pharmaceutical, medical and environmental analyses. This chemistry minor includes hands-on training on modern analytical equipment including applications, theory of operation, optimisation, maintenance and troubleshooting to produce work ready graduates. This minor is appropriate for student undertaking major studies in a range of science discipline areas who wish to complement their studies with some training in chemical instrumentation operation and interpretation. By completing all units in this minor, students will have fulfilled VIT requirements for a Teaching major in Chemistry.

NPU2101	Analytical Methods 1	12
NPU2102	Analytical Methods 2	12
NPU3101	Pharmaceutical Regulatory Processes	12
NPU3104	Drug Testing and Analysis	12

### HMIAHN Applied Human Nutrition

**Locations:** Footscray Park, St Albans

After developing a solid grounding in science, the Applied Human Nutrition minor prepares students for a wide choice of careers in nutrition and, in conjunction with Biomedical Nutrition minor, prepares for entry into the professional practice of dietetics. This minor uses classroom, community service, and practice learning to develop an interdisciplinary knowledge core in nutrition as related to health, wellness and illness and their determinants. Through rich and varied experiential learning opportunities, students gain practical skills related to application and interpretation of knowledge.

HHN2001	Family Health and Nutrition Through the Lifespan	12
HHN2401	Nutrition & Physical Activity Assessment	12
HHN2402	Diet & Disease	12
RBM3960	Nutritional Frontiers	12

### HMIAPP Applied Research

**Locations:** St Albans

This Minor provides the opportunity for students to focus on theoretical and practical

skills essential for Biomedical Research. The importance of biomedical research in developing new treatments and understanding the underlying mechanisms of diseases underpins this minor. Following on from first year core units students will further develop their understanding of qualitative and quantitative research with an emphasis on critically reviewing scientific literature, statistical analysis and effective scientific communication.

HBM2104	Research Methods	12
HBM3102	Medical Imaging	12
HBM3200	Bioinformatics Methods	12
RBM3910	Project	12

### HMIBIO Bioscience

**Locations:** St Albans

The Bioscience minor builds on the first year units of Bioscience 1 & 2, and it examines the natural physiological changes that occur throughout the life cycle and introduces the students to the major pathological disease processes of the body. It discusses the basis for preventative interventions and management of important pathological conditions.

RBM2530	Pathophysiology 1	12
RBM2540	Pathophysiology 2	12
RBM3550	Growth and Early Development	12
RBM3560	Growth, Development and Ageing	12

### HMIBNU Biomedical Nutrition

**Locations:** Footscray Park, St Albans

After developing a solid grounding in science, this group of units allows students to pursue a minor in Biomedical Nutrition. This minor is a prerequisite for entry into a dietetics postgraduate program as well as meeting a biochemistry requirement for VIT Chemistry teaching.

RBM2530	Pathophysiology 1	12
RBM2540	Pathophysiology 2	12
RBM2560	Medical Biochemistry	12
HHN3001	Nutritional Biochemistry	12

### HMIFSC Food Science

**Locations:** Footscray Park, St Albans

After developing a solid grounding in science, this minor allows students to develop knowledge and skills relevant to Food Science. Students will learn fundamentals of properties of foods including chemical composition and physical state and how to ensure their safety and quality using state of the art facilities at Victoria University. Students will develop their skills in oral communication, critical analysis and different forms of writing for audiences. Assessment tasks across the minor include short exercises, group projects, oral presentations, essays and formal examinations.

HFS2001	Properties of Food	12
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HFS2002	Food Safety and Preservation	12
HFS2003	Food Microbiology	12
RBF3151	Food Quality Assurance	12

### HMIHNU Health and Nutrition

#### Locations:St Abans

The Health and Nutrition Minor introduces the student to the role nutrition plays in individual health and populations through the lifespan. Upon completion of the minor students will have an understanding of the link between nutrition and health, wellness and illness and their determinants.

HPC1000	Introduction to Human Nutrition and Food	12
HHN2001	Family Health and Nutrition Through the Lifespan	12
HHN2401	Nutrition & Physical Activity Assessment	12
RBM3960	Nutritional Frontiers	12

### HMIHPH Anatomy & Integrated Physiology

#### Locations:St Abans

The Anatomy & Integrative Physiology minor introduces the students to the gross anatomy of the head, neck and back and the application of anatomy in medicine will be highlighted in clinical scenarios. The integrative nature of the cardiovascular, renal, respiratory systems will be interrogated further, building on basic physiological principals covered in Human Physiology in Year 1. The relationship between gastrointestinal physiology, nutrition and human health is also covered. Upon completion of this minor students will have an understanding of the link between anatomy, physiology, nutrition, metabolism and health.

HBM2103	Digestion, Nutrition and Metabolism	12
RBM2100	Rehabilitation Anatomy	12
RBM2200	Functional Anatomy of the Head and Back	12
RBM2800	Cardiorespiratory and Renal Physiology	12

### HMIIMM Immunopharmacology

#### Locations:St Abans

The Immunopharmacology minor covers Microbiology, Drug Discovery and Development, Immunology and Pharmacology. It focuses on the micro-organisms that cause human disease, their transmission and infection control, as well as the application of microbiology in medicine and drug development. It provides a pathway to understanding how the immune system can be exploited to develop novel therapies via a pharmacological approach. This minor is vital for students wanting to explore post graduate research or work in large companies which develop pharmaceutical products and their application to disease.

NPU2104	Drug Discovery and Development	12
HBM2105	Medical Microbiology and Immunity	12
RBM3720	Immunology	12
RBM3800	Pharmacology	12

### HMIIND Indigenous Health

#### Locations:St Abans

In the Indigenous Health Minor, students explore, analyse and deconstruct disciplinary and lived perspectives, impacts and outcomes for Indigenous individuals and communities in the 21st Century. Topics that are explored include history, human rights, traditional owners, sovereignty, governance and societal structures, and colonial systems of power, and how these influence the health outcomes of Indigenous populations and groups. In addition to this students will learn about and explore traditional health interventions used in Indigenous communities and their relationship to the conventional western medicine construct.

AEK1105	Aboriginal Traditions and Policy	12
AEK1204	Aboriginal History and Political Movements	12
AEK3202	Global Indigenous Leadership	12
HHB3000	Traditional and Contemporary Health Interventions	12

### HMIIPH Integrative Physiology

#### Locations:St Abans

On completion of the integrated physiology minor, students will have the knowledge and skills to apply a broad knowledge from the fundamental units of biomedical science, integrating aspects of neuromuscular physiology and research design, in a practical forum of a research project. Students will have the opportunity to apply this theoretical knowledge to practical situations in laboratory simulated learning environments, and community and industry settings, sometimes as part of a research team. Specifically, students will independently design and develop a research proposal which: 1) demonstrates an understanding of the principles of scientific research, experiment/project design; 2) develops skills in accessing, selecting, recording, reviewing and managing research data and research information; 3) critically analyses and synthesizes research data and other information; 4) considers social, cultural, and environmental issues; 5) adopts ethical practice including preparing an application for ethics approval; and 6) communicates information in oral and written forms to a range of associates including supervisors, peers, research teams, community and industry partners.

HBM2104	Research Methods	12
HBM3105	Research Project	12
RBM2100	Rehabilitation Anatomy	12
RBM3264	Advanced Nerve and Muscle Physiology	12

### HMIIMCB Molecular Cell Biology

#### Locations:St Abans

The Molecular Cell Biology minor builds on the knowledge of introductory cell function and molecular mechanisms, acquired from the first year core units. The suite of units offered in this minor focuses on the investigation of the human body at the molecular and cellular levels. Key concepts in microbiology, human genetics and biochemistry will be taught and utilized to understand human disease at the molecular level.

HBM2105	Medical Microbiology and Immunity	12
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HBM2106	Human Genetics	12
RBM2133	Cell and Molecular Biology	12
RBM2560	Medical Biochemistry	12

### **HMINUT Nutrition**

#### **Locations:**St Albans

The Health and Nutrition Minor introduces the student to the role nutrition plays in individual health and populations through the lifespan. Upon completion of the minor students will have an understanding of the link between nutrition and health, wellness and illness and their determinants. This minor uses classroom and practical learning to develop an interdisciplinary knowledge core in nutrition as related to health, wellness and illness and their determinants. Through varied learning opportunities, students gain practical skills related to application and interpretation of knowledge.

HPC1000	Introduction to Human Nutrition and Food	12
HHN2001	Family Health and Nutrition Through the Lifespan	12
HHN2401	Nutrition & Physical Activity Assessment	12
RBM3960	Nutritional Frontiers	12

### **HMPHN Public Health Nutrition**

#### **Locations:**Footscray Park, St Albans

This minor provides an integrated group of units in Public Health Nutrition. It covers disciplinary knowledge in Public Health Nutrition with a focus on contemporary challenges relating to principles and practices from social and behavioral science to develop, implement and evaluation of programs and policies that promote optimal nutrition and population health and well-being. Students will develop their skills in oral communication, critical analysis and different forms of writing for audiences. Assessment tasks across the minor include short exercises, group projects, oral presentations, essays, and formal examinations.

HHB1104	Introduction to Public Health and Wellness	12
HHB2301	Health Promotion	12
HHB2402	Health Program Planning and Evaluation	12
HHB3000	Traditional and Contemporary Health Interventions	12

# UNITS

## HBD1201 Introduction to Dermal Sciences

**Locations:**City Queen.

**Prerequisites:**Nil.

**Description:**This unit introduces students to the basic principles of anatomy and biology for dermal science that will be expanded upon in further units of study within the degree. It encompasses knowledge regarding the musculoskeletal and nervous systems in a context relevant to face and body treatments, and introduces students to the functions, structure and thermoregulatory role of the integumentary system. The glands and nerves of the skin are reviewed with regards to type, structure and function and nail structure is also discussed.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Substantiate the structure of the epidermis, dermis and hypodermis relevant to the practice of facial and body treatments;
2. Review the functions of the skin including the role that it plays in thermoregulation and assess the requirements for a healthy integumentary system;
3. Verify the types, structure and function of the various glands and nerves of the skin;
4. Summarise the structure of nails;
5. Determine the location and function of the skeletal and muscular structures of the body.

**Class Contact:**Lecture3.0 hrsTutorial1.0 hr

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit. Tortora, G.J., & Derrickson, B. (2014). 14th ed. Principles of anatomy and physiology Hoboken, NJ: Wiley and Sons.

**Assessment:**Test, Two (2) Online Tests (30 minutes each), 20%. Assignment, Written Assignment (1000 words), 40%. Examination, Written Examination (2 hours), 40%.

## HBD1202 Communication and Dermal Services

**Locations:**City Queen.

**Prerequisites:**Nil.

**Description:**This unit provides students with the knowledge and skills required for effective communication with clients, colleagues and industry representatives in a professional dermal therapies setting. It encompasses knowledge to enable students to deliver a comprehensive and complete service experience in a dermal therapies environment, with consideration given to legal, ethical and privacy requirements alongside the concepts of social and cultural diversity in the workplace. Students will be guided in how to confidently perform an effective consultation, as optimal communication between the dermal therapist and the client is required to ensure the safety and efficacy of dermal therapies procedures.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Evaluate and demonstrate effective verbal and non-verbal communication techniques relevant to dermal therapies;
2. Devise an effective consultation process, exploring legal, privacy and ethical concerns whilst giving consideration of cultural and social diversity;
3. Evaluate and interpret the relevance of conducting a detailed client history in relation to the consultation process, that encompasses medical and non-medical related health and lifestyle factors;
4. Demonstrate the ability to accurately explain and perform financial transactions relevant to a dermal therapies practice;
5. Explain and promote products and procedures in response to customer enquiries and to enhance treatment outcomes;
6. Assess the importance of communication, feedback and reflection in clinical practice to enhance workplace

interactions and professional development.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hrIn addition another Twelve (12) hours of practicum for this unit will involve four (4) sessions of three (3) hours in duration delivered face-to-face within the Victoria University Dermal Clinic.

**Required Reading:**Readings will be available on the VU Collaborate space for this unit

**Assessment:**Test, Quiz (30 minutes), 20%. Presentation, Case Scenario (10 minutes), 40%. Journal, Reflective Journal (1000 words), 40%. To pass this unit, students must achieve an aggregate score of 50%, and that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD1203 Facial and Body Treatments

**Locations:**City Queen.

**Prerequisites:**Nil.

**Description:**This unit will consolidate knowledge gained in the 1st semester and introduce the underpinning techniques in the practical application of basic massage techniques for facial and body treatments. Students will build upon theory gained in previous units and apply this to massage techniques utilised by dermal therapists. In this unit there is also an emphasis on the application of topical preparations used in aesthetic practice. This unit provides essential skills required as a dermal therapist and in preparation for the more complex practicum within the degree. Students will be capable of planning, developing, and adapting facial treatments for a variety of skin concerns in the dermal therapies, in addition to performing a basic facial based on a skin concern.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Apply knowledge gained in Human Physiology 1 to practice safe and effective facial treatments;
2. Develop, adapt and apply facial treatments for clients with specific skin concerns;
3. Interpret knowledge gained in Human Physiology 1 to provide safe and effective basic body massage techniques;
4. Design treatment plans for effective facial and body treatments;
5. Practise infection control standards when performing treatments in dermal therapies practice settings.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hrIn addition another twenty-four (24) hours of practicum for this unit will involve two (2) hours per week delivered face-to-face within the Victoria University Dermal Clinic.

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit. Cengage Learning (2013) 11th ed. Milady Standard Esthetics: Fundamentals USA, Milady.

**Assessment:**Presentation, Oral Presentation (5 minutes, 400 words), 25%. Journal, Journal/Logbook - Outlining five (5) facial and five (5) body treatments (800 words), 25%. Practicum, Practicum 1 - Devise a treatment plan and perform a facial treatment (1 hour allocated), 25%. Practicum, Practicum 2 - Perform basic body massage techniques (1 hour allocated), 25%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessments. The practical assessments are a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD1204 Electrology

**Locations:**City Queen.

**Prerequisites:**Nil.

**Description:**This unit explores the structure and function of the pilosebaceous unit and determine how permanent hair removal procedures influence these structures.

Students will investigate the science behind the process of electrolysis and thermolysis and apply this knowledge to develop and implement safe and effective electrology treatments.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the structure and function of the pilosebaceous unit and determine how permanent hair removal procedures impact on these structures and its function;
2. Determine the hair growth cycle and assess how this might impact upon the outcome of permanent hair removal procedures;
3. Investigate the basic principles of electricity and electrical safety and utilize this knowledge when developing and implementing electrology procedures;
4. Discuss disorders and biological factors that influence hair growth and determine how these may impact upon electrology procedures;
5. Investigate the principles of electrolysis and thermolysis and apply this knowledge to developing and implementing effective electrology treatments;
6. Design and apply safe and effective electrology treatments.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic.

**Required Reading:** Gior, F. (2005) 4th ed. *Modern Electrology: Excess hair its causes and treatment USA: Hair Publishing*

**Assessment:** Case Study, Part 1 Body Treatments: Design, perform and document permanent hair removal treatments on the body (minimum 5 treatments) due week 6 (1000 words min.), 30%. Case Study, Part 2 Face Treatments: Design, perform and document permanent hair removal treatments of the face (minimum 5 treatments) due week 9 (500 words min.), 20%. Examination, Practical Examination: Design and perform a safe and effective electrology treatment (1 hour), 30%. Examination, Written Examination (1 hour), 20%. To pass this unit, students must achieve an aggregate score of 50%, and pass the case study assessments. The case study assessments are a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD2101 Dermal Studies and Philosophy

**Locations:** Online, City Queen.

**Prerequisites:** HBD1201 - Introduction to Dermal Sciences

**Description:** This unit begins to establish the professional identity of a dermal therapist by enabling the student to substantiate their role in the aesthetics industry as a sole entity as well as being a member of an interprofessional team. It does so by providing an introduction to critical thinking and the philosophy of science required to be able to undertake studies in the dermal and health sciences. It will build on the concept of evidence-based practice by learning how to evaluate information using a scientific approach. It will also bring together many of the necessary academic skills required to complete a dermal sciences degree. A primary aim of this unit will be to facilitate the student's ability to critically analyse and evaluate selected literature relating to dermal sciences with particular reference to the safe practice of applied dermal therapies.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify basic philosophical concepts related to health practice;
2. Review industry based evidence using critical thinking and a scientific approach;
3. Demonstrate appropriate referencing and in text citations;
4. Create an academic writing that follows formal conventions and is expressed clearly, persuasively and effectively;
5. Exhibit effective collaborative skills in an ethical and responsible

manner to influence the work of team members in the achievement of group outcomes while exhibiting individual responsibilities within the group in an online setting.

**Class Contact:** Forty-eight (48) hours per semester, comprising of a recorded preparatory lecture of one (1) hour in duration per week, two (2) hours of lectures per week (face-to face and via a virtual classroom) and the equivalent of one (1) hour of online tutorials and/or online learning activities per week.

**Required Reading:** Gormov, J. (2011). 3rd ed. *Get Great Marks for Your Essays, Reports, and Presentations*. Crows Nest: Allen & Unwin. Rosenberg, A. (2012). 3rd ed. *Philosophy of science a contemporary introduction* New York: Routledge.

McLaren, N. (2012). 1st ed. *A (somewhat Irreverent) Introduction to philosophy for medical students and other busy people* Ann Arbor, MI: Future Psychiatry Press

**Assessment:** Test, Quizzes: Ten (10) online weekly quizzes (5 minutes each) covering information in tutorials., 20%. Project, Group Project (2000 words), 35%. Essay, Essay (1500 words), 45%. Project: Students will work in groups and will need to plan and self-manage their group, they will need to investigate claims made in the beauty industry and critique them using philosophical arguments and an scientific evidence based approach, students submit one project per group. Essay: An essay to be submitted individually on a set topic related to the dermal industry. The essay must be well researched and referenced. 10% of this grade will relate to a self-review to be submitted with the essay whereby the student provides feedback and expected mark on their own essay.

## HBD2102 Dermal Sciences 1

**Locations:** Online, City Queen.

**Prerequisites:** HBD1201 - Introduction to Dermal Sciences

**Description:** The unit introduces students to theoretical aspects of anatomy and physiology relevant to the practice of dermal therapy. The unit provides important underpinning knowledge that students will require in their practical applications throughout the degree program. Topics include; introduction to anatomical terminology; introduction to cell and tissue biology; the musculoskeletal system and circulatory system with emphasis on craniofacial anatomy and physiology of these systems; introduction to endocrine system biology with emphasis on homeostasis and feedback mechanisms relevant to dermal science.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptualise the basic structure and function of cells and tissues, including cell membranes;
2. Discuss the general structure and function of the circulatory system, craniofacial vasculature and microvasculature of the skin, using correct anatomical terminology;
3. Determine the structure and function of the musculoskeletal system with an emphasis on craniofacial musculature and osteology, using correct anatomical terminology;
4. Conceptualise and discuss the regulatory role of the endocrine system in terms of homeostatic feedback mechanisms with an emphasis on the role of hormones in regulating the integumentary system.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Tortora, G.J., & Derrickson, B. (2014) 14th ed. *Principles of anatomy and physiology* Hoboken, NJ: Wiley and Sons.

**Assessment:** Test, One (1) online test (30 min duration), 15%. Test, One (1) online test (30 min duration), 15%. Assignment, Written Essay (1500 words), 30%. Examination, Written Examination (2hrs duration), 40%.

## HBD2103 Occupational Health and Safety in Dermal Practice

**Locations:** Online, City Queen.

**Prerequisites:** HBD1201 - Introduction to Dermal Sciences HBD1202 - Communication and Dermal Services

**Description:** This unit introduces students to the theoretical and practical concepts of occupational health and safety specific to a dermal therapies setting. It educates students in how to consider health and safety in the workplace from the perspective of not only a worker, but also by considering hazards that may affect their colleagues and clients. The key areas of study include risk assessment, standard operating procedures, chemical hazards, ergonomics, human factors, infection control incorporating basic microbiology and controlling hazards in a dermal therapies setting. There will also be a focus on Australia legislation, regulations and Australian Standards relevant to the practice of dermal techniques to ensure that students understand their rights and responsibilities in the workplace, while being able to familiarise themselves with resources to support them in implementing safe practice strategies. Principles of basic first aid appropriate to dermal therapies practice will also be explored to ensure that students have the ability to provide first response care in the incident of an adverse event. The unit ultimately aims to develop a positive safety culture among students while enabling them to apply safe practice strategies.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify, analyse and apply relevant occupational health and safety legislation, regulations and Australian Standards to dermal therapies;
2. Discuss the structure and function of microorganisms and conceptualise microbiology and biosafety in a dermal therapies setting;
3. Assess for potential hazards and risks within a dermal therapies setting and be able to manage these through the development of safe and effective control methods;
4. Develop and implement standard operating procedures and occupational health and safety programs within a dermal therapies setting;
5. Apply appropriate first aid within a dermal therapies setting.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** The lecturer will provide a list of readings and reference materials as required for each topic on the VU Collaborate space for this unit. Lee, G., & Bishop, P. (2012) 5th ed. Microbiology and Infection Control for Health Professionals NSW: Pearson Education Australia Dunn, C.E., & Thakorlal, S. (2014). 2nd ed. Australian Master Work Health and Safety Guide. NSW: CCH Australia Ltd

**Assessment:** Test, Two (2) Online Case Study Tests (30 minutes each), 20%. Assignment, Written Assignment (1500 words), 40%. Examination, Written Examination (2 hours), 40%.

## HBD2104 Cognition in the Dermal Workplace

**Locations:** Online, City Queen.

**Prerequisites:** HBD1202 - Communication and Dermal Services

**Description:** This unit will look at various aspects of how the perception of our own self-concept and that of others can affect our workplace environment. By gaining a better understanding of themselves, students will be able to gain a better understanding of others, what makes them different and strategies for how to work more effectively with others. Students will be introduced to basic psychological concepts most related to the dermal sciences. Students will examine various psychological disorders that affect workplace functioning and psychological conditions that clients are more likely to present with in the dermal workplace setting. Students will be guided on how to develop protocols on managing these potential issues in the workplace.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interrogate different cognitive processes that affect perception of the self and others;
2. Probe the link between the physical self and psychological concepts of beauty;
3. Reflect on their own cognitive and behavioural processes and the role

this may play in their clinical practice;

4. Review the different psychological processes that affect the workplace setting and identify ways of dealing with them;

5. Clarify when a client or colleague may need emergency or professional psychological help and how to manage this care in the dermal workplace setting.

**Class Contact:** Forty-two (42) hours per semester, comprising of a weekly recorded preparatory lecture of one (1) hour in duration, two (2) hours of lectures per week (face-to face and via virtual classroom) and the equivalent of one (1) hour of online tutorials and/or online learning activities every fortnight.

**Required Reading:** Lecturer will provide a list of readings and reference materials as required.

**Assessment:** Journal, Reflective Journal: encompassing student opinions and related arguments or agreements to each of the first four (4) lectures (weeks 1-4, 1000 words), 20%. Journal, Reflective Journal: encompassing student opinions and related arguments or agreements to each of the second four (4) lectures (weeks 5-8, 1000 words), 20%. Assignment, Protocol Workbook: Two (2) issues covered in lectures and prepare a standard protocol to address issues in the workplace setting (2000 words), 60%.

## HBD2201 Dermal Research Methods

**Locations:** Online, City Queen.

**Prerequisites:** HBD2101 - Dermal Studies and Philosophy

**Description:** This unit provides an introduction to research methodology and how it can be applied to the aesthetics industry. Students will examine the importance of proper research design in evidence-based practice. Concepts include comparing and contrasting quantitative and qualitative research designs, principles of reliability and validity and their importance in measurement, and various forms of data analysis will be discussed. Students will be guided through the process of how research is developed, data collected, analysed and reports are written.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Contextualise research theory by taking part in a group investigative project with both qualitative and quantitative components;
2. Critique dermal research study designs;
3. Apply data collection methods for both quantitative and qualitative information in a controlled manner;
4. Analyse basic statistical data and report on research findings.

**Class Contact:** Forty-Eight (48) hours per semester, comprising of a recorded preparatory lecture of one (1) hour in duration per week, two (2) hours of lectures per week (face-to face and via virtual classroom) and the equivalent of one (1) hour of online tutorials and/or online learning activities per week.

**Required Reading:** Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:** Test, Ten (10) x 5 minute online weekly quizzes in a set time. The quizzes will cover information from the tutorials (500 words equivalent), 20%. Examination, Covering Lecture Material (2 hours in duration, 2000 words equivalent), 30%. Report, Class investigative report: research theory will be applied to a class research project (2000 words), 50%.

## HBD2202 Dermal Sciences 2

**Locations:** Online, City Queen.

**Prerequisites:** HBD2102 - Dermal Sciences 1

**Description:** The unit will introduce students to theoretical aspects of integumentary system embryology, structure and function, pathophysiology, immunology, cellular damage, allergy, inflammation, wound repair, neoplasia and tissue responses to stress relevant to the practice of Dermal Therapy. The unit will provide important

underpinning knowledge that students will require in their practical applications throughout the degree program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Differentiate between various forms of cellular damage, inflammation and wound healing processes;
2. Distinguish and demonstrate knowledge of normal inflammation and wound healing processes relevant to the practice of dermal therapies;
3. Investigate the development and biochemistry of the skin and apply this knowledge in a dermal science context;
4. Conceptualise the process of neoplasia and compare and contrast benign and malignant neoplasia;
5. Investigate immunological and hypersensitivity responses.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Kumar, V., Abbas, A.K., Fausto, N., & Mitchell, R.N. (2012) 9th ed. Robbins Basic Pathology Philadelphia, PA: Saunders Elsevier. Tortora, G.J., & Derrickson, B. (2014) 14th ed. Principles of anatomy and physiology Hoboken, NJ: Wiley and Sons.

**Assessment:** Test, Ten (10) Online Tests (12 minutes duration each), 25%. Essay, Written Essay (1500 words), 35%. Examination, Written Examination (2 hours duration), 40%.

### HBD2203 Laser Principles and Safety

**Locations:** Online, City Queen.

**Prerequisites:** HBD2103 - Occupational Health and Safety in Dermal Practice

**Description:** This unit provides students with knowledge regarding the fundamental concepts of laser and light based device use in dermal therapies including basic physics, the properties of light, biological effects of light on tissues and processes that are associated with laser and light based procedures. Students are educated regarding relevant state legislation and Australian Standards that are applicable to cosmetic laser and light based device use. Students will gain the knowledge and skills required for performing the role of a Laser Safety Officer, and will be introduced to safety concepts to be applied in a dermal therapies workplace to ensure safe use of laser and light based devices. Upon successful completion of this unit students will be able to assess for and control hazards in the workplace associated with laser and light based devices by applying safe practice strategies while being encouraged to develop and maintain a safety culture within their workplace.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Contextualise the properties of light when applied to laser and light-based procedures in dermal therapies;
2. Critique the different types of laser and light based delivery systems in relation to safety;
3. Discuss the biological effect of light and its interaction with tissue;
4. Review laser safety officer duties as required by the Australian Standard AS/NZS 4173:2004;
5. Evaluate the processes associated with laser and light-based procedures;
6. Substantiate the theoretical basis for the use of high and low level lasers and light emitting diodes in dermal therapies.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Standards Australia (2004) Guide to the Safe Use of Lasers in Health Care (AS/NZS 4173:2004). Sydney, NSW: Standards Australia International

**Assessment:** Test, Ten (10) online tests (each test 12 minutes duration). This assessment piece will provide students with formative feedback prior to week 6., 20%. Assignment, Written Assignment (1500 words), 40%. Examination, Written Examination (2 hours), 40%.

### HBD2204 Legal and Ethical Dermal Practice

**Locations:** Online, City Queen.

**Prerequisites:** HBD2104 - Cognition in the Dermal Workplace

**Description:** The unit enables students to better understand the elements of what constitutes professional dermal practice and how graduates should conduct themselves as a dermal therapist. Students will better understand how they can operate in the allied health field via exploring health law, legal constraints and ethics issues as applied to dermal practice. Students will discuss the role of the dermal therapist by examining the aesthetics industry as a whole via an interprofessional practice perspective. Other ethical issues such as advertising, networking and sales will also be discussed. An understanding of basic business practice and requirements will also be addressed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interpret ethical issues related to dermal therapy practice and generate appropriate solutions;
2. Strategise when to refer to the appropriate professionals, and how to best work with them from an interprofessional perspective;
3. Investigate the major components of our legal system and how it functions especially in relation to health law and legal dermal practice;
4. Determine basic business processes required as part of successful dermal practice.

**Class Contact:** Forty-two (42) hours per semester, comprising of a weekly recorded preparatory lecture of one (1) hour in duration, two (2) hours of lectures per week (face-to face and via virtual classroom) and the equivalent of one (1) hour of online tutorials and/or online learning activities every fortnight.

**Required Reading:** Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:** Case Study, Students are to present a case study on dermal business (1000 words), 20%. Presentation, Students work in groups of 4-5 and record a 15 minute presentation on a set topic related to an ethical issue, 40%. Examination, Multiple choice test on the lecture material (2 hours), 40%.

### HBD3101 Hair Reduction Procedures

**Locations:** Online, City Queen.

**Prerequisites:** HBD1204 - Electrology HBD2202 - Dermal Sciences 2HBD2203 - Laser Principles and Safety

**Description:** This unit will build on knowledge gained in HBD2203 Laser Principles and Safety. Students will be provided with the practical skills and theoretical knowledge required by a professional dermal therapist, when working with different Class 4 Lasers and Intense Pulsed Light (IPL), for the treatment of unwanted hair growth on various anatomical locations of face and body. Students will be required to work collaboratively and independently whilst demonstrating evidence based practice. Students will demonstrate ability to assess client suitability for treatment, including; various skin assessment scales, hair growth and patterns, treatment planning and progression, precautions and contraindications to treatment as well as optimal treatment parameters to ensure, treatment efficacy and safety ensuring compliance with all legal and ethical requirements related to dermal practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Integrate codes of conduct that apply to the practice of laser procedures in a clinic setting as outlined in the current AS/NZS 4173:2004 and the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010);
2. Interpret scientific theories associated with light based hair reduction as outlined in evidence based research and apply these to dermal clinical practice;
3. Evaluate different technologies associated with light based hair reduction for differing skin and hair

types; 4. Exhibit the ability to perform a professional consultation, analyse and apply evidence based research to establish effective Patient Care Plans and complete treatment documentation as expected by a qualified dermal therapist with consideration of legal and ethical requirements; 5. Integrate and contextualise previously acquired knowledge of laser safety to light based hair reduction; 6. Exhibit the ability to perform safe and effective light based hair reduction treatments using Laser and Intense Pulsed Light (IPL) techniques that meet the level required of a professional Dermal Therapist.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr  
Students Enrolled On Campus: In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic. Students Enrolled Online: Sixty-six (66) hours per semester, comprising of two (2) hours of lectures per week delivered online, and one (1) hour of tutorial per week delivered online over 12 weeks totalling thirty-six (36) hours. In addition another thirty (30) hours of practicum for this unit will involve fifteen (15) hours per week delivered face-to-face within the Victoria University Dermal Clinic delivered over a two (2) week intensive practicum on campus per semester. Practical exams will be included during the on campus sessions.

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:**Test, Twelve (12) Online Tests (10 minutes each), 10%. Assignment, Written Assignment (1500 words), 30%. Examination, Written Examination (2 hours), 30%. Practicum, Final Practical Assessment (equivalent 1000 words), 30%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessment. The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD3102 Clinical Skin Analysis

**Locations:**Online, City Queen.

**Prerequisites:**HBD2202 - Dermal Sciences 2

**Description:**This unit provides students with theory and application of techniques to confidently perform a clinical skin assessment at the level of a professional Dermal Clinician. This includes thorough understanding of the theory and demonstration of competent practical application of common technological devices/equipment and techniques used in both clinical research and dermal clinical practice. These include: standardised (medical) photography, clinical skin scoring methods and scales used to classify skin types, conditions and dermatological disorders, including, acne, rosacea, pigmentation, photo sensitivity, photo damage and ageing. Students will also learn to implement the use of algorithms for differential diagnosis to recognize when skin presents with suspicious, unusual or severe symptoms that require referral to medical professionals. Students will apply learning to provide a detailed skin assessment and consultation, demonstrating effective communication, with clients, peers, academics, and health care professionals as well as meeting legal and ethical requirements.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Contextualise clinical skin analysis to dermal therapy procedures; 2. Exhibit the ability to perform a clinical skin analysis and document the process to the level required of a professional dermal clinician; 3. Critically review and select appropriate assessment tools and techniques for clinical practice and research activities; 4. Adapt theory and practice of skin assessment and referral when required if skin conditions present outside the scope of the dermal clinician.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr Workshop 1.0 hr External placement up to

(10) hours (not mandatory).

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:**Practicum, Practical Examination (mid-year, 30 minutes), 15%. Assignment, Written Assignment (1500 words), 35%. Examination, Written Examination (2 hours), 35%. Practicum, Final Practical Examination (30 minutes), 15%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessments. The practical assessments are a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD3103 Chemistry for Dermal Sciences

**Locations:**Online, City Queen.

**Prerequisites:**HBD2102 - Dermal Sciences 1 HBD2103 - Occupational Health and Safety in Dermal Practice

**Description:**The unit will introduce the student to the basic concepts of chemistry. Particular emphasis will be placed on increasing student knowledge of enzymes, acid base balance and pKa in preparation for the more in depth cosmetic chemistry covered in HBD4101 Resurfacing Science: Theory and Practice. Students will also be introduced to the concept of functional groups and how they impact upon organic molecules.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Investigate the structure of atoms, ions, molecules and compounds and contrast between the various types of chemical bonds;
2. Analyse the mechanisms of enzyme action and critically assess the importance of water in biochemical reactions;
3. Conceptualise the principle of acid/base balance and the role of pKa in this;
4. Analyse the common functional groups and their properties and describe the basic chemistry of macromolecules;
5. Critically review the basic features and purpose of the periodic table of elements relevant to the context of cosmetic science.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**Tortora, G.J., & Derrickson, B. (2014) 14th ed. Principles of Anatomy and Physiology Hoboken, NJ: Wiley and Sons

**Assessment:**Test, Ten (10) Online Tests (12 minutes duration per test), 20%. Essay, Written Essay (1000 words), 20%. Presentation, Seminar Presentation (10 minutes), 20%. Examination, Written Examination (2 hours), 40%.

### HBD3104 Dermal Sciences 3

**Locations:**Online, City Queen.

**Prerequisites:**HBD2103 - Occupational Health and Safety in Dermal Practice HBD2202 - Dermal Sciences 2

**Description:**This unit will build on the knowledge base provided by HBD2102 Dermal Sciences 1 and HBD2202 Dermal Sciences 2 by further researching dermal pathologies, specifically in the area of dermatological conditions. This unit will also cover the management of non-infectious dermatological conditions such as dermatitis, eczema, psoriasis, benign and pre-malignant skin lesions and skin cancers. A range of vascular and connective tissue disorders will also be considered. This unit will also expand on the microbiology knowledge gained in HBD2103 Occupational Health and Safety in Dermal Practice to include the identification, biochemistry and treatment of infectious skin diseases. Knowledge of skin disorders and diseases will lead into related pharmacology and will include an introduction to the effects of various drugs and chemicals, both topical and oral, used in the treatment of skin conditions.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate the aetiology and epidemiology for a range of dermatological diseases and disorders;
2. Conceptualise the clinical features and evaluate potential differential diagnoses for a range of dermatological diseases and disorders;
3. Assess and discriminate between a range of dermatological conditions;
4. Investigate and critically review the management and potential treatments for a range of dermatological diseases and disorders;
5. Critically evaluate the role of a dermal clinician in the treatment of a range of dermatological conditions.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** Weller, R., Hunter, J., Savin, J., & Dahl, M. (2014) 5th ed. *Clinical Dermatology* Malden, MA: Blackwell Publishing Tortora, G.J., & Derrickson, B. (2014) 14th ed. *Principles of Anatomy and Physiology* Hoboken, NJ: Wiley and Sons

**Assessment:** Test, Ten (10) Online Tests (12 minutes duration for each test), 20%. Essay, Written Essay (in pairs, 1000 words each student, 2000 words in total), 20%. Presentation, Oral Presentation (in pairs, 10 minutes + 5 minutes question time), 20%. Examination, Written Examination (2 hours), 40%.

### HBD3201 Applied Electrotherapy

**Locations:** Online, City Queen.

**Prerequisites:** HBD3104 - Dermal Sciences 3

**Description:** This unit will build upon the underpinning knowledge of wound healing, bioelectricity, the nervous system, fluid, electrolyte, acid-base balance and electrical theory required to safely and effectively perform electrotherapy procedures in Dermal Therapies. Students will practice evaluative skills in determining efficacy of a range of electrotherapy modalities used in relation to dermal therapies. This will require written and research skills and will also include on-going evaluation of electrotherapy treatments in progress and final evaluation of completed treatments.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse the processes associated with electrotherapy treatments relevant to the dermal clinician;
2. Perform and manage electrotherapy treatments safely and effectively where appropriate;
3. Integrate electrical theory in relation to electrotherapy procedures in dermal therapy;
4. Investigate how electrotherapy procedures are related to the nervous system, fluid, electrolyte and acid base balance;
5. Formulate how electrotherapy procedures are related to and can assist wound healing processes;
6. Assess the applications of other modalities e.g. Low Level Laser in conjunction with electrotherapy;
7. Evaluate the efficacy of electrotherapy for use in dermal practice.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Students Enrolled On Campus: In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic. Students Enrolled Online: Sixty-six (66) hours per semester, comprising of two (2) hours of lectures per week delivered online, and one (1) hour of tutorial per week delivered online over 12 weeks totalling thirty-six (36) hours. In addition another thirty (30) hours of practicum for this unit will involve fifteen (15) hours per week delivered face-to-face within the Victoria University Dermal Clinic delivered over a two (2) week intensive practicum on campus per semester. Practical exams will be included during the on campus sessions.

**Required Reading:** Robertson, V., Ward, A., Low, J., & Reed, A. (2006) 4th ed. *Electrotherapy explained: Principles and practice* Edinburgh ; Sydney : Butterworth-Heinemann Elsevier.

**Assessment:** Assignment, Treatment Protocol (1500 words), 25%. Practicum,

Practical Assessments (each component 45 minutes), 35%. Examination, Written Examination (2 hours), 40%. Hurdle requirements: Successful completion of this unit requires 90% attendance of clinic sessions plus passing each of the practical assessments.

### HBD3202 Wound Biology and Management

**Locations:** Online, City Queen.

**Prerequisites:** HBD3104 - Dermal Sciences 3 HBD3102 - Clinical Skin Analysis

**Description:** This unit will build on knowledge from the Dermal Sciences units and is a pre-requisite for Resurfacing Science: Theory and Practice, Advanced Laser 1 & 2, Plastics: Aesthetics and Reconstructive Procedures and Clinical Dermal Practicum 1 & 2. Concepts covered include: infection, infectious processes and infection control in the healthcare setting, complications and abnormalities in wound repair as well as management of wounds and skin integrity within the scope of dermal practice. Students will apply learning and perform a range of techniques to prevent and manage infection and complications to healing as may be experienced in dermal practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate infectious processes and evaluate infectious control methods employed in a health care setting;
2. Analyse risks involved in managing wounds that can complicate healing and cause adverse outcomes and provide management strategies;
3. Assess and classify a variety of wounds;
4. Present patient care plans in the role as dermal clinician for the assessment and management of wounds;
5. Consult with health care professionals and coordinate referral to health practitioners in the care of clients with wounds;
6. Adapt knowledge and treatment techniques within the scope of the dermal clinician to client scenarios.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Workshop 1.0 hr External placement up to (30) hours.

**Required Reading:** Bishop, P. & Lee, G. (2009) 4th ed. *Microbiology and infection control for health professionals* Frenchs Forest, NSW: Pearson Education. Sussman, C & Bates-Jensen, B. (2013) 3rd ed. *Wound Care: A collaborative practice manual for health professionals* Philadelphia, PA: Lippincott, Williams and Wilkins.

**Assessment:** Presentation, Oral Presentation (10-15 minutes, 1000 words), 20%. Practicum, Practical Assessment (45 minutes), 35%. Assignment, Written Assignment (2000 words), 45%. To pass this unit, students must achieve an aggregate score of 50%, pass the practical assessment and Six (6) Topic tests as a summative assessment and revision (these tests do not add to the final grade). The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD3203 Lymphatic Biology and Management

**Locations:** Online, City Queen.

**Prerequisites:** HBD2202 - Dermal Sciences 2 HBD3102 - Clinical Skin Analysis

**Description:** This unit builds on previous knowledge in anatomy and physiology units with a focus on investigating the lymphatic system and its relationship to the adipose organ, endocrine and immunological functions in more detail in health and disease. Students will learn to recognise symptoms of dysfunction and disorder through diagnostic testing techniques. Students will be able prescribe and perform evidence based management strategies to alleviate symptoms of lymphatic dysfunction and localised adiposity as well as communicate and coordinate referral to medical professionals and specialists when symptoms present outside the scope of the



Dermal Clinician.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interrogate the structure and function of the lymphatic system, adipose organ as well as endocrinology and immunology in relation to the lymphatic system in health and disease; 2. Distinguish through diagnostic testing the health or dysfunction of lymphatics including effects on adiposity and skin health; 3. Adapt holistic patient care plans for treatment (including medical referral if required) based on findings of diagnostic testing; 4. Develop, modify and perform professionally treatment interventions to manage lymphatic dysfunction and localized adiposity; 5. Evaluate and recommend interventions for lymphatic dysfunction, adiposity and skin integrity management based on best practice and scientific evidence.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Students Enrolled On Campus: In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic. Students Enrolled Online: Sixty-six (66) hours per semester, comprising of two (2) hours of lectures per week delivered online, and one (1) hour of tutorial per week delivered online over 12 weeks totalling thirty-six (36) hours. In addition another thirty (30) hours of practicum for this unit will involve fifteen (15) hours per week delivered face-to-face within the Victoria University Dermal Clinic delivered over a two (2) week intensive practicum on campus per semester. Practical exams will be included during the on campus sessions.

**Required Reading:** Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:** Practicum, Practical Examination (mid-semester, 30 minutes), 15%. Assignment, Written Assignment (2000 words), 35%. Examination, Written Examination (1.5 hours), 35%. Practicum, Practical Examination (final, 30 minutes), 15%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessments. The practical assessments are a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD3204 Dermal Sciences 4

**Locations:** Online, City Queen.

**Prerequisites:** HBD3104 - Dermal Sciences 3

**Description:** This unit will build on the knowledge base provided by HBD2102 Dermal Sciences 1 and HBD2202 Dermal Sciences 2 by further investigating concepts of ageing of the integumentary system, and craniofacial anatomy. The influence of race and sex upon integumentary system and craniofacial anatomy will also be explored. The psychology of ageing and perceptions of beauty will also be explored. Knowledge of cell biology, biochemistry and genomics will be developed to explain human development across the lifespan.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Review the current knowledge of cell biology and biochemistry and critically apply this to the explanation of human development from zygote to senescence; 2. Analyse the ageing of the integumentary system and craniofacial anatomy; 3. Critically review the various theories of ageing and the psychology of ageing and concepts of beauty in relation to the discipline of dermal science; 4. Analyse variations of the craniofacial anatomy and the integumentary system related to sex and race; 5. Examine the current theories of genetic variation and the transmission of genetic information from parent to daughter cells to predict how

genotype may translate to phenotype and apply this to understanding the genetic basis of disease.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** McDonald, R. (2013) *Biology of Ageing Connecticut, USA*: Taylor and Francis

**Assessment:** Test, Ten (10) Online Tests (12 minutes duration per test), 20%. Essay, Written Essay (1000 words), 20%. Presentation, Seminar Presentation (10 minutes), 20%. Examination, Written Examination (2 hours), 40%.

## HBD4101 Resurfacing Science: Theory and Practice

**Locations:** Online, City Queen.

**Prerequisites:** HBD3102 - Clinical Skin Analysis HBD3103 - Chemistry for Dermal Sciences HBD3104 - Dermal Sciences 3 HBD3202 - Wound Biology and Management

**Description:** This unit covers the theory regarding chemistry, pharmacology and toxicology of chemical peeling agents to ensure that students are able to perform safe and effective chemical resurfacing procedures. Students will also cover the theoretical concepts of microdermabrasion and collagen induction therapy. Previously acquired knowledge of dermal science, wound care and chemistry will be integrated and applied within this unit to enable the student to expand their knowledge with regards to wound healing and skin barrier function as relevant to resurfacing procedures. Evidence based practical application of the theory covered in this unit will be performed at the Victoria University Dermal Therapies Teaching Clinic with a minimum of thirty (30) supervised hours to be completed as a hurdle requirement. As a part of this practicum, students will further develop their skills in professional communication and consultation, the development of safe and effective treatment protocols and professional reporting of cases to meet legal requirements.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Assess the pharmacological and toxicological implications of using specific chemical preparations in dermal therapies; 2. Analyse the chemistry of specific chemical preparations and the varied effects they have on the skin; 3. Integrate previously acquired knowledge of skin histology and wound healing and adapt it to resurfacing procedures; 4. Critically review evidence based research to identify effective resurfacing procedures; 5. Devise effective and safe treatment protocols through the evaluation and application of evidence based research to various resurfacing techniques; 6. Exhibit the ability to perform safe and effective resurfacing procedures at the level of a professional dermal therapist through the integration and adaption of theoretical knowledge to clinical practice; 7. Report on resurfacing procedures by documenting case information to meet professional and legal requirements.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr Students Enrolled On Campus: In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic. Students Enrolled Online: Seventy-eight (78) hours per semester, comprising of three (3) hours of lectures per week delivered in a blended environment, and one (1) hour of tutorial per week delivered online over 12 weeks totalling thirty-six (48) hours. In addition another thirty (30) hours of practicum for this unit will involve fifteen (15) hours per week delivered face-to-face within the Victoria University Dermal Clinic delivered over a two (2) week intensive practicum on campus per semester. Practical exams will be included during the on campus sessions.

**Required Reading:** The Unit Co-ordinator will provide a list of readings and reference materials as required for each topic on the VU Collaborate space for this unit. All materials can be accessed from the VU Library Online.

**Assessment:** Essay, Essay (2000 words) This assessment task will provide formative

feedback to the student regarding their progress within the first 6 weeks., 20%. Practicum, Practical Exam (1 hour), 40%. Examination, Written Examination (2 hours), 40%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessment. The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD4102 Advanced Laser 1

**Locations:**Online, City Queen.

**Prerequisites:**HBD3101 - Hair Reduction ProceduresHBD3104 - Dermal Sciences 3

**Description:**This unit builds on and consolidates knowledge and techniques covered in HBD2203 Laser Principles and Safety and HBD3101 Hair Reduction Procedures, as well as sequencing as part of case management. The unit provides important underpinning knowledge that students will require in the treatment of pigment and vascular conditions using light based modalities. Practical application of techniques utilising Class 3b, Class 4 lasers and intense pulsed light (IPL) will be undertaken. Students will be monitored through the on-going evaluation of treatments in progress and final evaluation of completed treatments.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Analyse the process, including the physics and biochemical changes, associated with laser and light based treatments for dermatological conditions appropriate for phototherapy;
2. Authenticate and describe vascular lesions, including depth, complexity of involvement and potential treatment risks;
3. Formulate treatment techniques appropriate for dermatological conditions using IPL, Class 3B and 4 lasers, within AS/NZS 4173:2004 guidelines;
4. Triangulate knowledge, application, and skills for the treatment of vascular and pigmented lesions to a clinical endpoint;
5. Design and safely implement treatment plans for dermatological conditions in relation to Fitzpatrick skin type and evidence based practice.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hrStudents Enrolled On Campus: In addition another thirty (30) hours of practicum for this unit will involve three (3) hours per week delivered face-to-face within the Victoria University Dermal Clinic. Students Enrolled Online: Sixty-six (66) hours per semester, comprising of two (2) hours of lectures per week delivered online, and one (1) hour of tutorial per week delivered online over 12 weeks totalling thirty-six (36) hours. In addition another thirty (30) hours of practicum for this unit will involve fifteen (15) hours per week delivered face-to-face within the Victoria University Dermal Clinic delivered over a two (2) week intensive practicum on campus per semester. Practical exams will be included during the on campus sessions.

**Required Reading:**Goldberg, D. (2008) Laser dermatology: Pearls and problems Malden, MA: Blackwell Publishing.

**Assessment:**Case Study, Critique of clinical scenario (500 words), 10%. Assignment, Written Assignment (2000 words) Based on vascular/pigmented conditions, 30%. Examination, Written Examination (2 hours), 30%. Examination, Practical Examination (1 hour), 30%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessment. The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD4103 Clinical Dermal Practicum 1

**Locations:**Online, City Queen.

**Prerequisites:**HBD1204 - ElectrologyHBD3101 - Hair Reduction ProceduresHBD3102 - Clinical Skin AnalysisHBD3201 - Applied ElectrotherapyHBD3202 - Wound Biology and ManagementHBD3203 - Lymphatic Biology and ManagementHBD3204 - Dermal Sciences 4

**Description:**The aim of this unit is to integrate the theoretical and practical components of dermal therapies, to provide students the opportunity to enhance their understanding by applying their skills in the clinical setting. It will assist in transitioning students into professional clinical practice, through engaging with community and industry sectors in external and internal placements in approved healthcare, plastic and cosmetic surgery practices or dermal therapy clinics. The unit reinforces aspects of aseptic procedures, history taking, principles of diagnosis, treatment protocols, the range of treatment skills covered in the course thus far, legal issues and interpersonal and professional communication skills as well as reflective and evidence based practices.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Analyse and implement theoretical and practical knowledge in dermal therapies to clinical practice and cases that typically present within professional practice;
2. Interrogate case material, exhibiting professional practice to the standard of a qualified dermal clinician to facilitate accurate, efficient and effective handover;
3. Collaborate effectively in a team environment within broad professional settings, including; inter professional practice and mentoring junior students within the teaching clinic;
4. Exhibit the ability to perform all treatments, administration duties and meet occupational health & safety standards within the dermal teaching clinic to the standard of a qualified clinician;
5. Analyse and critically reflect on current clinical practices and apply evidence based practice to dermal clinical therapies.

**Class Contact:**Tutorial1.0 hrIn addition another sixty (60) hours of practicum for this unit will involve thirty (30) hours delivered face-to-face within the Victoria University Dermal Clinic, plus thirty (30) hours in external placement.

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:**Journal, Reflective Journal: Placement experience reflection (1000 words), 20%. Assignment, Guideline Procedure Protocol (2000 words), 40%. Practicum, Final Practical Assessment (1.25 hours), 40%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessment. The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

### HBD4104 Independent Project and Group Research 1

**Locations:**Online, City Queen.

**Prerequisites:**HBD2201 - Dermal Research Methods

**Description:**This capstone unit seeks to develop a student's capacity to design research, prepare for postgraduate research, work in groups and self-manage projects. With the help of a nominated supervisor, students will be guided through the processes of developing a research project with specific emphasis on appropriate research design, development of a research proposal and obtaining ethics approval. While students will work in groups on the research project, the research they choose will be expected to be at a post-graduate research level, and their ethics document will be submitted to the appropriate Victoria University ethics committee as required.

Students will also complete an individual project whereby they will develop reflective work practices, self-management and project management skills. Students will be given the choice of conducting a charity project in their local community or taking part in a student-mentoring program, students are expected to contribute at least 60 hours of work outside of class time on this independent project. This unit is a capstone task for the course.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Design a high quality research project as part of a group;
2. Critically evaluate a research proposal as part of a group;
3. Compose a high quality ethics application as part of a group;
4. Individually design and complete a work project;
5. Monitor and develop self-reflective work practices.

**Class Contact:** Nineteen (19) hours per semester, comprising of fifteen (15) hours of lectures (pre-recorded or face-to face and via virtual classroom) and four (4) hours of small group supervision made up of thirty (30) minute supervisor meetings conducted on weekly basis over eight (8) weeks.

**Required Reading:** Please note, some of these titles are available online from the library and do not need to be purchased. Lebrun, J. L. (2011) 1st ed. Scientific writing 2.0: a reader and writer's guide New Jersey: World Scientific. Kerzner, H. (2013) 11th ed. Project management: a systems approach to planning, scheduling, and controlling Hoboken, New Jersey: John Wiley & Sons, Inc. Cargill, M. (2013) 2nd ed. Writing scientific research articles strategy and steps Hoboken, New Jersey: John Wiley & Sons, Inc.

**Assessment:** Test, Online Multiple Choice Test covering the application of applicable research guidelines such as NHMRC and ARC research guidelines. (40 minutes), 10%. Portfolio, Submission of an ethics application on a research project (2500 words equivalent per student), 40%. Project, Students will present the development of a self-managed project (3000 words equivalent), 50%.

### HBD4201 Plastics: Aesthetics and Reconstructive Procedures

**Locations:** Online, City Queen.

**Prerequisites:** HBD3104 - Dermal Sciences 3 HBD3202 - Wound Biology and Management HBD3204 - Dermal Sciences 4

**Description:** In this unit students will begin to focus on a specific range of medical and therapeutic procedures with a view to specialisation of peri-operative support using clinical dermal therapy techniques. Topics include: procedures in reconstructive, plastic and cosmetic surgery; complications of reconstructive, plastic and cosmetic procedures; Surgical aseptic technique and the considerations and implications for wound repair before and after surgery such as co-morbidities and medications. Students will bring together knowledge from units including Dermal Science, Wound Care for Dermal Practice and Dermal Therapy practical units such as Resurfacing Science, Lymph and Adipose Biology, Electrotherapy and Skin Variations and Transitions in order to develop wholistic patient care plans to optimise surgical and non-surgical outcomes.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate and critically review cosmetic and reconstructive procedures with regard to indications, benefit and risks;
2. Interrogate risk and prescribe management strategies to prevent infection and adverse wound healing outcomes pre, and post operatively;
3. Evaluate the impact of medications, diseases/disorders and other conditions on wound repair after plastics procedures and present management strategies;
4. Negotiate and defend the role that the Dermal Clinician has in patient care pre and post operatively;
5. Justify dermal therapy treatment plans demonstrating evidence based practice.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Students will also have the opportunity to participate in an external placement with a focus on observing plastic surgery, and client management pre and post operatively. This may be up to 30 hours and is not mandatory however is highly recommended.

**Required Reading:** Seimionow, M., & Eisenmann-Klein, M. (2010) Plastic and reconstructive surgery London, UK: Springer This is an ebook available from the Victoria University Library.

**Assessment:** Test, Six (6) Online Topic Tests to provide formative feedback on revision, 0%. Review, Literature Review (750 words), 10%. Journal, Reflective Journal (1000 words), 20%. Assignment, Written Assignment (2000 words), 35%. Examination, Written Examination (2 hours), 35%.

### HBD4202 Advanced Laser 2

**Locations:** Online, City Queen.

**Prerequisites:** HBD4102 - Advanced Laser 1

**Description:** In this unit students will build on and consolidates knowledge and techniques covered in HBD2203 Laser Principles and Safety, HBD3101 Hair Reduction Procedures, and HBD4102 Advanced Laser 1 as well as sequencing as part of case management. Students will be monitored through the on-going evaluation of treatments in progress and final evaluation of completed treatments. Practical application of advanced dermal treatment techniques will be undertaken. Specific techniques to support clinical procedures will include Class 3b, Class 4 lasers and intense pulsed light (IPL).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interpret codes of conduct in laser procedures as outlined in the Australian Standards (AS/NZS 4173:2004);
2. Triangulate the processes, including the physics, associated with laser and light based treatments for tattoo removal and advance skin tightening;
3. Exhibit abilities to perform tattoo removal and advanced skin treatments including but not limited to scar revision and skin treatment using intense pulsed light (IPL), Class 3B and Class 4 lasers;
4. Evaluate and design treatment plans for tattoo removal and advanced skin treatment in relation to different wavelengths and its relation to skin assessment tools like but not limited to Fitzpatrick photo skin typing, Glogau, Robertson skin classifications;
5. Interrogate risks and prescribe management strategies to prevent complication associated with light-based and laser treatments for tattoo removal and advanced skin treatment.

**Class Contact:** Seventy-eight (78) hours per semester, comprising of lectures delivered in a blended environment over 12 weeks totaling thirty-six (36) hours. In addition another twelve (12) hours of tutorials and thirty (30) hours of intensive supervised practicum within the Dermal Teaching Clinic to be completed as 1-2 weeks intensive on campus per semester. Practical exams will be included during the on campus sessions. It is expected that students will undertake out-of-class, independent learning to complete their assessment requirements.

**Required Reading:** Weekly Reading material will be available on VU Collaborate and link to journal articles and clinical studies through E:Reserve (library).

**Assessment:** Test, Six (6) Online Tests (12 minutes duration each, 1000 words equivalent), 20%. Case Study, Case Study exhibiting practical abilities (3000 words), 40%. Examination, Written Examination (2 hours), 40%. To pass this unit, students must achieve an aggregate score of 50%, and pass the case study assessment. The case study assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD4203 Clinical Dermal Practicum 2

**Locations:**Online, City Queen.

**Prerequisites:**HBD4103 - Clinical Dermal Practicum 1

**Description:**The aim of this unit is to integrate the theoretical and practical components of dermal therapies and to provide students the opportunity to enhance their understanding by applying their skills in the clinical setting. Students will be required to complete internal placement at VU Dermal Therapies clinics and external placement venues. These internal and external placements will assist in transitioning students into professional clinical practice. External placements provide opportunities to engage with community and industry sectors in approved healthcare, plastic and cosmetic surgery practices or dermal therapy clinics. The unit reinforces aspects of aseptic procedures, history taking, principles of diagnosis, treatment protocols, the range of treatment skills covered in the course thus far, legal issues and interpersonal and professional communication skills as well as reflective and evidence based practices.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Negotiate the role of the dermal clinician in the scope of the interprofessional team in client centered care;
2. Devise wholistic patient care plans demonstrating best and evidence based practice in a variety of professional healthcare settings including, community, hospital and private practice;
3. Adapt and implement patient skin education programmes
4. Plan and perform a range of treatments within the scope of the dermal clinician to address concerns around skin management and integrity in health and disease;
5. Reflect on current clinical practices and apply evidence based practice to dermal clinical therapies.

**Class Contact:**Tutorial1.0 hrIn addition another one hundred (100) hours of practicum for this unit will involve thirty (30) hours delivered face-to-face within the Victoria University Dermal Clinic, plus seventy (70) hours in external placement. It is expected that students will undertake out-of-class, independent learning to complete their assessment requirements.

**Required Reading:**Readings and reference materials will be available on the VU Collaborate space for this unit.

**Assessment:**Journal, Reflective Journal: Placement experience reflection (1000 words), 20%. Presentation, Oral education presentation (30 minutes), 40%. Practicum, Final Practical Assessment, 40%. To pass this unit, students must achieve an aggregate score of 50%, and pass the practical assessment. The practical assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting.

## HBD4204 Independent Project and Group Research 2

**Locations:**Online, City Queen.

**Prerequisites:**HBD4104 - Independent Project and Group Research 1

**Description:**This unit seeks to develop a student's capacity to become a researcher and or to develop specific knowledge in their chosen field of dermal science. Students will be working with an approved research project from HBD4104 Independent Projects and Group Research 1. They will need to collect data according to appropriate research guidelines then undertake the process of analysing the collected data using the appropriate research methodology. Students will then write a minor thesis on the research findings or in a format ready for publication. Students will also present their research findings via an oral presentation in a conference style format.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Substantiate research data via validated collection methods on an approved project as part of a group;
2. Analyse and critically review collected research data as part of a group;
3. Interpret research findings in a written format as part of a group;
4. Present research findings via an oral presentation as part of a group;

**Class Contact:** Eight (8) hours per semester, comprising of two (2) hours of lectures (pre-recorded or face-to face and via virtual classroom) and six (6) hours of small group supervision made up of 30 minute supervisor meetings conducted on weekly basis over 12 weeks.

**Required Reading:**Lebrun, J. L. (2011) 1st ed. Scientific writing 2.0: a reader and writer's guide New Jersey: World Scientific. Cargill, M. (2013) 2nd ed. Writing scientific research articles strategy and steps Hoboken, New Jersey: John Wiley & Sons, Inc.

**Assessment:**Journal, Group work reflection (1000 words), 20%. Research Paper, Thesis or published paper (6000 words per group), 50%. Presentation, Oral presentation of research findings (15 minutes), 30%.

## HBM1001 Anatomy and Physiology 1

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**The structure and function of the human body is introduced and placed in an integrated fashion within the context of health care. Following a brief overview of the organisation of the human body, students are introduced to the structure and function of cells and various types of tissues. Students are introduced to microbiology within the context of infection control. The nervous system is discussed to highlight it's regulatory role for control, co-ordination and communication. The cardiovascular, respiratory and reproductive systems, and pregnancy, are placed in context with their overall regulation and co-ordination via the neuro-endocrine system. This provides an understanding of how homeostatic mechanisms regulate variables such as blood pressure, blood gas status and parturition.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Outline the structures and functions of human cells and tissues;
2. Explain the basic concepts of microbiology and infection control in relation to the human body;
3. Describe the structures and functions of the nervous, cardiovascular, respiratory and reproductive systems;
4. Describe the processes of conception, pregnancy and parturition;
5. Apply knowledge and understanding of human structure and function of these organ systems to clinical scenarios through laboratory experiment and activities, and guided inquiry learning.

**Class Contact:**Lab2.0 hrsLecture3.0 hrsTutorial1.0 hr

**Required Reading:**Marieb, E.N., & Hoehn, K. (2015). (10th ed.). Human anatomy and physiology London, UK: Benjamin Cummings Publishing.

**Assessment:**Laboratory Work, Laboratory worksheets, 15%. Test, On-line quizzes and tutorial worksheets, 15%. Test, Two (2) multiple choice tests (30 mins each), 20%. Examination, Final exam (2.5 hours), 50%. To pass this unit, students must achieve an aggregate score of 50%, and pass the final exam. The final exam is a hurdle requirement that assesses all learning outcomes for this unit, which underpins essential knowledge that informs allied health practitioners including nurses, midwives and paramedics.

## HBM1002 Biological Systems

**Locations:**St Abans.

**Prerequisites:**Nil

**Description:**This unit introduces students to the key properties of living organisms,

focussing on the cellular and molecular level. Students will learn the basic principles and concepts of biological molecules and the structure and function of prokaryotic and eukaryotic cells. The unit will explore introductory molecular mechanisms within the cell and how they contribute to the organization of a cell and the whole organism. The lecture content will be supplemented by workshops that will incorporate both tutorial styled questions and open ended investigations that will provide a context for the unit content. This unit provides a strong foundation for students specialising in Biomedical Science.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the diversity and classification of various types of living organisms;
2. Demonstrate an understanding of the structure and functions of cells;
3. Identify the four major classes of biological molecules and elaborate on their functions;
4. Describe the basic structure and mechanisms of action of viruses and bacteria;
5. Apply the fundamental principles of genetics and appreciate the significance of evolution;
6. Demonstrate an understanding of the fundamentals of scientific communication and critical analysis using guided inquiry learning.

**Class Contact:** Lecture 2.0 hrs Workshop 2.0 hrs

**Required Reading:** Simon, E.J., Dickey, J.L., & Reece, J.B. (2013) 5th ed. Campbell Essential Biology Pearson

**Assessment:** Test, Ten (10) Online quizzes and tutorial inquiry worksheets (500 words), 10%. Test, Two (2) Topic Tests (30 minutes each), 20%. Workshop, Two (2) Workshop Reports (750 words each), 20%. Examination, Final Exam (2 hours), 50%.

### HBM1003 Applied Mathematics and Biostatistics

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit of study introduces students to the quantitative skills and techniques required to critically analyse scientific reports, scientific data and understand research methods employed in biomedical science. The unit will explore the role of mathematics and statistics in developing scientific knowledge and how statistics is used for interpreting information, testing hypotheses and analysing the inferences people make about the real-world. Students will be required to use statistical software, online MathBench modules and calculators to analyse data and interpret results for experimental and sampling designs, tests on population means and proportions, correlation and linear regression, and one-way ANOVA.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Clarify the functional importance of mathematical skills in biomedical science;
2. Differentiate between quantitative and qualitative data sets;
3. Demonstrate knowledge in using statistics to summarise, describe and interpret scientific data and perform statistical inferences;
4. Apply basic principles of experimental design when collecting data and perform hypotheses testing;
5. Analyse data using common statistical software and interpret results to solve science related problems.

**Class Contact:** Lecture 2.0 hrs PC Lab 2.0 hrs

**Required Reading:** Graham, A. (2013) Statistics: a complete introduction London: Hodder & Stoughton

**Assessment:** Exercise, Online MathBench modules (10 exercises-total 250 words), 10%. Test, Maths skills test (400 words), 10%. Test, Statistics Test (MCQ & short answer questions; 750 words), 25%. Examination, Final Exam (2 hours), 55%.

### HBM1101 Gene and Evolutionary Biology

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit introduces key concepts of genetics, animal and plant diversity and evolution. Students will learn basic principles in the nature of variation, inheritance, genes and chromosomes, human genetics, DNA replication, gene action and expression, population genetics, selection, the genetics of speciation, molecular evolution, evolutionary biology and the origin of life, classification of organisms diversity of life, communities, ecosystems and the relationship of organisms to their environment, human impact, preserving habitats and genetic variation. The lecture content will be supplemented by workshops that will incorporate both tutorial styled questions and open ended investigations that will provide a context for the unit content. This unit provides a strong foundation for students specialising in Biomedicine and health sciences.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate a basic understanding of mechanisms of inheritance, recombination and mutation;
2. Describe the structure of DNA, its replication and the molecular basis of gene action;
3. Conceptually map the nature of genetic variation in populations, natural selection, microevolution, reproductive isolation and speciation;
4. Describe the basic structure and mechanisms of action of viruses and bacteria
5. Apply the concept of diversity of organisms to their relationship to each other and the environment
6. Demonstrate an understanding of the fundamentals of scientific communication and critical analysis

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Simon, EJ, Dickey, JL & Reece, JB (2013) Campbell Essential Biology 5th Ed Pearson

**Assessment:** Test, Three (3) topic tests (30 min each), 30%. Report, Two (2) Workshop Reports (750 words each), 20%. Examination, Multiple Choice and short answer questions (2 hours), 50%.

### HBM1102 Medical Statistics and Experimental Design

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit subject provides students with a broad understanding in the fundamental concepts of probability and statistics required for experimental design and data analysis in the biomedicine and health sciences. Students will be introduced to common study designs, random sampling and randomised trials as well as numerical and visual methods of summarising data. Then emphasis will be placed on understanding population characteristics such as means, variances, proportions, risk ratios, odds ratios, rates, prevalence, and measures used to assess the diagnostic value of a clinical test and understanding how biological principles can give rise to quantitative models. The presentation and interpretation of the results from statistical analyses of typical clinical health research studies will be emphasised.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the fundamental concepts of experimental design, cause and effect relationships in biomedical and health science research;
2. Demonstrate a range of standard statistical methods which can be applied to common study designs in biomedical and health sciences;
3. Analyse standard data sets, interpreting the results of such analysis and presenting the conclusions in a clear and comprehensible manner;
4. Explain and apply fundamental principles in mathematics and statistics, using logical and mathematical reasoning, to a variety of familiar and novel situations in biomedicine and public health policy;
5. Analyse biomedical and

health data using a statistical computing package.

**Class Contact:**Lecture2.0 hrsPC Lab1.0 hrTutorial1.0 hr

**Required Reading:**Norman and Steiner 2014, Biostatistics The Bare Essentials. People's Medical Publishing House - USA, Ltd 4th edition

**Assessment:**Assignment, Written assignment due in the first half of semester (750 words), 20%. Laboratory Work, Two lab worksheets (500 words each), 30%. Examination, Final Exam (2 hours), 50%.

## HBM1112 Communication and Careers in Biomedicine

**Locations:**Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**This unit provides students with the fundamental skills necessary for the successful completion of the biomedicine course. A series of lectures and workshops will provide students with an introduction to communication theory and professional practice. This will cover communication skills of summarising, synthesising, note taking, laboratory report and essay writing, researching, statistical analysis and referencing. Students will be encouraged to develop critical thinking and self-editing skills. Oral presentation techniques such as formal talks, impromptu presentations and small group presentations will be developed. During laboratory classes students will gain an understanding of the scientific method and will become familiar with some career options in biomedicine. An important outcome of the laboratory component is that students develop fundamental laboratory and problem solving skills.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate skills in researching, summarising, synthesizing and referencing for scientific writing purposes;
2. Exhibit sound and effective oral presentation techniques;
3. List and elaborate potential career options in the field of biomedicine;
4. Identify and demonstrate fundamental laboratory skills;
5. Demonstrate skills in participating in group work and preparing collaborative assessments;
6. Develop an e-portfolio as a basis for further learning plans, strategies and reflection
7. Demonstrate maths and statistical analysis skills.

**Class Contact:**Lab2.0 hrsLecture3.0 hrsTutorial2.0 hrs

**Required Reading:**bin Hay, Dianne Bochner, Gil Blakket, Carol Dungey (2012) 4th ed. Making the grade: a guide to successful communication and study Australia Oxford University Press

**Assessment:**Report, One (1) written report (300 words), 10%. Test, Two (2) Tests (approx. 30 minutes each), 20%. Laboratory Work, Four (4) Laboratory Worksheets (approx. 300 words each), 20%. Project, Group Project (1000 words) and oral presentation., 50%. Combined individual assessment tasks equate to approximately 3000 words.

## HBM1201 Research Methods

**Locations:**Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**This unit of study introduces students to the core processes and strategies of modern biomedical research. Students are introduced to the principles of quantitative and qualitative research - critical analysis of scientific literature and data interpretation, and hypothesis formulation and testing. In particular, this unit provides an understanding of the fundamental concepts of probability and statistics required for experimental design and data analysis in the health sciences, including: normal distribution, the t statistic, p values and the use of statistical and graphing software packages such as Microsoft Excel, SPSS and Graph Pad. Ethical human and animal research practices, research funding frameworks, research protocols and

management will also be considered, with particular emphasis on scientific integrity, fraud, intellectual property and reference management.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically appraise biomedical literature, specific examples of quantitative and qualitative experimental design, and isolated data sets;
2. Formulate a testable hypothesis and conceptually map a robust experimental design;
3. Recommend appropriate statistical analyses for hypothesis testing;
4. Apply and interpret a range of standard statistical methods to biomedical data sets, using statistical software packages;
5. Discriminate between examples of ethical and non-ethical research in human and animal experimental contexts and substantiate the importance of ethical conduct including regulatory requirements;
6. Commentate on the National and International framework for medical research funding and the processes via which research grants are allocated; and
7. Describe and justify on the requirement for the active management of intellectual property issues, scientific integrity and conflict of interest in a contemporary biomedical research context.

**Class Contact:**Lab2.0 hrsLecture3.0 hrs

**Required Reading:**To be Advised

**Assessment:**Test, Workshop/class-based Tests (MCQ & short answer), 35%. Assignment, Ethics Proposal (1500 words), 15%. Examination, Final Exam (3 hours, 2000 words), 50%. Total combined word equivalence approximately 4000 words.

## HBM1202 Anatomy & Physiology 2

**Locations:**St Albans.

**Prerequisites:**HBM1001 - Anatomy and Physiology 1

**Description:**This unit expands on content from 'HBM1001 Anatomy and Physiology 1' of the structure and function of the human body, using homeostatic regulation of the internal environment as the ongoing theme. The endocrine and renal systems are discussed, as well as their roles in the regulation of variables such as fluid and electrolyte balance and acid-base balance. The provision of nutrients to the body by the gastrointestinal system is integrated with the study of biochemistry and metabolism. The bones, joints and muscles of the body are taught in an integrated way using a regional approach. This is followed by a discussion of the special senses, in particular sight, hearing and balance. The integumentary system is covered to emphasise the importance of, for example, skin colour, temperature and sensation relevant to health care.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the structure and function of the renal, endocrine, gastrointestinal, musculoskeletal and integumentary systems in the human body;
2. Explain how the homeostatic mechanisms regulate fluid and electrolyte balance and acid-base balance;
3. Explain the concepts of chemistry and biochemistry in relation to digestion and nutrition; and
4. Apply knowledge and understanding of human structure and function of these organ systems to clinical scenarios through laboratory experiment and activities, and guided inquiry learning.

**Class Contact:**Lab2.0 hrsLecture3.0 hrsTutorial1.0 hr

**Required Reading:**Marieb, E.N., & Hoehn, K. (2015). (10th ed.). Human anatomy and physiology London, UK: Benjamin Cummings Publishing.

**Assessment:**Laboratory Work, Laboratory worksheets, 15%. Test, On-line quizzes and tutorial worksheets, 15%. Test, Two (2) multiple choice tests (30 mins each), 20%. Examination, Final exam (2.5 hours), 50%. To pass this unit, students must achieve an aggregate score of 50%, and pass the final exam. The final exam is a hurdle requirement that assesses all learning outcomes for this unit, which underpins

essential knowledge that informs allied health practitioners including nurses, midwives and paramedics.

## HBM2102 Nutrition for Health and Disease

**Locations:**St Abans.

**Prerequisites:**RB M1528 - Human Physiology 2

**Description:**This unit explores the use of nutrition as a medical intervention in past and present societies, combining "food as medicine" traditions with contemporary dietary therapy and scientific advances in nutritional biochemistry. Throughout history the relationship between diet and wellbeing has long been understood, with Hippocrates proclaiming "Let food be thy medicine and medicine be thy food" in 400BC. This unit extends the application of this knowledge in modern society by examining the chemical nature of nutrients, their role in body structure and function, their handling by the gastrointestinal system and the body as a whole and their metabolism. This unit will examine the role of diet in common chronic diseases (i.e. obesity, diabetes, cardiovascular disease) and its importance in growth and development.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explore the use of food as medicine in past and present cultures and civilisations;
2. Discriminate and define different classes of nutrients, e.g. carbohydrates, lipids, proteins, vitamins and minerals;
3. Articulate the composition and role of nutrients within a range of different diets, and their impact and regulation within the body;
4. Collect and analyse experimental data and discuss the results;
5. Justify the importance of digestion, metabolism, nutrition and energy balance to the wellbeing of an individual and recommend interventions accordingly; and
6. Contextualise the role of diet in chronic disease states.

**Class Contact:**Lab2.0 hrsLecture3.0 hrsPC Lab2.0 hrs

**Required Reading:**Whitney, E., Rolfe, S.R., Crowe, T., Cameron-Smith, D., & Walsh, A. (2011) 1st Understanding Nutrition, Australian and New Zealand Edition Cengage Learning

**Assessment:**Test, MCQ Tests, 10%. Laboratory Work, Lab Reports x 2 (1000 words each), 15%. Assignment, Critical evaluation of a medical nutrition intervention (1500 words), 20%. Examination, Theory Examination (3 hours; MCQ, short & essay questions), 55%. Combined individual assessment tasks equate to approximately 4000 words total.

## HBM2103 Digestion, Nutrition and Metabolism

**Locations:**St Abans.

**Prerequisites:**RB M1528 - Human Physiology 2

**Description:**This unit will introduce the relationships between gastrointestinal function, nutrition, metabolism and human health. The unit covers the gastrointestinal structure and function, the neural regulation of gastrointestinal functions; chemical nature of the nutrients, their roles in body structure and function, and their handling by the gastrointestinal system, the body as a whole and their metabolism. It extends this physiological knowledge by examining the energy intake and regulation; dietary guidelines; and the role of nutrition in maintaining good health. This unit will also examine the role of diet in chronic diseases.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the structure and function of digestive system;
2. Explain the role of the enteric nervous system in the regulation of digestion;
3. Assess the different macro and micronutrients, their role within the body and commonly used laboratory approaches;
4. Evaluate the importance of digestion, metabolism, nutrition and

energy balance to the wellbeing of an individual; 5. Analyse the role of diet in the development of common chronic disease states; 6. Work both independently and collaboratively to apply their knowledge in problem solving.

**Class Contact:**Lab1.0 hrLecture2.0 hrsTutorial1.0 hrWorkshop1.0 hr

**Required Reading:**Whitney, E., Rolfe, S.R., Crowe, T., Cameron-Smith, D., & Walsh, A. (2013) Australian and New Zealand Edition 2 Understanding Nutrition Cengage Learning

**Assessment:**Test, Two (2) Topic Tests (25 minutes each), 20%. Report, Two (2) Laboratory Reports (600 words each), 20%. Examination, Theory Examination - MCQ, short & essay questions (2.5 hours), 60%.

## HBM2104 Research Methods

**Locations:**St Abans.

**Prerequisites:**RB M2540 - Pathophysiology 2RB M2800 - Cardiorespiratory and Renal PhysiologyRB M2540 for HBBM RB M2800 for HBBS

**Description:**This unit of study introduces students to the core processes and strategies of modern biomedical research. Students are introduced to the principles of quantitative and qualitative research - critical analysis of scientific literature and data interpretation, and hypothesis formulation and testing. In particular, this unit provides an understanding of the fundamental concepts of probability and statistics required for experimental design and data analysis in the health sciences, including: normal distribution, the t statistic, p values and the use of statistical and graphing software packages such as Microsoft Excel, SPSS and Graph Pad. Ethical human and animal research practices, research funding frameworks, research protocols and management will also be considered, with particular emphasis on scientific integrity, fraud, intellectual property and reference management.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically appraise biomedical literature, specific examples of quantitative and qualitative experimental design, and isolated data sets;
2. Formulate a testable hypothesis and conceptually map a robust experimental design;
3. Recommend appropriate statistical analyses for hypothesis testing;
4. Apply and interpret a range of standard statistical methods to biomedical data sets, using statistical software packages;
5. Discriminate between examples of ethical and non-ethical research in human and animal experimental contexts and substantiate the importance of ethical conduct including regulatory requirements;
6. Commentate on the National and International framework for medical research funding and the processes via which research grants are allocated;
7. Describe and justify on the requirement for the active management of intellectual property issues, scientific integrity and conflict of interest in a contemporary biomedical research context.

**Class Contact:**Lecture3.0 hrsWorkshop2.0 hrs

**Required Reading:**As recommended by lecturer in class or via e-learning system.

**Assessment:**Test, Workshop/class-based Tests (1500 words), 30%. Assignment, Ethics Proposal (1500 words), 20%. Examination, Final Exam (2 hours), 50%.

## HBM2105 Medical Microbiology and Immunity

**Locations:**St Abans.

**Prerequisites:**RB M1528 - Human Physiology 2

**Description:**This unit of study will introduce students to the micro-organisms that cause human disease and the host's immune response associated with micro-organism infection. The nature and classification of micro-organisms including bacteria, fungi, viruses, protozoa and helminths will be covered. The growth requirements of micro-organisms, microbial genetics and host-microbe interaction are discussed within the context of infection control. The source and mode of transfer of

infectious agents and their health threats are highlighted. Principles of safe clinical practice, antibiotics, epidemiology, and analytical methods are also covered. The application of microbiology in medicine, industry and biological products are emphasized. The basic concepts of immunology and how the individual components of the immune system work together to fight bacterial, fungal, or viral infections will also be introduced.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and describe the differences of main groups of microorganisms, including bacteria, viruses, fungi, protozoa and helminths;
2. Describe the microflora associated with the human body and in various environments;
3. Critically review the transmission and infection control of microorganisms;
4. Evaluate fundamental knowledge of microbial genetics;
5. Examine innate and adaptive immunity to pathogens and the fundamentals of the immune response;
6. Explain the host defence mechanisms associated with micro-organism infections;
7. Discuss the importance of microbiome, chemotherapeutic agents and epidemiology, and their relevance to a health practitioner.

**Class Contact:** Lab 2.0 hrs Lecture 1.0 hr Workshop 2.0 hrs

**Required Reading:** Tortora, G.J., Funke, B.R. & Case, C.L. (2015) 12th ed.

Microbiology: an Introduction Redwood City, California

**Assessment:** Test, Two (2) Topic Tests (25 minutes each), 20%. Report, Two (2) Laboratory Reports (650 words each), 20%. Examination, End of Semester Examination - MCQ, short & essay questions (2.5 hours), 60%.

## HBM2106 Human Genetics

**Locations:** St Albans.

**Prerequisites:** HBM1002 - Biological Systems

**Description:** This unit introduces students to concepts and methods in human genetics with a major focus on disease. Advances in human genetics in the last decade have had a major impact on medical science from early diagnosis through to targeted therapies. Fundamental genetic principles will be explored including genome structure, gene regulation, genetic heterogeneity and inheritance. Students will apply their knowledge to the understanding of the molecular mechanisms, diagnosis and screening of both monogenetic and multifactorial disorders.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structure of the human genome and explain the function of its various components;
2. Critically review the molecular processes involved in gene expression, including epigenetics;
3. Explain the nature of mutations and how genetic instability contributes to mutation;
4. Evaluate molecular defects involved in disease states at the chromosomal or individual gene level;
5. Critically assess methods used to detect mutations and diagnose genetic diseases.

**Class Contact:** Lecture 3.0 hrs Workshop 3.0 hrs

**Required Reading:** Lewis, R (2012) 3rd Edition Human Genetics Concepts and Applications McGraw-Hill

**Assessment:** Exercise, Tutorial/Workshop participation (500 words), 20%. Laboratory Work, Laboratory work and reports (500 words), 30%. Examination, Final examination (3 hours), 50%.

## HBM2203 Clinical Physiology

**Locations:** Footscray Park, St Albans.

**Prerequisites:** RBM1518 Human Physiology 1 and RBM1528 Human Physiology 2.

**Description:** This unit introduces students to the integrative nature of the cardiovascular, respiratory and renal physiology systems. Building on the information

obtained regarding individual systems in Human Physiology (RBM1518 & RBM1528), students understanding of how the cardiorespiratory systems co-operate will be facilitated by using exercise as their natural stressor. Further integration with the renal system and fluid and electrolyte balance in normal and extreme environments will enhance student learning and provide a platform for the application of exercise as a therapeutic modality in Exercise is Medicine (RBM3104).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically reflect on the concept of cardiac work and predict changes in cardiac parameters in order to understand physiological responses to exercise;
2. Assess the characteristics of obstructive and restrictive diseases and interpret how these are reflected in respiratory measurements;
3. Interrogate kidney control and feedback mechanisms, including molecular transport, in order to forecast fluid, electrolyte and acid-base imbalance;
4. Interpret cardiorespiratory limitations to exercise in normal and extreme environments;
5. Evaluate and analyse data from human participants in a simulated patient testing environment; and
6. Appraise results of experimental procedures and formulate a typical patient testing report.

**Class Contact:** Lecture 3.0 hrs Tutorial 3.0 hrs

**Required Reading:** Beachey, W. (2007) 2nd Respiratory Core Anatomy and Physiology: Foundations for a Clinical Practice Mosby Silverthorn, DU. (2012) 6th Human Physiology: An Integrated Approach Pearson Powers & Howley (2006) 6th Exercise Physiology McGraw-Hill

**Assessment:** Laboratory Work, Simulated LiWC environment and reports (4 reports), 20%. Assignment, Online multiple choice questions and written answers (3 questions), 20%. Test, Two (2) Mid-semester MCQ tests (30 minutes each), 10%. Examination, End of semester examination (3 hours mixture of MCQ & SA), 50%. The total combined assessment word equivalence is approximately 5000 words.

## HBM2204 Microbiology and Pathology

**Locations:** St Albans.

**Prerequisites:** RBM1518 - Human Physiology 1 RBM1528 - Human Physiology 2 OR equivalent units.

**Description:** This unit covers a range of topics in pathology-related microbiology. Topics include: nature and classification of micro-organisms and their growth requirements, normal flora and disease-causing micro-organisms, host-microbe interaction, microbial genetics, infection, sterilisation, disinfection, asepsis, antiseptics, sources and mode of transfer of infectious agents, principles of safe clinical practice, chemotherapy and epidemiology. This unit extends the application of microbiology in medicine, industry and biological products. Integration of microbiology with pathology will enhance student learning in biomedicine and provide a platform for the application of microbiology in medical practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and describe the differences of main groups of microorganisms, including bacteria, viruses, fungi and protozoa;
2. Describe the microflora associated with the human body and in various environments;
3. Discuss the transmission and infection control of disease-causing microorganisms;
4. Explain microbial genetics; and
5. Critically review the chemotherapeutic agents and argue the importance of epidemiology, and their relevance to a health practitioner.

**Class Contact:** Sixty (60) hours or equivalent for one semester comprising lectures and laboratories.

**Required Reading:** Tortora, G.J., Funke, B.R. and Case, C.L., (2012) 11th Microbiology: an Introduction Redwood City, California, USA.

**Assessment:** Test, Topic test (25 minutes), 10%. Report, Laboratory/LiWC work and



reports (3 reports 500 words equivalent), 30%. Examination, End of semester examination (2.5 hours), 60%. Combined individual assessment task will equate to 4000 words approximate.

### HBM3102 Medical Imaging

**Locations:**Sunshine, St Albans.

**Prerequisites:**None

**Description:**This unit focuses on the introductory principles that form the basis of the theoretical and practical knowledge underpinning medical imaging procedures including X-rays, ultrasound, magnetic resonance imaging and nuclear imaging. Students will develop critical thinking skills to address and analyse a variety of issues associated with developments in medical imaging and their application.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain and analyse currently available medical imaging interventions and justify their use in particular contexts;
2. Critically evaluate radiographic images against criteria which determine the final quality of radiographic image for example contrast and non-contrast radiographic projections, radiographic positioning and the clinical history;
3. Describe the limitations of the various medical imaging techniques employed using subject specific terminology;
4. Argue the benefits of the application of more than one medical imaging procedure to determine or confirm a diagnosis; and
5. Recognise and discriminate normal and abnormal (pathology) in radiographic images.

**Class Contact:**Lecture3.0 hrsTutorial2.0 hrs

**Required Reading:**Students are highly encouraged to obtain access to at least one of the texts listed below. Frank, E.D., Long, B.W., & Smith, B.J. (2011) 12th ed. Vol. 1 & 2 Merrill's Atlas of Radiographic Positioning and Procedures St Louis: Mosby Bontrager, K. L., & Lampignano, J. P. (2010) 7th ed. Textbook of Radiographic Positioning and Related Anatomy St Louis: Elsevier Mosby McQuillen-Martensen, K. (2011) 3rd ed. Radiographic Image Analysis St Louis: Elsevier Saunders Einsenberg, R. L., & Johnson, N. M. (2003) 3rd ed. Comprehensive Radiographic Pathology Mosby

**Assessment:**Workshop, Prepare Report (2500 words), 20%. Other, Prepare answers for worksheets (500 words), 10%. Test, Topic Test (30 minutes), 20%. Examination, End of Semester Examination (2 hours, 2000 words), 50%.

### HBM3104 Exercise Is Medicine

**Locations:**St Albans.

**Prerequisites:**RB M2560 - Medical BiochemistryRB M2800 - Cardiorespiratory and Renal Physiology

**Description:**Exercise is Medicine is a Capstone unit within the HBES and HBBM degree. Students will build upon their broad and coherent knowledge of the pathophysiology of chronic diseases and apply their learning in the formulation and management of evidence-based, safe, targeted and innovative exercise intervention programs as a non-pharmacological intervention strategy to prevent cardiovascular disease, diabetes, depression, dementia and falls; improve mental health and cognitive function; and promote active and healthy ageing.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Conceptually map physiological adaptations to different exercise modalities in order to inform prevention, treatment and management of chronic diseases;
2. Analyse the benefits of exercise in managing chronic conditions, including ageing at a cellular and molecular level;
3. Identify and justify the therapeutic benefits of graded exercise taking into account functional limitations of chronic disease;
- 4.

Formulate and evaluate evidence-based exercise prescriptions for a range of chronic conditions in accordance with Australian Physical Activity Guidelines; 5. Predict the impact of potential drug-exercise interactions when designing exercise therapy and adjust interventions accordingly; and 6. Incorporate behaviour-change principles into physical activity programs to suit a diverse range of individuals and groups.

**Class Contact:**Lecture2.0 hrsWorkshop3.0 hrs

**Required Reading:**American College of Sports Medicine., & Pescatello, L. S. (2014). ACSM's guidelines for exercise testing and prescription (Ninth edition.). Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins Health. Readings as instructed by lecturers Fact sheets of exercise guidelines for chronic disease will be provided by the lecturer.

**Assessment:**Case Study, Exercise prescription for a specific chronic disease (1000 words), 20%. Laboratory Work, Laboratory reports on exercise-based measurements and analysis (2 x 500 words), 20%. Presentation, Presentation of Case Study (500 words), 20%. Examination, End of semester two hour examination, 40%.

### HBM3105 Research Project

**Locations:**St Albans.

**Prerequisites:**HBM1201 - Research MethodsRB M2610 - Biomedical Sciences and SocietyHBM3104 - Exercise Is MedicineStudents should have successfully completed one (1) of the three (3) pre-requisite units.

**Description:**The Research Project unit of study is an individual program of supervised research in which the student, in consultation with the supervisor, designs, conducts and disseminates the outcomes of a specific project. Research placements enable students to undertake a structured work experience program as an integral part of their degree course. Gaining practical experience in their chosen field enables students to test interest and ability in these areas. Selection: The number of Project places will be limited by the number of available projects. Places will be allocated on the basis of academic merit. It would be expected that students wishing to do Project would have a Distinction average and be in their final year of the course.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Design, conduct and manage a biomedical/work-based research project;
2. Work independently or part of a team with minimal supervision on a work-based or laboratory project, and demonstrate time management and project-related organisational skills;
3. Articulate and justify research questions/project objectives and methods;
4. Demonstrate proficiency in writing a research/work-based project final report, including a rationale and a summary of strengths and limitations;
5. Demonstrate proficiency in disseminating derived research/workplace findings to peers and the VU Biomedical community.

**Class Contact:**Eight (8) hours per week for one semester (or equivalent hours over the course of a semester comprising a total of ninety-six (96) hours) comprising laboratory work for a minor research project either in a VU-based or external laboratory. Students will also be expected to attend a one (1) hour information seminar at the commencement of the semester (to be advised by the coordinator) and a three (3) hour research dissemination seminar at the conclusion of the semester.

**Required Reading:**Selected material as advised by the project supervisor

**Assessment:**Presentation, Oral (10 mins + 5 mins questions), 15%. Practicum, Supervisor assessment of laboratory skills, 15%. Research Thesis, Minor written thesis (4000 words), 70%. The Research Project will be assessed by: the minor written thesis (70%) of 4000 words due at the end of semester; an oral presentation (10 mins + 5 mins question time) due towards the end of semester during a research seminar organised by the unit coordinator (15%); and the

supervisor's assessment of research competence, based upon the student's contributions to the project design and completion (15%).

### **HBM3106 Reproductive and Developmental Biology**

**Locations:**St Abans.

**Prerequisites:**RB M2540 - Pathophysiology 2

**Description:** In this unit of study, students will develop a detailed understanding of the molecular, biochemical and cellular events that regulate reproduction, and subsequently, the development of specialised cells, tissues and organs during the embryonic and foetal periods. In particular, cell signalling pathways that regulate embryonic induction, tissue interactions and pattern formation, and expression of regulator genes, will be explored and the pathological outcomes of interruption to normal processes/development will be featured. The continuous development of physiological systems throughout the foetal and neonatal periods, and the process of parturition and its induction will also be examined. Focus on the experimental strategies and techniques that are used to identify molecular and cellular mechanisms of development will be a feature of this unit. Students will be exposed to a range of scientific techniques through the laboratory component and will undertake a minor project.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the physiological processes that govern reproduction - from gamete production to successful fertilisation and implantation of the zygote - and contextualise the use of medical intervention to assist these processes when abnormal;
2. Review, analyse and conceptualise the body of research that has led to our fundamental understanding of developmental biology with particular emphasis on the embryonic and foetal stages;
3. Identify and evaluate the environmental and genetic influences that contribute to developmental abnormalities in the embryo/foetus, and the repercussion of these on the neonate and throughout the lifespan;
4. Deduce the transitional adaptations that must occur at birth to enable the foetus to survive as a neonate;
5. Diagnose sonographic, biochemical and/or symptomatic anomalies in the foetus/neonate and recommend the impact on future development and potential treatments;
6. Conceptualise the process of parturition and critically evaluate the theories underpinning its initiation; and
7. Commentate on various scientific techniques and methodologies used in the study of developmental biology through reading and practise, including research design and ethical consideration.

**Class Contact:** Lab3.0 hrsLecture2.0 hrs

**Required Reading:** Required and recommended texts to be advised.

**Assessment:** Test, Two (2) Multiple choice quizzes (5% each, 30 minutes ), 10%. Laboratory Work, Laboratory reports and/or presentations (500 words), 15%. Assignment, Written Assignment (1200 words), 15%. Examination, Final Exam (2 hours, 2000 words), 60%.

### **HBM3200 Bioinformatics Methods**

**Locations:**St Abans.

**Prerequisites:**RB M1528 - Human Physiology 2RB M2560 - Medical BiochemistryRB M2133 - Cell and Molecular Biology

**Description:** This unit introduces students to a variety of bioinformatics tools, and builds in analytical skills to facilitate a better understanding of biological processes and to identify newly sequenced genes from various organisms. The understanding of the relationship between sequence, structure and function of DNA, RNA and protein, over recent decades is now essential to practice in any biological or medical research fields. This unit Bioinformatics provides a foundation for post-graduate study in this

area.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Select and justify the use of various bioinformatics tools to determine phylogenetic relationships between organisms, using DNA, RNA and protein sequences;
2. Interrogate appropriate databases in order to identify alternative transcripts of a gene;
3. Conceptually map how amino acids and their properties play key roles in forming functional motifs found in proteins leading to three-dimensional structures and their functional significance;
4. Predict genetic risk factors and design personalised medicine;
5. Interpret relationships between genes, metabolic pathways, diseases and medical drugs.

**Class Contact:** Lecture3.0 hrsWorkshop3.0 hrs

**Required Reading:** Lesk, A., (2014) 4th Introduction to Bioinformatics Oxford University Press, 2014

**Assessment:** Other, Weekly online quizzes based on computer exercises (1000 words), 50%. Assignment, Research based assignment (2000 words), 20%. Examination, Final Examination (2 hours, 2000 words), 30%.

### **HBM3201 Clinical Genetics**

**Locations:**St Abans.

**Prerequisites:**RB M2540 - Pathophysiology 2RB M2560 - Medical BiochemistryRB M2133 - Cell and Molecular Biology

**Description:** This Unit builds on foundation knowledge and skills relating to cellular, molecular and biochemical interactions in the body. It includes a more specialised study of the human genome and the ways in which genes are expressed and regulated. Patterns and consequences of genetic inheritance - both Mendelian and non-Mendelian - are also examined. Most importantly for biomedicine, the unit explore the various ways in which genetic diseases manifest themselves, their symptoms, pathogenesis, diagnosis and treatment, if any. Relevant screening of populations, genetic counselling and ethical considerations will be discussed. Case studies will be utilised to illustrate clinical aspects of genetic disease.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structure of the human genome, the functional significance of its various components and how gene expression is regulated;
2. Distinguish between the various types of inheritance patterns and demonstrate an understanding of both Mendelian and non-Mendelian inheritance;
3. Elucidate genetic disease-causing mechanisms such as various types of DNA mutations, chromosomal abnormalities and epigenetic mechanisms;
4. Identify and elaborate the genetic basis, symptoms, pathogenesis, and principles of diagnosis and treatment options of commonly encountered genetic diseases as well as diseases that have genetic risk factors; and
5. Debate aspects of genetic screening, genetic counselling and ethical implications regarding these.

**Class Contact:** Lecture3.0 hrsWorkshop3.0 hrs

**Required Reading:** Research and review authorised Web site and journal articles as appropriate. Jorde, L.B., Carey, J.C., Bamshad, M.J., 2009. 4th Medical Genetics with STUDENT CONSULT Online Access Mosby Read, A. & Donnai, D., 2010. 2nd New Clinical Genetics Scion Publishing

**Assessment:** Workshop, Contributions to discussions, debates and answers to questions (1000 words), 30%. Assignment, Group preparation and presentation of a case study (2000 words), 30%. Examination, Two-hour final examination (2000 words), 40%. The total combined assessment word equivalence is approximately 5000 words.

## HBM3202 Applied Biomedical Science

**Locations:**St Albans.

**Prerequisites:**RB M2133 - Cell and Molecular Biology HB M2106 - Human Genetics RB M2200 - Functional Anatomy of the Head and Back RB M2800 - Cardiorespiratory and Renal Physiology

**Description:** In this Capstone unit students will apply and consolidate their knowledge in Physiology and Molecular Cell Biology to current global health challenges. Students will develop critical awareness of current concepts, controversies and latest advances in biomedical science. Students will investigate the pathophysiology, current research and interventions of specific disorders having a major impact in the 21st century. Single disorders for in depth analysis will be chosen from: metabolic disorders, infectious diseases, cardiovascular diseases, neurodegenerative diseases and cancer. This Capstone unit will develop graduates as health professionals with the ability to critically assess current and future biomedical knowledge, providing a basis for independent lifelong learning.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map disorders from pathogenesis through to treatment;
2. Demonstrate an in depth knowledge of the pathophysiology of selected diseases;
3. Critically reflect on ethical principles underpinning biomedical science;
4. Critically review current advances in medical interventions/therapeutics;
5. Effectively and analytically communicate complex ideas/scientific literature in both written and oral formats.

**Class Contact:** Lecture 3.0 hrs Workshop 2.0 hrs

**Required Reading:** Students will have access to articles from primary scientific literature and recommended readings via VU Collaborate.

**Assessment:** Presentation, Journal article analysis (15 minutes), 10%. Essay, Essay (1,500 words), 30%. Report, Two (2) Workshop Reports (800 words each), 30%. Test, Two (2) Topic tests (1.5 hours and 1,000 words each), 30%.

## HBM3203 Integrative Physiology

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HB M2203 - Clinical Physiology RB M2800 - Cardiorespiratory and Renal Physiology

**Description:** The unit will provide a detailed understanding of some of the most recent advances in select areas of physiology. Topics representing the research focus of the Discipline will be delivered in the form of a conference key note presentation. Based on interest and availability, students select from a number of areas of study that reflect the dynamic nature of physiology. These currently encompass i) Cardiovascular Disease, ii) Muscle and Exercise Physiology, iii) Neurophysiology and iv) Ageing. Students further develop and utilise their graduate capabilities in communication, critical analysis and problem solving to develop theoretical background and multidisciplinary approaches to investigate physiological processes. Students will be introduced to current technologies that enable the understanding of selected areas of study. The unit will culminate in a mock conference with moderated poster presentations which will bring together theoretical and practical elements covered throughout the Human Physiology major, designed to promote teamwork, the ability to read critically, and to evaluate and communicate physiological information.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. To develop and apply skills of critical evaluation of scientific literature, physiological data and experimental design;
2. Demonstrate the skills to communicate the results of physiological study in both written and oral form;
3. Build the capacity to understand practical skills and technologies in the solution of

scientific problems.

**Class Contact:** Lecture 2.0 hrs Workshop 4.0 hrs

**Required Reading:** Primary literature references will be utilised as directed by the unit coordinator and lecturers.

**Assessment:** Laboratory Work, Analysis of Physiology Research Techniques (1000 words), 20%. Report, Abstract of poster presentation (500 words), 10%. Poster, Conference Poster (3000 words), 60%. Other, Peer Assessment (500 words), 10%.

## HBM3204 Biomolecular Mechanisms of Disease

**Locations:** St Albans.

**Prerequisites:** RB M2133 - Cell and Molecular Biology HB M2106 - Human Genetics

**Description:** In this Capstone unit, students will apply their previously obtained knowledge of molecular and cellular Biology to explore the molecular processes of multifactorial diseases including cancer, cardiovascular disease and metabolic disorders. This knowledge will be integrated into investigations of recent advances in molecular medicine including targeted therapies and diagnosis. Consolidation of molecular techniques utilized in molecular biomedicine will underpin this unit. Students will develop both theoretical and laboratory skills essential for becoming successful professionals in both research and clinical based biomedical science.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically review current knowledge of molecular mechanisms resulting in human diseases and the impact of these diseases in both an individual and global context;
2. Critically assess the use of current and emerging molecular biotechnology techniques to determine the molecular mechanisms of diseases and the design of targeted therapies;
3. Ability to critically review and apply molecular and biotechnology methodologies;
4. Collaborate constructively within small groups in the planning, development and implementation of teamwork tasks;
5. Report on and elucidate on research data and scientific ideas.

**Class Contact:** Sixty (60) hours or equivalent for one (1) semester comprising lectures, workshops/laboratories and tutorials.

**Required Reading:** Coleman. W.B., & Tsongalis. G.J., (2009) 1st ed. Molecular Pathology: The Molecular Basis of Human Disease Elsevier In addition to the above texts, students will utilize articles from primary scientific literature and recommended online readings.

**Assessment:** Test, Two (2) Topic Tests (30 mins each), 10%. Laboratory Work, Four (4) Practical Reports (2,000 words total), 25%. Case Study, Team presentation (1000 words), 15%. Examination, Multiple choice & short answer questions (2000 words), 50%.

## HBM3205 Clinical Genetics and Cellular Basis of Disease

**Locations:** St Albans.

**Prerequisites:** RB M2540 - Pathophysiology 2 RB M2560 - Medical Biochemistry RB M2133 - Cell and Molecular Biology

**Description:** This capstone unit builds on foundation knowledge and skills relating to cellular, molecular and biochemical interactions in the body and how they contribute to the pathogenesis of disease. It includes a more specialised study of the human genome and the ways in which genes are expressed and regulated. Patterns and consequences of genetic inheritance - both Mendelian and non-Mendelian - are also examined. Most importantly for biomedicine, the unit explore the various ways in which genetic diseases manifest themselves, their symptoms, pathogenesis, diagnosis and treatment, if any. Relevant screening of populations, genetic counselling and ethical considerations will be discussed. Case studies will be utilised to illustrate clinical aspects of genetic disease.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structure of the human genome, the functional significance of its various components and how gene expression is regulated; 2. Distinguish between the various types of inheritance patterns and demonstrate an understanding of both Mendelian and non-Mendelian inheritance 3. Elucidate genetic disease-causing mechanisms such as various types of DNA mutations, chromosomal abnormalities and epigenetic mechanisms 4. Identify and elaborate the genetic basis, symptoms, pathogenesis, and principles of diagnosis and treatment options of commonly encountered genetic diseases as well as diseases that have genetic risk factors; and 5. Debate aspects of genetic screening, genetic counselling and ethical implications regarding these

**Class Contact:** Lecture 3.0 hrs Workshop 3.0 hrs

**Required Reading:** Jarde, L.B., Carey, J.C., Bamshad, M.J., (2009) 4th ed. Medical Genetics Mosby Read, A. & Donnai, D., (2010) 2nd ed. New Clinical Genetics Scion Publishing The text Medical Genetics with STUDENT CONSULT via Online Access.

**Assessment:** Workshop, Contributions to discussions, debates and answers to questions (1000 words), 30%. Case Study, Group presentation of a case study (2000 words), 30%. Examination, Final Examination (2 hours), 40%.

### **HBP6901 Research Thesis (Full Time)**

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. Intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. Expert cognitive, technical and creative skills to: a) design, develop and implement a research project/s to systematically investigate a research problem, b) develop, adapt and implement research methodologies to extend and redefine existing knowledge, c) manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature; 4. Expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations; 5. Capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals; 6. Intellectual independence, initiative and creativity in new situations and/or for further learning; 7. Ethical practice and full responsibility and

accountability for personal outputs; and 8. Autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### **HBP6902 Research Thesis (Full Time)**

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. Intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. Expert cognitive, technical and creative skills to: a) design, develop and implement a research project/s to systematically investigate a research problem; b) develop, adapt and implement research methodologies to extend and redefine existing knowledge, c) manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature; 4. Expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations; 5. Capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals; 6. Intellectual independence, initiative and creativity in new situations and/or for further learning; 7. Ethical practice and full responsibility and accountability for personal outputs; and 8. Autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### **HBP6911 Research Thesis (Part Time)**

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HBP6912 Research Thesis (Part Time)

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3. expert cognitive, technical and creative skills to: 3.1. design, develop and implement a research project/s to systematically investigate a research problem 3.2. develop, adapt and implement research methodologies to extend and redefine existing knowledge 3.3. manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature 4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning 7. ethical practice and full responsibility and accountability for personal outputs 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HBS1101 Patient, Practitioner and Health System 1

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** HBS1101 Patient, Practitioner and the Health System 1, introduces students' to the Australian healthcare system with an emphasis on the health professional services available to patients. Students consider patient centred care and start to explore the value of reflective practice in being a health professional.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Locate the determinants of health in the Australian healthcare system;
- 2.

Identify the health enhancing and health risk behaviours of Australian health consumers; 3. Review the professions contributing to the Australian healthcare system; 4. Evaluate the benefits and challenges of patient-centered care; and 5. Discuss the value of reflective practice in health care.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**Report, Discuss the Australian healthcare system (1000 words), 35%. Report, Reflective practice (500 words), 15%. Report, Health enhancing and risk behaviours (500 words), 15%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester tasks 1, 2 and 3 (1000 words), 35%. Students are required to participate in tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement).

## HBS1102 Evidence for Practice 1

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HBS1102 Evidence for Practice 1, introduces students' to the role of evidence and academic resources within healthcare practice. Students are supported in their transition to university through developing their skills in academic writing and computer programs. These fundamental skills are crucial for their subsequent units of study in the Bachelor of sciences or other bachelr degree within the University.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate the role of evidence in healthcare practice; 2. Locate relevant academic sources of evidence; 3. Cite academic sources; 4. Summarise key features of a piece of evidence using academic writing; 5. Demonstrate appropriate use of Word, Excel, and PowerPoint programs; and 6. Review the process of creating a wiki page, blog or e-portfolio.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**Report, Locate a quantitative paper about a profession specific intervention and outline why evidence is important (1000 words), 33%. Presentation, Twenty (20) minute group presentation on commonly implemented treatment technique, 33%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester tasks 1 and 2. Include evidence from semester tasks 1 and 2 (1000 words)., 34%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

## HBS1103 Scientific Basis for Osteopathy 1

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HBS1103 Scientific basis for osteopathy 1 introduces students to fundamental principles of biomedical sciences relevant to osteopathy. Students will apply theoretical concepts of biomedical sciences to the upper limb and review common musculoskeletal conditions presenting in osteopathic practice.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the anatomy, histology and embryology of the upper limb & shoulder girdle; 2. Elaborate basic physiological, pharmacological, pathophysiology, etiological and pathogenical principles, particularly related to inflammation and pain;

3. Illustrate biomechanical principles of the upper extremity; 4. Relate osteopathic principles to the upper extremity; and 5. Discuss common musculoskeletal conditions of the upper limb and list appropriate management strategies.

**Class Contact:**Lab1.0 hrLecture2.0 hrsTutorial2.0 hrsWorkshop1.0 hr

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system.Moore, K. L., & Dalley, A. F. (2010) 6th ed. Clinically oriented anatomy Philadelphia: Lippincott Williams & Wilkins. Guyton, A. C., & Hall, J. E. (2011) 12th ed. Textbook of medical physiology Philadelphia, PA: Elsevier. Bryant, B., & Knights, K. (2014) 4th ed. Pharmacology for health professionals Sydney, Australia: Elsevier.

**Assessment:**The formative assessment tasks for this unit will be: - Online quiz (weeks 4,8,11) - Practical examination (week 5) - Contribution to CBL group (weekly) Report, Upper extremity common muscubskeletal complaint (500 words), 20%. Examination, Practical Anatomy Examination (15 minute equivalent to 500 words), 20%. Examination, Theory Paper (two (2) hours, equivalent of 2000 words), 60%. Total combined assessment word equivalence is approximately 3000 words for a 12 credit point unit at AQF level 5. Students are required to participate in practical and tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall. .

## HBS1104 Clinical Skills 1

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HBS1104 Clinic skills 1 introduces students to clinical communication and examination within the context of osteopathic practice. Students commence their development of patient communication through history taking relating to a musculoskeletal complaint. Osteopathic manual techniques for the upper extremity are explored in this unit with students being able to commence their manual therapy skills.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Relate the principles of basic history taking to the process of recording details of the presenting complaint; 2. Exhibit and interpret a musculoskeletal physical examination of the upper extremity; 3. Review common medical tests that may be used in diagnosis & management of conditions of the upper extremity; 4. Articulate basic clinical reasoning for conditions of the upper extremity; and 5. Exhibit and explain osteopathic manual techniques for the upper extremity.

**Class Contact:**Lecture1.0 hrTutorial1.0 hrTotal of seventy-two (72) hours comprising of practical workshops (2 x 2.5 hour sessions) and case based learning (1 hour) per week.

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system.Magee, D. (2014) 6th ed. Orthopaedic physical assessment. St Louis, US: Elsevier Saunders. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams Wilkins. Bickley, L. S. (2012) 11th ed. Bates' guide to physical examination and history taking. Philadelphia, US: Lippincott Williams & Wilkins.

**Assessment:**The formative tasks for this unit are: - Online quizzes (weeks 4,8,11) - Practical examination (includes self- and peer-review) (week 5) - Contribution to CBL group (weekly) Report, Upper extremity common musculoskeletal complaint (1000 words), 40%. Examination, 30 minute practical examination of technique/palpation (20 mins) and physical examination (10 mins)

(Equivalent to 2000 words) (Hurdle Requirement), 60%. Total combined assessment word equivalence is approximately 3000 words for a 12 credit point unit at AQF level 5. Students are required to participate in practical sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the semester assessments (Report) and for the end-of-semester examination (30 minute practical examination) is required to satisfactorily complete the unit overall. The hurdle requirements are in place to satisfy the unit learning outcomes, and ensure safe practice and implementation of the skills learnt in this unit.

## HBS1201 Patient, Practitioner and Health System 2

**Locations:**City Flinders.

**Prerequisites:**HBS1101 - Patient, Practitioner and Health System 1HBS1102 - Evidence for Practice 1

**Description:**HBS1201 Patient, practitioner and the health system 2 builds on students developing knowledge of patient-centred care and the Australian healthcare system. Students will consider the relevance of health, illness and disease and review diseases affecting a significant proportion of the Australian public. Health enhancing and risk behaviours are related to common diseases and students will reflect on the role of various health professions (and the role of inter-professional practice) in delivering healthcare to patients with these diseases.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Summarise health, illness and disease; 2. Relate the health enhancing and health risk behaviours to common diseases in Australia; 3. Investigate inter-professional education and practice; and 4. Evaluate reflective practice in the context of patient-centred care.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessment task for this unit will be: - Online quiz (weeks 5) Report, Interprofessional practice (500 words), 15%. Report, Health within Australia (1500 words), 50%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester tasks 1 and 2. Include evidence from semester tasks 1 and 2 (1000 words), 35%. Total combined assessment word equivalency is approximately 3000 words. Students are required to participate in tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement).

## HBS1202 Evidence for Practice 2

**Locations:**City Flinders.

**Prerequisites:**HBS1102 - Evidence for Practice 1

**Description:**HBS1202 Evidence for Practice 2 builds on students developing knowledge of evidence within healthcare practice. The emphasis in this unit is on locating, retrieving and reviewing peer reviewed journal articles. Students extend their skills in computer programs by engaging with referencing software to store and manage peer-reviewed articles. Qualitative and quantitative research paradigms are introduced.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Locate and retrieve peer-reviewed journal articles from search engines; 2. Compare quantitative and qualitative research approaches; 3. Evaluate the features of a peer-review journal article; and 4. Cite references and format reference lists using referencing software.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**Report, Locate and evaluate journal article (quantitative paper) (500 words), 16%. Report, Locate one qualitative paper and one quantitative paper about the same topic. Compare the research approaches. (1000 words), 50%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester tasks 1 and 2 (1500 words), 34%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

## HBS1203 Scientific Basis for Osteopathy 2

**Locations:**City Flinders.

**Prerequisites:**HBS1103 - Scientific Basis for Osteopathy 1

**Description:**HBS1203 Scientific Basis for Osteopathy 2, extends students knowledge of biomedical sciences through application of principles to the lower limb. Students explore previously learnt concepts of anatomy, physiology and other theoretical material in a new region of the body, enabling them to develop a more in depth understanding of how these principles relate to lower extremity conditions relevant to osteopathic practice. The complex phenomenon of pain is introduced in this unit, forming a crucial underlying concept for subsequent scientific basis of osteopathy units.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Discuss the anatomy, histology and embryology of the lower limb; 2. Review the physiology of the peripheral nerves, and relate this to the effects of damage to these structures and their mechanisms of repair; 3. Illustrate biomechanical principles of the lower extremity; 4. Assess the applicability of osteopathic principles to the lower extremity; 5. Discuss common musculoskeletal conditions of the lower limb and list appropriate management strategies.

**Class Contact:**Lab1.0 hrLecture2.0 hrsTutorial2.0 hrsWorkshop1.0 hr

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system. Moore, K. L., & Dalley, A. F. (2010) 6th ed. Clinically oriented anatomy. Philadelphia, US: Lippincott Williams & Wilkins. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams Wilkins. Guyton, A. C., & Hall, J. E. (2011) 12th ed. Textbook of medical physiology Philadelphia, PA: Elsevier.

**Assessment:**The formative assessment tasks for this unit are: - Online quizzes (weeks 4,8,11) - Contribution to CBL group (weekly) Report, Lower extremity common musculoskeletal complaint (500 words), 20%. Examination, Practical Anatomy Examination - 15 minutes (equivalent to 500 words), 20%. Examination, Written Examination Paper - 2 hours (equivalent to 2000 words), 60%. Total combined assessment word equivalence is approximately 3000 words for a 12 credit point unit at AQF level 5. Students are required to participate in practical and workshop sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall.

## HBS1204 Clinical Skills 2

**Locations:**City Flinders.

**Prerequisites:**HBS1104 - Clinical Skills 1

**Description:**HBS1204 Clinical Skills 2 introduces students to the osteopathic manual techniques, clinical examination and medical tests relevant to the lower limb. Students are able to further develop their patient communication and history taking

skills by taking a systems history in addition to the presenting complaint for the lower limb. Clinical reasoning is a focus of this unit and students are encouraged to start to articulate their clinical thinking in relation to lower limb conditions.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Relate the principles of basic & systems history taking to record details of the presenting complaint;
2. Perform and interpret a musculoskeletal physical examination of the lower extremity;
3. Review common medical tests that may be used in the diagnosis & management of conditions of the lower extremity;
4. Articulate basic clinical reasoning for conditions of the lower extremity; and
5. Exhibit and explain the principles of osteopathic manual techniques of the lower extremity.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Workshop 2.5 hrs Total of seventy-two (72) hours comprising of practical workshops (2 x 2.5 hour sessions) and case based learning (1 hour) per week.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. DeStefano, L. (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams & Wilkins. Magee, D. J. (2014) 6th ed. Orthopaedic physical assessment. St Louis, US: Elsevier. Bickley, L. S. (2012) 11th ed. Bates' guide to physical examination and history taking. Philadelphia, US: Lippincott Williams & Wilkins.

**Assessment:** The formative assessments for this unit are: - Online quizzes (weeks 4, 8, 11) - Practical examination (includes self and peer-review) (week 5) - Contribution to CBL group (weekly) Report, Lower extremity common musculoskeletal complaint (1000 words), 40%. Examination, 30 minute practical examination of technique/palpation (20 mins) and physical examination (10 mins) (Equivalent to 2000 words) (Hurdle Requirement), 60%. Total combined assessment word equivalence is approximately 3000 words for a 12 credit point unit at AQF level 5. Students are required to participate in practical and tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the semester assessments (Report) and for the end-of-semester examination is required to satisfactorily complete the unit overall. The hurdle requirements are in place to satisfy the unit learning outcomes, and ensure safe practice and implementation of the skills learnt in this unit. .

### HBS2301 Patient, Practitioner and Health System 3

**Locations:** City Flinders.

**Prerequisites:** HBS1201 - Patient, Practitioner and Health System 2

**Description:** HBS2301 Patient, Practitioner and the Health System 3, aims to extend students' knowledge of public health and consider the factors impacting on health and wellbeing of the Australian population. Students are challenged to consider the ethical considerations of health professional practice from the perspective of the practitioner and the patient.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Review the current approaches to health education, health promotion and disease prevention;
2. Reflect on psychosocial factors impacting health & well-being;
3. Debate the importance and relevance of ethical considerations for health practice; and
4. Report on the reflective practice skills demonstrated in simulated healthcare practice.

**Class Contact:** Lecture 1.0 hr Tutorial 2.0 hrs Workshop 1.0 hr Attendance requirement of 90% for tutorials and workshops as these classes involve interactive activities, simulations etc.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Stone, J. (2002) 1st ed. An ethical framework for complementary and alternative therapists London: Routledge.

**Assessment:** Report, Ethics in healthcare (500 words), 15%. Report, Reflective report on simulated consultation (500 words), 15%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester (1000 words), 20%. Report, Psychosocial factors in health (2000 words), 50%. The formative assessment task for this unit will be: - Online quiz (weeks 5) 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial and workshop activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

### HBS2302 Evidence for Practice 3

**Locations:** City Flinders.

**Prerequisites:** HBS1202 - Evidence for Practice 2

**Description:** HBS2302 Evidence for Practice 3, aims to contextualize the role of evidence and research in manual therapy. Students are able to investigate the applicability of qualitative and quantitative research approaches through a deeper examination of what these approaches offer. The process of research is introduced with an emphasis on ethical considerations of manual therapy research involving patients and other stakeholders.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptualise qualitative research designs for manual therapy;
2. Review quantitative research designs for manual therapy; and
3. Report on the ethical considerations of research in manual therapy.
4. Critique evidence for osteopathic treatment of the spine.

**Class Contact:** Lecture 1.0 hr Tutorial 2.0 hrs Workshop 1.0 hr Fortnightly two (2) hour tutorials and weekly one (1) hour lectures and one (1) hour Workshop.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Stone, J. (2002) 1st ed. An ethical framework for complementary and alternative therapists London: Routledge.

**Assessment:** Essay, Research designs and ethics (1000 words), 25%. Presentation, Ten (10) minute presentation on critique of paper (500 words), 10%. Examination, Written examination (end of semester), 40%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester (1000 words), 25%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

### HBS2303 Scientific Basis for Osteopathy 3

**Locations:** City Flinders.

**Prerequisites:** HBS1203 - Scientific Basis for Osteopathy 2

**Description:** HBS2303 Scientific Basis for Osteopathy 3, expands the students' knowledge of biomedical sciences through application of fundamental principles to the spine. Patients presenting in osteopathic practice tend to seek care for spine related pain and dysfunction, so a key focus in this unit is the osteopathic philosophy and principles. Students are able to strengthen their knowledge of management strategies for musculoskeletal conditions through case based learning of patients with spinal complaints.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Map the anatomy, histology and embryology of the head and spine;
2. Relate the physiological processes of the brain, cranial nerves and spinal cord, including their



involvement in pain and relevant pharmacological interventions; 3. Integrate biomechanical principles to spinal movements; 4. Propose appropriate management for common musculoskeletal conditions affecting the spine.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 2.0 hrs Workshop 1.0 hr Weekly classes include: two (2) hour lectures, one (1) hour lab, one (1) hour workshop and two (2) hour tutorials (Case Based Learning). An extra four (4) lecture hours will be delivered over the semester in addition to above.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Moore, K. L., & Dalley, A. F. (2014) 7th ed. Clinically oriented anatomy. Philadelphia, US: Lippincott Williams Wilkins. Guyton, A. C., & Hall, J. E. (2011) 12th ed. Textbook of medical physiology Philadelphia, PA: Elsevier. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams Wilkins.

**Assessment:** The formative assessments for this unit will be - Online quizzes (weeks 4 and 11) - Contribution to CBL group (weekly) Examination, 15 minute anatomy practical examination (equivalent to 500 words), 15%. Essay, Common spinal complaint discussion paper (1000 words), 25%. Examination, 10 minute practical examination discussing anatomical considerations of technique/palpation and examination (equivalent to 1000 words), 25%. Examination, 1.5 hour written paper (equivalent to 1500 words), 35%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program (hurdle requirement). The workshops, tutorials and CBL classes in this unit are interactive and students are able to seek feedback from the teachers on meeting the learning outcomes and planning for assessment tasks. A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall as the assessment tasks are related to essential theoretical knowledge required for osteopathic practice. .

### HBS2304 Clinical Skills 3

**Locations:** City Flinders.

**Prerequisites:** HBS1204 - Clinical Skills 2

**Description:** This unit introduces students to clinical examination, medical tests and osteopathic management, including manual techniques relevant to the spine and neurological system. Students will continue to develop history taking and communication skills specifically for spinal conditions. Clinical reasoning continues to be developed in this unit with a focus on patient presentations affecting the spine and neurological system.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Relate the principles of history taking to record details of the presenting complaints of the spine; 2. Exhibit and interpret a physical examination of the spine and neurological system; 3. Interpret common medical tests that may be used in diagnosis and management of conditions of the spine and neurological system; 4. Exemplify clinical reasoning for common conditions of the spine and neurological system; and 5. Exhibit and explain osteopathic manual techniques and management of the spine.

**Class Contact:** Lecture 1.0 hr Workshop 2.5 hrs Total of sixty-six (66) hours comprising of practical workshops (2 x 2.5 hour sessions) and lectures (1 hour x 6 weeks).

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine Philadelphia, US: Lippincott Williams Wilkins. Magee, D (2014) 6th ed. Orthopaedic Physical Assessment. St Louis, US: Elsevier. Bickley, L S. (2012) 11th ed. Bates' guide to physical examination and history taking. Philadelphia, US: Lippincott Williams & Wilkins.

**Assessment:** The formative assessment tasks for this unit are: - Online quizzes (week 4 and 11) - In-class examination (safety considerations of manipulation) (week 3) - In-class examination (technique) (week 8) - Contribution to CBL group (weekly)

Examination, Thirty (30) minute written paper (equivalent to 500 words), 15%. Examination, Five (5) minute practical examination discussing clinical reasoning (equivalent to 500 words), 15%. Essay, Common spinal complaint discussion paper (1000 words), 25%. Examination, Twenty (20) minute practical examination of technique/palpation (20 mins) and physical examination (10 mins) (equivalent to 2000 words), 45%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program (hurdle requirement). The practical workshops in this unit are interactive and develop students manual and examination skills for work as an osteopath. Further students are able to seek feedback from the teachers on meeting the learning outcomes and planning for assessment tasks. A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall as the assessment tasks are reflective of the nature of osteopathic practice.

### HBS2401 Patient, Practitioner and Health System 4

**Locations:** City Flinders.

**Prerequisites:** HBS2301 - Patient, Practitioner and Health System 3

**Description:** HBS2401 Patient, Practitioner and the Health System 4 consolidates students' knowledge developed in HBS1101, HBS1201 & HBS2301 by considering patients' specific needs in receiving healthcare. Students examine the importance of communication in healthcare practice and consider tailoring to individual patient needs. Students assess the impact of chronic disease on the Australian healthcare system and relate patient behaviours to health outcomes.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Assess the impact of chronic disease on the Australian healthcare system; 2. Map individual patient behaviours to health outcomes 3. Argue the importance of confidentiality and informed consent for health care practice; and 4. Evaluate the role of communication in healthcare practice.

**Class Contact:** Tutorial 2.0 hrs Workshop 1.0 hr Weekly 2 hour tutorials and weekly 1 hour workshop. Minimum 90% attendance requirement for tutorials and workshops.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Allen, F (2010) 1st ed. Health Psychology and Behaviour: in Australia McGraw-Hill Australia Pty Ltd

**Assessment:** Report, Effective communication (500 words), 15%. Report, Ethics in healthcare (500 words), 15%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester (1000 words), 20%. Essay, Chronic diseases in the Australian population (2000 words), 50%. The formative assessment tasks for this unit will be: - Online quiz (weeks 5) 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial and workshop activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

### HBS2402 Evidence for Practice 4

**Locations:** City Flinders.

**Prerequisites:** HBS2302 - Evidence for Practice 3

**Description:** HBS2402 Evidence for Practice 4, aims to strengthen students' ability to critically review information and evidence, particularly findings from a peer review journal article. Students are introduced to statistical techniques and are facilitated in learning how to extract key information from journal articles. The levels of evidence for research are examined and their relevance to areas of healthcare is considered.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:  
1. Demonstrate use of basic statistical techniques; 2. Discriminate sources of bias that confound the interpretation of study outcomes; 3. Contrast the levels of evidence used to justify healthcare interventions; 4. Present the key outcomes of a peer-review journal article;

**Class Contact:** Lecture 1.0 hr Tutorial 2.0 hrs One (1) hour lecture and a two (2) hour tutorial each week.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Coakes, S.J. (2012) 20th ed. SPSS version 20.0 for Windows. Analysis without Anguish John Wiley & Sons, Australia.

**Assessment:** Report, Use the Cochrane Risk of Bias tool to critique a quantitative research paper (500 words), 15%. Essay, Contrast the levels of evidence using peer review papers that demonstrate each evidence level (1000 words), 25%. Portfolio, Develop a wiki, blog or e-portfolio to reflect on semester tasks 1 and 2. Include evidence from semester tasks 1 and 2. (1000 words), 25%. Examination, One and a half (1.5) hour computer lab exam (1500 words), 35%. The formative assessment tasks for this unit will be an online quiz in basic statistics in Excel (week 5) 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

### HBS2403 Scientific Basis for Osteopathy 4

**Locations:** City Flinders.

**Prerequisites:** HBS2303 - Scientific Basis for Osteopathy 3

**Description:** HBS2403 Scientific Basis for Osteopathy 4, strengthens students' ability to recognize the relevant biomedical science concepts for presenting complaints by applying them to conditions affecting the thorax. This unit is different in focus to previous Scientific basis of osteopathy units. There is a shift from considering somatic causes for pain to visceral causes from the thoracic viscera. Students develop their understanding of pain through reviewing pain pathways and examining mechanisms of referred and chronic pain. Students are introduced to actions of pharmacological agents and consider those applicable for conditions affecting the thorax.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:  
1. Map the anatomy, histology and embryology of the thorax; 2. Relate the physiological processes of the thoracic viscera; 3. Articulate mechanisms involved in viscera as a source of pain; 4. Integrate biomechanical principles to movements of the thorax; 5. Review common conditions affecting the thorax and thoracic viscera and list appropriate management; and 6. Propose relevant pharmacological interventions for conditions affecting thorax.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 3.0 hrs Workshop 1.0 hr Four (4) extra hours of lectures are required to deliver the content. This is in addition to above. The three (3) hour tutorial (Case Based Learning) will include two (2) hours of facilitation and one (1) hour self-directed.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Moore, K. L., & Dalley, A. F. (2014) 7th ed. Clinically oriented anatomy. Philadelphia, US: Lippincott Williams & Wilkins. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams Wilkins. Guyton, A. C., & Hall, J. E. (2011) 12th ed. Textbook of medical physiology Philadelphia, PA: Elsevier. Bryant, B., & Knights, K. (2014) 4th ed. Pharmacology for health professionals. Sydney, Australia: Elsevier.

**Assessment:** Presentation, Fifteen (15) minute presentation of thorax complaint (equivalent to 2000 words), 25%. Examination, Ten (10) minute practical

examination discussing anatomical considerations of technique/palpation and examination (equivalent to 1000 words), 25%. Examination, Two (2) hour written paper (equivalent to 2000 words), 50%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program (hurdle requirement). The workshops, tutorials and CBL classes in this unit are interactive and students are able to seek feedback from the teachers on meeting the learning outcomes and planning for assessment tasks. A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall as the assessment tasks are related to essential theoretical knowledge required for osteopathic practice. .

### HBS2404 Clinical Skills 4

**Locations:** City Flinders.

**Prerequisites:** HBS2304 - Clinical Skills 3

**Description:** HBS2404 Clinical Skills 4, introduces students' to clinical examination, medical tests and osteopathic management and treatment techniques relevant to the conditions affecting the thorax. This unit provides the first opportunity for students to consider the application of spinal manipulation therapy (SMT) so safety and risk factors relating to SMT are considered. Students will be able to commence developing their psychomotor skills in SMT on peers under close guidance from educators. Students are able to continue development of their history taking skills by tailoring their questioning to a specific complaint. Clinical reasoning continues to be developed in this unit with a focus on patient presentations affecting the thorax, however there is an expectation students are now able to integrate information from a patient history, clinical examination and medical tests to justify their differential diagnoses relating to a presenting complaint.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:  
1. Relate the principles of advanced history taking to the recording of details for the presenting complaint; 2. Exhibit and interpret a clinical examination of systemic health (Vital signs) and systems of the thorax (CVS, respiratory, vascular, musculoskeletal); 3. Interpret common medical tests that may be used in diagnosis and management of conditions of the thorax; 4. Exemplify clinical reasoning for common conditions of the thorax; and 5. Demonstrate and explain osteopathic manual techniques of the thorax including spinal manipulation therapy (SMT) and relevant safety considerations.

**Class Contact:** Lecture 1.0 hr Workshop 2.5 hrs Total of sixty-six (66) hours comprising of practical workshops (2 x 2.5 hour sessions) and lectures (6 x 1 hour)

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Gibbons, P., & Tehan, P. (2009) 3rd ed. Manipulation of the spine, thorax and pelvis: An osteopathic perspective. Australia: Elsevier. Bickley, L. S. (2012) 11th ed. Bates' guide to physical examination and history taking. Philadelphia, US: Lippincott Williams & Wilkins.

**Assessment:** The formative assessments for this unit are: - Online quiz (safety considerations of manipulation) (week 3) - In-class examination (history taking simulation) (week 7) - Online quizzes (weeks 4 and 11) - Contribution to CBL group (weekly) Examination, 30 minute written paper (equivalent to 500 words), 15%. Project, 10 minute video of history taking with reflective journal (equivalent to 1500 words), 35%. Examination, 40 minute practical examination of technique (20 minutes) and examination (20 minutes) (equivalent to 2000 words), 50%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program (hurdle requirement). The practical workshops in this unit are interactive and develop students manual and examination skills for work as an osteopath. Further students are able to seek feedback from the teachers on meeting the

learning outcomes and planning for assessment tasks. A minimum pass grade (50%) for the semester assessments and each end-of-semester examination is required to satisfactorily complete the unit overall as the assessment tasks are reflective of the nature of osteopathic practice.

### **HBS3501 Patient, Practitioner and Health System 5**

**Locations:**City Flinders.

**Prerequisites:**HBS2401 - Patient, Practitioner and Health System 4

**Description:**HBS3501 Patient, Practitioner and the Health System 5, aims to develop students' specialized knowledge of being a health professional in the Australian healthcare system. Students are able to reflect on effective and ineffective communication skills by considering their application in inter-professional interactions. The students identity as an osteopathic student is established with opportunity to consider their future as an osteopath.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Appraise inter-professional education through observation of inter-professional teams;
2. Integrate health screening and risk assessment into patient management;
3. Extrapolate principles of self-care to osteopathic practice; and
4. Evaluate, through peer review, communication with another health care professional.

**Class Contact:**Lecture1.0 hrPC Lab1.0 hrTutorial1.0 hr

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessments for this unit are: - Online quizzes (weeks 4) - Contribution to CBL group (weekly) Presentation, Video for self-assessment & peer assessment (2000 words), 40%. Report, Systematic search of any condition and choose 1 qualitative/1 quantitative paper to review & summarise key findings from both papers (500 words), 10%. Report, Inter-professional education report (2000 words), 40%. Portfolio, Evidence piece (500 words), 10%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in CBL sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment. .

### **HBS3502 Evidence for Practice 5**

**Locations:**City Flinders.

**Prerequisites:**HBS2402 - Evidence for Practice 4

**Description:**HBS3502 Evidence for Practice 5, extends students' skills in statistical techniques developed in HBS2402. The students developing specialist knowledge of research in manual therapy enables them to consider future directions for research in osteopathy. Qualitative data collection methods are explored. The students established skills in locating, retrieving and reviewing peer reviewed journal articles and research paradigms enables them to formulate a systematic literature review of a topic of their interest.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Debate research paradigms in health;
2. Interpret parametric and non-parametric statistical techniques;
3. Review qualitative research data collection methods; and
4. Formulate a systematic literature search.

**Class Contact:**Lecture1.0 hrPC Lab1.0 hrTutorial1.0 hr

**Required Reading:**Students will be provided with an up-to-date reading list via the VU

Collaborate system.Coakes, S.J. (2012) 20th ed. SPSS version 20.0 for Windows. Analysis without Anguish John Wiley & Sons, Australia.

**Assessment:**The formative assessments for this unit are: - Online quizzes (week 5) - Contribution to CBL group (weekly) Essay, Systematic search any condition using a qualitative or quantitative paper (2000 words), 40%. Portfolio, Evidence piece (2000 words), 40%. Examination, 45 minute written paper (equivalent 1000 words) , 20%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in CBL and tutorial sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall.

### **HBS3503 Scientific Basis for Osteopathy 5**

**Locations:**City Flinders.

**Prerequisites:**HBS2403 - Scientific Basis for Osteopathy 4

**Description:**HBS3503 Scientific Basis for Osteopathy 5, further strengthens students' ability to recognize the relevant biomedical science concepts for presenting complaints by applying them to conditions affecting the abdomen. Students extend their knowledge of actions of pharmacological agents and discuss those applicable for conditions affecting the abdomen.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Conceptualise the anatomy, histology and embryology of the abdomen and pelvis;
2. Report on the physiological processes of the viscera of the abdomen and pelvis;
3. Debate the relevance of the osteopathic principles to the anatomy of the abdomen and viscera;
4. Analyse common conditions affecting the abdominal viscera and propose appropriate management; and
5. Evaluate relevant pharmacological interventions for abdominal conditions.

**Class Contact:**Lab1.0 hrLecture2.0 hrsTutorial1.0 hrWorkshop1.0 hr

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system.Moore, K. L., & Dalley, A. F. (2010) 6th ed. Clinically oriented anatomy. Philadelphia, US: Lippincott Williams & Wilkins. Guyton, A. C., & Hall, J. E. (2011) 12 ed. Textbook of medical physiology Philadelphia, PA: Elsevier. Destefano, L (2011) 4th ed. Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams & Wilkins. Bryant, B., & Knights, K. (2014) 4th ed. Pharmacology for health professionals. Sydney, Australia: Elsevier.

**Assessment:**The formative assessments for this unit are: - Online quizzes (weeks 4 and 11) - Contribution to CBL group (weekly) Report, Review one pharmacological agent for the management of a gastrointestinal complaint (1250 words), 25%. Examination, 15 minute practical examination discussing theoretical concepts of abdomen and pelvis (equivalent to 1250 words), 25%. Portfolio, Evidence piece (1000 words), 20%. Examination, 1.5 hour written paper (equivalent of 1500 words) , 30%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### **HBS3504 Clinical Skills 5**

**Locations:**City Flinders.

**Prerequisites:**HBS2404 - Clinical Skills 4

**Description:**HBS3504 Clinical Skills 5 contains two modules: Clinical skills 5a, occurs

in the classroom and introduces students to osteopathic manual techniques, clinical examination and medical tests relevant to the abdomen. Clinical reasoning continues to be developed in this unit with a focus on patient presentations affecting the abdomen, however there is an expectation students are now able to integrate information from a patient history, clinical examination and medical tests to justify their differential diagnoses relating to a presenting complaint. Clinical skills 5b, occurs in the work integrated learning (clinical) environment and provides students with osteopathic workplace experience through their clinical placement hours in the student led osteopathic clinics within the university. Students observe senior students treating members of the public under the supervision of osteopathic clinical educators and contribute to the operational running of the clinic. The clinical placement hours within this unit develop students' capacity for teamwork, collaboration with peers and supervisors and communication with patients.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit and interpret a physical examination of the systems of the abdomen;
2. Interpret common medical tests that may be used in diagnosis and management of conditions of the abdomen;
3. Exemplify clinical reasoning for common conditions of the abdomen; and
4. Exhibit osteopathic manual techniques for the abdomen and lymphatics.

**Class Contact:** Workshop 4.0 hrs Plus 120 hours of clinical placement.

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Destefano, L (2011) 4th ed. Greenman's Principles of Manual Medicine Philadelphia, US: Lippincott Williams & Wilkins. Bickley, L. S. (2012) 12th ed. Bates' guide to physical examination and history taking Philadelphia, US: Lippincott Williams Wilkins.

**Assessment:** The formative assessment tasks for this unit are: - Online quiz (weeks 4 and 11) - In-class examination (technique & physical examination) (week 8) - Contribution to CBL group (weekly) Report, Review one pharmacological agent for the management of a gastrointestinal complaint (1500 words), 30%. Examination, 15 minute practical examination of manual technique and examination of abdomen and pelvis (equivalent to 1000 words), 20%. Portfolio, Evidence piece (1000 words), 20%. Examination, 1 hour written paper (equivalent to 1500 words), 30%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in practical sessions and clinical placement with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

## HBS3601 Patient, Practitioner and Health System 6

**Locations:** City Flinders.

**Prerequisites:** HBS3501 - Patient, Practitioner and Health System 5

**Description:** HBS3601 Patient, Practitioner and the Health System 6, aims to secure students' emerging professional identity as an osteopath through reflection of their experience as a part of a clinical team in the student-led osteopathic clinic. A focus of this semester for the student is preparation for their high stakes clinic entrance exam, which upon successful completion enables them to treat members of the public under supervision in the student led osteopathic clinics at Victoria University. To facilitate their preparation for the clinic entrance exam and treating patients, students consider legal and regulatory requirements of osteopathic practice. Students are able to apply knowledge developed in previous Patient, practitioner and the health system (PPH) units by using outcome measures in the clinical environment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Negotiate with their peers in the management of patients with a variety of health complaints and socio-demographic backgrounds;
2. Quantify patient health status using outcome measures;
3. Collaborate with clinical educators and their peers in the basic management of an osteopathic practice; and
4. Contextualise the legal and regulatory requirements impacting Australian osteopathic practice.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Workshop 1.0 hr

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Stone, J. (2002) 1st ed. An ethical framework for complementary and alternative therapists London: Routledge

**Assessment:** The formative assessments for this unit are: - Use of outcome measures in the clinic (weeks 4 & 11) - MiniCEX (across final weeks of semester) - Contribution to CBL group (weekly) Case Study, Patient seen in clinic (1000 words), 20%. Assignment, MiniCEX with reflection (1500 words), 30%. Examination, 15 minute Objective Structured Clinical Examination (equivalent to 1000 words), 20%. Portfolio, Evidence piece (1500 words), 30%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit.

## HBS3602 Evidence for Practice 6

**Locations:** City Flinders.

**Prerequisites:** HBS3502 - Evidence for Practice 5

**Description:** HBS3602 Evidence for Practice 6, provides students' with the opportunity to consider the development of a research project in an area of interest. Students are able to apply their established knowledge of literature searching, research paradigms, data collection methods and ethical considerations by proposing a research project in the area of osteopathy. This unit is crucial in the students transition to the HMHO Master of Health Science (Osteopathy), in particular HMM7901, HMM7902 & HMM7903.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate outcome measures in the assessment and monitoring of health status;
2. Critique research papers using validated scoring methods;
3. Design a framework for conducting a research project;
4. Integrate ethics into a research project; and
5. Present an integrated research proposal.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Workshop 1.0 hr

**Required Reading:** VU Collaborate online learning environment supporting lectures, tutorials, formative assessments and links to online references and resources, Textbooks and the Library.

**Assessment:** The formative assessments for this unit are: - Use of outcome measures in the clinic (weeks 4 and 11) - Draft of proposal, Framework for project & ethical considerations (week 5) - Contribution to CBL group (weekly) Case Study, Patient seen in clinic (500 words), 10%. Assignment, Research proposal (2500 words), 50%. Examination, 15 minute exam Objective Structured Clinical Exam (equivalent to 1000 words), 20%. Portfolio, Evidence piece (1000 words), 20%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade

for each assessment. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit.

### HBS3603 Scientific Basis for Osteopathy 6

**Locations:**City Flinders.

**Prerequisites:**HBS3503 - Scientific Basis for Osteopathy 5

**Description:**HBS3603 Scientific basis for osteopathy 6 aims to amalgamate the biomedical science theory introduced in the region based semesters HBS1103, HBS1203, HBS2303, HBS2403 and HBS3503. A focus of this semester for students is preparation for their high stakes clinic entrance exam, which upon successful completion enables them to treat members of the public under supervision in the student led osteopathic clinics at VU. To facilitate their preparation for the clinic entrance exam and treating patients, students consider patient cases with more than one painful site as these presentations reflect the nature of osteopathic practice. The students specialized knowledge of the theoretical concepts underlying common musculoskeletal conditions is applied in the clinical setting and in case based learning classes. In this unit, students are provided with support as they prepare for the theoretical components of their clinic entrance exam.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Propose anatomical structures influencing common presentations in osteopathic practice;
2. Analyse normal and altered biomechanics in the clinical setting;
3. Reconstruct the physiology and pathophysiology, signs and symptoms, natural history and prognosis of common neuro-musculoskeletal and systemic conditions; and
4. Manage common musculoskeletal conditions by applying the osteopathic principles to their practice.

**Class Contact:**Lecture3.0 hrsTutorial2.0 hrsTotal of 36 hours comprising of burst mode lectures (4 x 3 hours lectures), fortnightly tutorials (2 hours) and weekly case based learning (1 hour)

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system. Moore, K. L., & Dalley, A. F. (2010) 6th ed. Clinically oriented anatomy Philadelphia, US: Lippincott Williams & Wilkins Destefano, L (2011) 4th ed. Greenman's Principles of Manual Medicine Philadelphia, US: Lippincott Williams Wilkins

**Assessment:**The formative assessments tasks for this unit are: - Online quiz (week 7) - MiniCEX in clinic (week 10) - Contribution to CBL group (weekly) Case Study, Patient in student clinic (2000 words), 40%. Exercise, Reflection on results from near peer assessed miniCEX (equivalent to 500 words), 10%. Examination, 20 minute Objective Structured Clinical Examination (OSCE) (equivalent to 1500 words), 30%. Portfolio, Evidence pieces (1000 words), 20%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### HBS3604 Clinical Skills 6

**Locations:**City Flinders.

**Prerequisites:**HBS3504 - Clinical Skills 5

**Description:**HBS3604 Clinic Skills 6 contains two modules: Clinical skills 6a, occurs in the classroom and comprises of practical workshops for students to extend their osteopathic manual therapy and clinical examination skills. The focus in the module is tailoring the examination and treatment to a presenting complaint that may involve more than one region of the body. Clinical Skills 6b, occurs in the clinical

environment and provides students with osteopathic workplace experience through their clinical placement hours in the student led osteopathic clinics within the university. Students work with senior students co treating members of the public under the supervision of osteopathic clinical educators and contribute to the operational running of the clinic. The clinical placement hours within this unit develop students' capacity for teamwork, collaboration with peers and supervisors and communication with patients, and is the optimal environment for students to prepare for their high stakes clinic exit exam at the end of the semester. Both modules of Clinical Skills 6 aim to amalgamate the practical skills introduced in the region-based semesters HBS1104, HBS1204, HBS2304, HBS2404 and HBS3504. To facilitate their preparation for the clinic entrance exam and treating patients, students consider patient cases with more than one painful site as these presentations reflect the nature of osteopathic practice. Students' established psychomotor skills in osteopathic manual techniques and clinical examination are applied in the clinical setting and in the practical workshop classes. In this unit, students are provided with support as they prepare for the practical components of their clinic entrance exam.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Elicit a patient and condition-specific clinical history;
2. Present and interpret an advanced physical examination of the patient;
3. Exhibit an understanding of common medical tests that may be used in diagnosis and management of common conditions presenting in osteopathic practice;
4. Analyse and clinically reason the patient's presenting complaint and management; and
5. Commentate on the principles of a range of osteopathic manual techniques and exercise rehabilitation.

**Class Contact:**Workshop4.0 hrsPlus 120 hours of clinical placement.

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system. Bickley, L. S. (2012) 12th ed. Bates' guide to physical examination and history taking Philadelphia, US: Lippincott Williams & Wilkins. Destefano, L (2011) 4th ed. Greenman's Principles of Manual Medicine Philadelphia, US: Lippincott Williams Wilkins. Brukner, P. & Khan, K. (2012) 4th ed. Brukner and Kahns Clinical Sports Medicine Sydney, Australia: McGraw Hill.

**Assessment:**The formative assessments tasks for this unit are: - Online quiz (week 7) - MiniCEX in clinic (week 10) Case Study, Patient in student clinic (1000 words), 20%. Exercise, Reflection on results from near peer assessed miniCEX (1000 words), 20%. Examination, 40 minute Objective structured Clinical Examination (OSCE) (equivalent to 2500 words), 50%. Portfolio, Evidence pieces (500 words), 10%. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. Participation in practical sessions and clinical placement with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### HCC5101 Complex Care Coordination in the Community

**Locations:**Footscray Park, City Flinders, St Albans.

**Prerequisites:**Nil.

**Description:**This unit of study addresses managing oneself, communication and inter-professional teamwork. The challenges of complex care coordination in a changing health environment will be the platform for developing strategies to be a role model in providing leadership in taking care of oneself as an adapter, communicating effectively in diverse situations and providing direction and quality care in a team environment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit effective strategies in managing oneself by adapting and promoting resilience in an environment of change;
2. Critically analyse specific communication requirements in situations where there are complex healthcare coordination requirements for the person;
3. Reflexively apply effective negotiation and conflict resolution skills in the care coordination environment;
4. Coordinate complex care demonstrating autonomy, expert judgement adaptability and responsible leadership;
5. Assess and appraise actual and potential issues or practices impacting on the attainment of the quality of services.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Thirty-six (36) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings. World Health Organisation. (2014) 1st ed. Modern health care delivery systems, care coordination and the role of hospitals Geneva: World Health Organisation

**Assessment:** Assignment, Development of resilience (1,000 words), 20%. Case Study, Interprofessional relationships and communication (1,500 words), 30%. Report, Work-based problem (2,500 words), 50%.

## HCC5102 Management of Complex Healthcare Needs

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** This unit of study explores the approaches in managing complex care needs of people. It will address the problem solving process of coordinating care, and how health system values and the partnership of person, carer and interprofessional team intersect with the delivery of coordinated care.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Manage care coordination for complex healthcare needs utilising various approaches;
2. Exhibit effective decision making skills by including the person, carers and the interprofessional team;
3. Interpret and apply health system values in the delivery of quality care or the management of quality care;
4. Reflect critically on professional practice in the delivery of care coordination.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Thirty-six (36) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings. Schraeder, C. and Shelton, P. (2011). 1st ed. Comprehensive Care Coordination for Chronically Ill Adults. Ames, USA: Iowa State University Press. Treadwell, J. et al., (2014). 1st ed. Case Management and Care Coordination in Children's Healthcare: Supporting Children and Families to Optimal Outcomes. USA: Springer International Publishing.

**Assessment:** Assignment, Discipline specific care coordination (1,000 words), 20%. Case Study, Identify and analyse the impact of factors on care (2,500 words), 30%. Report, Contextualise decision making in complex situations (2,500 words), 50%.

## HCC5103 Ethics and Social Responsibility in the Management of Complex Needs

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** This unit of study is designed to give students an understanding of the ethical issues which can arise when managing care coordination for people with

complex health presentations. Students identify how problem solving, policy, planning and administration are structured by ethical theories and principles and how these can be in tension with other normative principles that are fostered and sustained by institutions such as the law. The unit addresses issues relating to the application of philosophical principles in care coordination. The role of institutional ethics committees within different organisational and community settings is also discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse critically, reflect on and synthesise complex ethical theories and principles that structure problem solving, policy, planning and administration in care coordination;
2. Investigate and debate key ethical issues in care coordination;
3. Assess and critically evaluate ethical issues related to an organisational culture while recognising how intercultural difference can result in tensions with and between professional, legal, business and community understandings;
4. Exhibit ethical practice in care coordination through demonstrating leadership in policy advocacy and influencing corporate governance.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Twenty-four (24) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings. Harris, D. (2011) 1st ed. Ethics in Health Services and Policy: A global approach USA: Jossey-Bass.

**Assessment:** Assignment, Identification and application of ethical theories and principles (1,500 words), 30%. Case Study, Case study debate: respond to an ethical problem (1,000 words), 20%. Essay, Apply ethical theories and principles to a complex workplace problem (2,500 words), 50%.

## HCC5104 Leadership and Innovation for Complex Needs

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** This unit of study explores the attributes of the care coordinator in the interprofessional team. It examines the theoretical approaches to the styles of leadership to address issues such as change management, teamwork, innovative models, systems thinking and strategies for person-centred care. It then examines how leaders as innovators can promote evidence-based practice in the validation of care coordination in a diverse and multicultural environment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit leadership by critically analysing knowledge and reflexively applying leadership skills in managing issues and problems that arise in the care coordination of complex health care needs;
2. Critique the principles of evidence-based health care to enhance a critical and reflexive approach to learning and practice in care coordination;
3. Exhibit autonomy, expert judgement, adaptability and innovative leadership in care coordination;
4. Assess and appraise actual and potential issues or practices impacting on care coordination with autonomy and collaboration;
5. Reflexively apply effective communication, negotiation, conflict resolution and innovative techniques to leading care coordination.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Twenty-four (24) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings.

Schraeder, C. and Shelton, P. (2011) 1st ed. *Comprehensive Care Coordination for Chronically Ill Adults*. Ames, USA: Iowa State University Press. Treadwell, J. et al., (2014) 1st ed. *Case Management and Care Coordination in Children's Healthcare: Supporting Children and Families to Optimal Outcomes*. USA: Springer International Publishing.

**Assessment:** Assignment, Exhibit reflexivity of coordinated care (1,500 words), 30%. Case Study, Illustrate a selected work-based problem using evidence-based care (3,500 words), 70%.

### HCC6100 Quality Management in Care Coordination

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** This unit of study aims to investigate organisational structures, strategies, processes and resources required to implement quality management in care coordination. It provides students with evidence-based models of care coordination in establishing effective and efficient best practice in care coordination. An overview of the tools and methods of chain management, risk management and change management will be explored. A social and political systems framework provides the structure for students to develop an integrated appreciation of quality management for sustainable continuous improvement and consumer satisfaction with coordinated care.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit advanced knowledge of quality management in care coordination including the quality functions required by the Government's accreditation process;
2. Analyse critically, reflect on and synthesise complex information, problems, concepts and theories in appraising quality management systems in care coordination;
3. Articulate chain management, risk management and change management as applied to specific situations;
4. Integrate knowledge of the ways in which intercultural issues shape quality management within care coordination;
5. Investigate and articulate a coherent and sustained argument in defence of sustainable quality management decisions and policy advocacy;
6. Exhibit autonomy, expert judgement, adaptability and responsibility as a practitioner by effectively managing quality evaluation in the care coordination setting.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Thirty-six (36) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings. Liebler, J. and McConnell, C. (2012). 6th ed. *Management Principles for Health Professionals*. USA: Jones and Bartlett Learning.

**Assessment:** Assignment, Identify a work based problem (1,000 words), 30%. Report, Applied problem evaluation (5,000 words), 70%.

### HCC6900 Applied Research Design and Methods

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** In this unit students develop the critical research skills to discriminate between quantitative and qualitative design and methods for particular contexts, problems and research interests. The unit centres on current research published in refereed journal articles that explore care coordination; its purpose is to explore how quantitative and qualitative research design and methods are used care coordination research. Attention is given to how quantitative and qualitative paradigms and methods are used to investigate the types of global and local research problems

facing care coordination in health services. Centred on selected research articles, students critique and analyse qualitative research philosophies and approaches including phenomenology, grounded theory and action research. Similarly, students critique and analyse quantitative methods including experimental, quasi experimental; and inferential statistics. The kinds of ethical concerns that arise with each approach are considered and strategies to manage them are discussed. Issues related to data collection including sampling, generalisability, reliability and validity are considered in the context of the kinds of data, problems and research questions that arise in the delivery of care coordination.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse assumptions underlying quantitative and qualitative research methods;
2. Critically appraise research designs and methods presented in published research studies;
3. Synthesise, reflect on and apply the findings of evidence based literature to inform professional practice;
4. Critically analyse and evaluate legal and ethical considerations in undertaking research in care coordination.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Thirty-six (36) hours per semester, comprising of a combination of lectures, tutorials, seminars and online activities during the semester. As part of blended learning student-focused learning activities will be embedded in the delivery of the unit.

**Required Reading:** Students will be provided with a list of selected readings. Chatburn, R. (2011) 2nd ed. *Handbook for Health Care Research USA*: Jossey-Bass.

**Assessment:** Exercise, Critically review qualitative and quantitative research articles (1,750 words), 30%. Essay, Analysis of research design and methods for care coordination (4,250 words), 70%.

### HCC6901 Industry Project

**Locations:** Footscray Park, City Flinders, St Albans.

**Prerequisites:** HCC5101 - Complex Care Coordination in the Community HCC5102 - Management of Complex Healthcare Needs HCC5103 - Ethics and Social Responsibility in the Management of Complex Needs HCC5104 - Leadership and Innovation for Complex Needs HCC6100 - Quality Management in Care Coordination

**Description:** This unit structures student investigations into the challenges facing Australia's care coordination by developing an industry project proposal. Students may work individually or collaboratively with other students to identify a current care coordination problem and develop a project proposal in consultation with their academic and host organisation supervisor(s). Developing a project proposal enables students to engage with industry while integrating and applying specialised knowledge and skills from previous units of study in the care coordination program. Students will be encouraged to analyse, reflect on and synthesise complex information, problems, concepts and theories through lectures, industry input, and online problem solving exercises leading to a well-developed industry-based project proposal. Students will appropriately apply research methodology and methods while working collaboratively and reflectively with stakeholders under the guidance of their academic and industry supervisor (s). Students reflexively apply research knowledge and cognitive skills that they have mastered during the course to execute a substantial capstone experience by demonstrating autonomy, expert judgement, adaptability and responsibility in the care coordination setting.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Determine an advanced and integrated knowledge of a complex problem facing care coordination;
2. Analyse critically, reflect on and synthesise complex information, problems, concepts and theories in developing a project proposal to resolve a care coordination problem;
3. Apply knowledge and skills of inter-

cultural issues, which may shape the problem and add social and political complexity;

4. Work collaboratively and ethically in negotiating and integrating understandings of the problem; 5. Exhibit an advanced and integrated knowledge of a problem facing care coordination by building upon an analysis of the problem as defined and described in the project proposal; 6. Collect, analyse, interpret, and report on data in an ethical and socially responsible manner; 7. Analyse critically, reflect on and synthesise information, problems, concepts and theories in developing a project report to resolve a complex industry problem;

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Plus twelve (12) hours of supervision as part of face to face contact. The fieldwork component will be a minimum of two-hundred (200) hours.

**Required Reading:** Students will be provided with a list of selected readings.

Schraeder, C. and Shelton, S. (Ed.). (2011) 1st ed. *Comprehensive Care Coordination for Chronically Ill Adults*. Ames, USA: Iowa State University Press.

Treadwell, J. et al., (2014) 1st ed. *Case Management and Care Coordination in Children's Healthcare: Supporting Children and Families to Optimal Outcomes*. USA: Springer International Publishing.

**Assessment:** Project, A proposal for solving an identified problem (1,500 words), 30%. Report, A report of the process in the resolution of the identified problem (5,000 words), 70%.

### HE05100 Principles of Exercise for Manual Therapy

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** This unit explores the principles underlying exercise prescription and assessment of a patient's suitability for the use of exercise as part of their management. The principles underlying specific types of exercise will be examined, including closed chain vs. open chain exercise, and eccentric and concentric exercise. The current evidence base for the efficacy of a variety of exercises will be investigated, as will factors determining type and frequency of exercise, and the factors influencing compliance rates and how to maximize these. The unit will also explore the stages of rehabilitation, general benefits of exercise, gym vs. home exercise, and a consideration of common types of equipment/programs and their suitability for particular patient complaints.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Apply objective measures and justify their use to assess patient fitness and functional movement; 2. Analyse the principles underlying exercise rehabilitation, and the application of commonly prescribed types of exercises; 3. Articulate the indications and contraindications for particular types of exercise and in particular patient populations; 4. Critically review the evidence base for the most common types of exercise, exercise rehabilitation programs and factors influencing compliance to prescribed exercises; and 5. Determine patient-specific exercise progression for the individual rehabilitation client taking into account their specific needs, using the principles of adaptation, overload and recovery.

**Class Contact:** Forty-two (42) hours for one (1) semester comprising of six (6) hours of face to face workshops (burst mode), two (2) hours of structured and supported self-directed study, and one (1) hour of contributions to moderated online discussions per week.

**Required Reading:** This unit has required and recommended texts Woolf-May, Kate & Bird, Stephen R., (2006). *Exercise prescription: physiological foundations: a guide for health, sport and exercise professionals*. Edinburgh, [Scotland] Churchill Livingstone/Elsevier Taylor, Nigel A. S & Groeller, Herbert (2008). *Physiological bases of human performance during work and exercise*. New York, Churchill

Livingstone, Edinburgh Recommended texts: Buckley, John (2008). 1st ed. *Exercise physiology in special populations*. Elsevier/Churchill Livingstone, Edinburgh ; New York Tomchuk, David (2011). 1st ed. *Companion guide to measurement and evaluation for kinesiology*. Sudbury, Massachusetts Jones & Bartlett Learning  
**Assessment:** Assignment, Written assignment - evidence informed management of a patient (2000 words equivalent), 30%. Test, Online quizzes x 3 (2000 words equivalent), 30%. Examination, Practical Exam (15 min) (equivalent to 2000 words), 40%. The total combined assessment word equivalence is approximately 6,000 words. Formative assessments: 1. Video - Exercise Demonstration; 2. Online quiz.

### HE05101 Principles of Exercise Rehabilitation for Manual Therapy

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** This unit examines the principles of exercise physiology and local tissue adaptation to specific exercises including the investigation of systemic and local tissue responses to exercise; motor control mechanisms in exercise; and aerobic and anaerobic exercise. The benefits of exercise from a public health standpoint as well as concepts related to training for strength, hypertrophy, power and endurance will be explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Deconstruct the physiological principles of exercise and rehabilitation and their application to manual therapy; 2. Analyse the physiological adaptations to the various exercise training modalities including training for strength, hypertrophy, power and endurance as they pertain to manual therapy rehabilitation; 3. Recognise indications and contraindications for specific patient groups including acute and chronic musculoskeletal pain in relation to the stages of rehabilitation; 4. Critically discuss the physiological effects of programs written for different patient populations and chronic musculoskeletal diseases; and 5. Appraise the public health benefit of exercise and cost-benefit of exercise.

**Class Contact:** Forty-two (42) hours for one (1) semester comprising of six (6) hours of face to face workshops (burst mode), two (2) hours of structured and supported self-directed study and one (1) hour of contributions to moderated online discussions per week.

**Required Reading:** Woolf-May, Kate & Bird, Stephen R., 1959- (2006). 1st *Exercise prescription: physiological foundations: a guide for health, sport and exercise professionals* Edinburgh, [Scotland] Churchill Livingstone/Elsevier Taylor, Nigel A. S & Groeller, Herbert (2008). 1st *Physiological bases of human performance during work and exercise* Churchill Livingstone, Edinburgh ; New York Buckley, John BPE, MSc (2008). 1st *Exercise physiology in special populations* Elsevier/Churchill Livingstone, Edinburgh ; New York Tomchuk, David (2011). 1st *Companion guide to measurement and evaluation for kinesiology* Sudbury, Massachusetts Jones & Bartlett Learning

**Assessment:** Assignment, Essay - Evidence informed principles (1000 words), 15%. Case Study, Responses to case based scenarios. (Equivalent of 2000 words), 35%. Assignment, Essay (Equivalent of 2000 words), 35%. Other, Online contribution to group discussions (Equivalent to 1000 words), 15%. The total combined assessment word equivalence is approximately 6,000 words. Formative Assessment: 1. Online Quiz; 2. Contribution to online discussions.

### HE05201 Designing and Writing Exercise Programmes for Manual Therapy Patients

**Locations:** City Flinders.



**Prerequisites:**HE05100 - Principles of Exercise for Manual TherapyHE05101 - Principles of Exercise Rehabilitation for Manual Therapy

**Description:**This unit examines the design of exercise rehabilitation programs for patients who seek manual therapy care. This will include a review of common musculoskeletal soft tissue injuries associated biomechanical predisposing factors and appropriate investigation and rehabilitation strategies. Individual patients are also assessed for suitability of appropriate protocols. The evidence base for specific rehabilitation exercises will be investigated, as well as the indications and contraindications for these exercises. The unit will also reinforce the skills and knowledge required to liaise with other health professionals and third party providers in the planning of exercise programs. An exploration of patient-reported outcome measures and an introduction to exercise prescription software will also be form part of this unit.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Relate the principles that underpin exercise rehabilitation program writing to manual therapy patients;
2. Critique the development and progression of exercise rehabilitation programs including periodisation, load and recovery principles;
3. Create evidence-informed rehabilitation programs for common acute and chronic musculoskeletal conditions, and review their progress using patient-reported outcome measures;
4. Critically review and utilise exercise prescription software to develop rehabilitation programs; and
5. Report on patient progress with rehabilitation plans to inform other health professionals and third party providers.

**Class Contact:**Forty-eight (48) hours for one (1) semester comprising of two (2) face-to-face workshops (6 hours each), two (2) hours of structured and supported self directed study and one (1) hour of online discussions per week.

**Required Reading:**Bridges, Thuy & Bridges, Clint (2015). Length, strength and kinesiotape Edinburgh, [Scotland] Churchill Livingstone/Elsevier Rome, Keith, (editor.) & McNair, Peter (editor.) (2015). Management of chronic conditions in the foot and lower leg Edinburgh Churchill Livingstone Lederman, Eyal (2014). Therapeutic stretching : towards a functional approach Edinburgh Churchill Livingstone Hodges, Paul W., & Cholewicki, Jacek & Van Diee "n, Jaap H., (editor of compilation.) (2013). Spinal control : the rehabilitation of back pain : state of the art and science Edinburgh Churchill Livingstone/Elsevier Brukner, Peter & Khan, Karim (2009). Rev. 3rd ed. Clinical sports medicine Peter Brukner, Karim Khan. McGraw-Hill, North Ryde, N.S.W. ; London

**Assessment:**Assignment, Case study (equivalent 2000 words), 35%. Other, Online Quiz (equivalent 1000 words), 15%. Examination, Practical Exam\* (2 x 15 minutes) (3000 word equivalent), 50%. The total combined assessment word equivalence is approximately 6,000 words. Formative Assessment: 1. Online quiz \* Students will be required to demonstrate parts of the exercise program developed for a patient from their own clinical practice. The examiner will review the program prior to the practical exam, and the student will be assessed on their ability to guide a simulated patient though aspects of the program.

## HE05202 Management of Common Musculoskeletal Conditions for Manual Therapy Patients

**Locations:**City Flinders.

**Prerequisites:**HE05100 - Principles of Exercise for Manual TherapyHE05101 - Principles of Exercise Rehabilitation for Manual Therapy

**Description:**This unit examines exercise prescription for common musculoskeletal conditions presenting to manual therapy practitioners. This will include the common conditions of the upper limb, lower limb and spine along with indications when to refer for further investigation and management. Consideration will also be given to

exercise rehabilitation for surgical, elderly and chronic condition populations. The ability to construct evidence-informed rehabilitation programs and incorporate content from other units. Practical demonstration and patient education about their rehabilitation plan forms an important aspect of this unit.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Generate and prescribe evidence informed rehabilitation programs for common musculoskeletal conditions of the upper limb, lower limb and spine;
2. Negotiate safe and effective rehabilitation programs for common musculoskeletal conditions incorporating progression and patient preference;
3. Articulate the rehabilitation plan to the patient and demonstrate safe performance of the exercises and movements in a clinical setting; and
4. Recommend and apply the use of adjunct therapies or modalities such taping, supports and exercise equipment relevant to the rehabilitation plan.

**Class Contact:**Forty-eight (48) hours for one (1) semester comprising of two (2) face-to-face workshops (6 hours each), two (2) hours of structured and supported self directed study, and one (1) hour of online discussions per week.

**Required Reading:**Bridges, Thuy & Bridges, Clint (2015). Length, strength and kinesiotape Edinburgh, [Scotland] Churchill Livingstone/Elsevier Rome, Keith, (editor.) & McNair, Peter (Prasor, (editor.) (2015). Management of chronic conditions in the foot and lower leg Edinburgh Churchill Livingstone Lederman, Eyal (2014). Therapeutic stretching : towards a functional approach Edinburgh Churchill Livingstone Hodges, Paul W. & Cholewicki, Jacek & Van Diee "n, Jaap H., (editor of compilation.) (2013). Spinal control : the rehabilitation of back pain : state of the art and science Edinburgh Churchill Livingstone/Elsevier Brukner, Peter & Khan, Karim (2009). Rev. 3rd ed. Clinical sports medicine McGraw-Hill, North Ryde, N.S.W. ; London Constantinou, Maria & Brown, Mark (2010). Therapeutic taping for musculoskeletal conditions Elsevier Australia, Chatswood, N.S.W

**Assessment:**Case Study, Three short case reports from clinical practice (700 words each), 35%. Assignment, Lead an online discussion on a patient case (equivalent of 1000 words), 15%. Examination, Practical examination\* x 3 (15 minutes each, equivalent to 3000 words), 50%. The total combined assessment word equivalence is approximately 6,000 words. Formative Assessment: 1. Video Presentations (2) - One demonstrating exercise prescription, one demonstrating taping. \* Students will be required to demonstrate parts of the exercise program for the upper extremity, lower extremity and spine. The student will be assessed on their ability to guide a simulated patient though aspects of the program and perform practical tasks.

## HFB1110 Foundations of Professional Paramedic Practice

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**This unit will introduce students to broad frameworks related to health, wellbeing, illness and death. The unit covers the professional foundations of health care from the paramedic context. These foundational concepts include professional practice (professional behaviours and self-care, communication and the historical perspective of paramedicine), health, wellness, illness and death from a social perspective, and development of academic and professional literacy and numeracy skills. In this unit, students learn to identify social aspects of health issues by exploring the health and wellbeing of the self and of diverse communities and examine how health disadvantages experienced by particular groups are rooted in wider historical and current inequalities, including those based on ethnicity, gender and class. Additionally, students will learn the fundamentals of communication and behaviour with patients, which they will continue to develop as they progress through both their student and professional careers. This unit will explore concepts

such as prehospital health service delivery and professionalism and the nature of emotional work, verbal and non-verbal communication and effective interpersonal communication.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the history and development of paramedicine and prehospital health service delivery as a discipline;
2. Demonstrate knowledge and skills in literacy and numeracy in professional and academic contexts;
3. Analyse the social aspects of health issues, health inequities and explore models of health and illness relevant to paramedic practice;
4. Describe the skills and attributes necessary for the provision of prehospital health care to culturally diverse communities;
5. Elucidate factors that contribute to, and effective strategies that support, wellbeing, health and effective care of the self as a professional;
6. Articulate professional approaches to the emotional and death related work associated with prehospital health service delivery.

**Class Contact:** Lecture 2.0 hrs PC Lab 2.0 hrs

**Required Reading:** Gemov, J. (2014) *Second Opinion: An introduction to health sociology* Oxford University press.

**Assessment:** Other, Weekly discussions (equivalent to 500 words), 20%. Other, Workbook (equivalent to 500 words), 20%. Examination, Final Exam (90 minutes duration), 60%.

## HFB1111 Professional Practice 1

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit will cover: Pre-hospital health service delivery and professionalism; Medical terminology; Verbal and non-verbal communication and effective interpersonal communication; The nature of emotional work; Death and Dying.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Outline the history and development of pre-hospital health service delivery and how this has evolved into the current Australian and overseas pre-hospital health service systems;
2. Examine the roles and responsibilities of the paramedic and the nature of pre-hospital service delivery
3. Identify and define medically related root terms including suffixes and prefixes in medical terms and phrases;
4. Describe the concepts of effective communication within the paramedic context;
5. Interrogate the nature and importance of emotions, self-awareness, compassion, empathy, sympathy, and the personal implications of emotional work;
6. Elicit the key contexts of health and wellbeing relevant to paramedic practice; and
7. Discuss the concepts of death, dying and the grieving process in the context of pre-hospital care.

**Class Contact:** Lecture 2.0 hrs Forty-eight (48) hours or equivalent for one semester comprising lectures, including group discussions.

**Required Reading:** Students will be directed to appropriate resources.

**Assessment:** Assignment, Written report (500 words), 20%. Test, Approximately 50 minutes, 30%. Assignment, Group work written (1000 words) & oral presentation, 50%.

## HFB1112 Paramedic Clinical Practice 1

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit will introduce students to the fundamental skills and concepts that will form the basis of their paramedic clinical practice. Specific areas of focus will

include basic life support, resuscitation of the cardiac arrest patient, vital signs, secondary survey, patient time criticality, principles of splinting and wound management, patient documentation, with specific reference to the Victorian Ambulance Clinical Information System (VACIS), Occupational Health and Safety, manual handling and infection control. Students will be required to demonstrate physical fitness capability to meet the professional industry requirements of clinical placement.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit the process of history taking, including documentation;
2. Describe and demonstrate the principles of safe management of a patient, including splinting and wound management;
3. Describe and demonstrate methods of patient and scene assessment;
4. Satisfactorily perform resuscitation of a real or simulated cardiac arrest;
5. Describe and demonstrate the principles of safe manual handling of patients and equipment.

**Class Contact:** Lab 3.0 hrs Lecture 1.0 hr Plus twenty (20) hours placement in an appropriate setting which may include clinical, simulation or equivalent.

**Required Reading:** Further readings and references will be provided in the unit outline and VU Collaborate.

**Assessment:** Knowledge, skills and values developed in this unit will be assessed through skills assessment, practical scenario exam, placements (clinical or equivalent), workbook and SDL (minimum of 12 hrs). Students are required to satisfactorily complete a clinical logbook whilst on clinical placement. To obtain a pass in this ungraded unit, all components of assessment must be attempted and passed. Practicum, Skills Assessment, Pass/Fail. Other, Simulated patient scenario assessment, Pass/Fail. Practicum, Placements and completed logbook, Pass/Fail. Other, Workbook, Pass/Fail. Practicum, Self-directed learning (laboratory-based/SDL), Pass/Fail. Other, Pre-placement medical and physical, Pass/Fail. Practical sessions have a hurdle requirement of at least 80% attendance and placements have a hurdle requirement of 100% attendance. The practical sessions enables students to acquire the essentials skills and knowledge expected in paramedic practice.

## HFB1113 Pre-Hospital Ethical and Legal Issues

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit will introduce students to the ethical and legal principles and values which underpin good paramedic practice. Students will develop knowledge and understanding about ethical issues in the prehospital setting and the legal processes and obligations of paramedics sufficient to enable them to provide effective care with minimal risk. Themes of client autonomy and self-determination, client rights, vulnerable patients and professional responsibility are explored in the context of prehospital paramedic practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Define and demonstrate understanding of ethical and legal terminology and abbreviations relevant to paramedic practice;
2. Locate relevant and important legislation, legal concepts and case law and describe them and their application to paramedic practice;
3. Understand ethical governance and the core bioethical principles relevant to contemporary health care provision and apply a framework for ethical decision making;
4. Understand fundamental patient rights including autonomy, consent, refusal of treatment, privacy and confidentiality and their application in paramedic practice;
5. Discuss and analyse the legal and ethical obligations surrounding paramedic work from an industrial and professional

perspective including occupational health and safety, complaints and the role of the Health Services Commissioner, negligence and liability, ambulance service governance and emergency management, use of drugs and driving emergency vehicles; 6. Identify and examine the legal and ethical obligations surrounding vulnerable patients including end-of-life care, child protection and mandatory reporting, victims of sexual assault and mental health patients.

**Class Contact:**Lecture 2.0 hrsForty-eight (48) hours for one semester comprising lectures, online activities and self-directed learning (blended learning).

**Required Reading:**Eburn, M. (2013) 4th ed. Emergency law : Rights, liabilities and duties of emergency workers and volunteers Annandale, N.S.W.: The Federation Press Townsend, R., & Luck, M. (2014) Applied paramedic law and ethics : Australia and New Zealand Chatswood, NSW Elsevier Australia

**Assessment:**Test, Test (30 minutes), 20%. Case Study, Case Study (1000 words), 40%. Examination, Theory Examination (60 minutes), 40%.

## HFB1207 Principles of Drug Actions for Health Professionals

**Locations:**St Albans.

**Prerequisites:**HBM1001 - Anatomy and Physiology 1HFB1113 - Pre-Hospital Ethical and Legal Issues

**Description:**This unit provides an introduction to the study of pharmacology. Four important areas of pharmacology are covered: (1) an introduction to drugs and medicines; pharmacotherapy and the legal and ethical foundations of pharmacotherapy; (2) the principles of pharmacology-pharmacodynamics: the molecular aspects of drug action and fundamental concepts of drug-target interactions, receptor families and signalling pathways; (3) the principles of pharmacology-pharmacokinetics and routes of administration and (4) Drugs affecting the peripheral nervous system - an overview of the sympathetic and parasympathetic nervous systems.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the major historical developments of the science of pharmacology; 2. Explain how drugs are sourced, named and classified and discuss the quality use of medicines and authoritative sources for drug information; 3. Assess the legal and ethical aspects of drug use; 4. Articulate the basic principles of pharmacodynamics, describe the basic chemical composition of drugs, the targets of drug action and the cellular mechanisms by which drugs produce their effects in living systems; 5. Discuss the basic principles of pharmacokinetics and their relevance to drug action; 6. Apply knowledge from other scientific disciplines to explain the potential therapeutic and adverse effects of drugs; 7. Interpret and explain the clinical indications for and adverse effects of autonomic nervous system agonists and antagonists and somatic agents.

**Class Contact:**Lecture 4.0 hrsTutorial 1.0 hrFifty-six (56) hours for one semester comprising forty-eight (48) hours face-to-face lectures /flipped classes and eight (8) hours of tutorial all supported by e-learning.

**Required Reading:**Bryant, B. and Knights, K. (2014) 4th Pharmacology for health professionals. Sydney: Mosby Elsevier

**Assessment:**Test, One (1) hour theory test (mid semester), 25%. Assignment, Written Assignment (1500 words), 25%. Examination, Final Examination (2 hours) - hurdle requirement), 50%. To obtain a passing grade or higher in this graded unit, students must achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. The theory exam encompasses critical knowledge essential for safe paramedic practice and to meet industry expectations of graduate paramedic students. .

## HFB1212 Professional Practice 2

**Locations:**St Albans.

**Prerequisites:**HFB1111 - Professional Practice 1

**Description:**This unit introduces students to: Past and present sociological perspectives of health and illness; Biomedical models of health; The role of the 'sick' person; The influence of society, religion and culture on health care systems; Cultural, social diversity and multiculturalism in Australia; The role of culture in the provision of health care services; Social construction of biological traits; Death, dying and grief; Mental Illness; Disabilities in society; Indigenous health; Minority groups; Epidemiological health trends in Australia; Inequality and bias in health and illness; Ethnicity and identity; Principles of conditioning.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students are expected to be able to:

- Describe various ways in which the sociological approach to health differs from the more traditional biomedical approaches;
- Discuss the work of prominent social theorists, as they pertain to models of the sociology of health and medicine;
- Discuss the concepts of 'health' and 'illness';
- Discuss the role of the 'sick' person in various socioeconomic, religious and cultural contexts;
- Contrast the biomedical model with the sociological perspective in terms of approach and treatment of various illnesses;
- Discuss how a society's view or model of health influences the structure of the health system and the role of 'culture' in the provision of health care services;
- Discuss various sociological models of death and dying within the context of different socioeconomic, religious and cultural groups, and contrast the practices amongst groups;
- Discuss the various models of grief within the context of different socioeconomic, religious and cultural groups;
- Discuss the prevalence and treatment of disabilities within the context of different socioeconomic, religious and cultural groups;
- Discuss the concept of sociological, religious and cultural construction and moulding of what are traditionally considered 'biological' traits, such as gender and age;
- Discuss patterns of mental illness within society in the context of a sociological model;
- Describe and define multiculturalism in relation to the Australian society;
- Describe health trends and the epidemiology of diseases in Australian society with respect to different socioeconomic and cultural groups;
- Discuss the concept of cultural footprints relevant to current sociological expectations;
- Contrast the health care needs and expectations of differing cultural and religious and minority groups; including Indigenous Australians;
- Express a developing understanding of the relationship between ethnicity and identity.

**Class Contact:**Lecture 2.0 hrsForty-eight (48) hours or equivalent for one semester comprising lectures.

**Required Reading:**Gray, D., (2006). Health Sociology An Australian Perspective.

Frenchs Forest NSW: Prentice Hall.

**Assessment:** Assignment, Group Assignment (1500 words), 50%. Assignment, Reflective journal or case study on placement experiences (500 words), 10%. Examination, 2 hour written, held in examination week, 40%. To obtain a pass or higher in this graded unit all components of assessment must be passed.

## HFB1213 Paramedic Clinical Practice 2

**Locations:** St Abans.

**Prerequisites:** HFB1112 - Paramedic Clinical Practice 1 RBM1107 - Bioscience for Paramedics 1 HFB1111 - Professional Practice 1 HFB1110 - Foundations of Professional Paramedic Practice HFB1113 - Pre-Hospital Ethical and Legal Issues For HBPA degree: prerequisites are HFB1112, RBM1107 and HFB1111 For the HBPD degree: prerequisite is HFB1112, HFB1110, HFB1113

**Description:** This unit will introduce students to pain assessment and management, fundamental pharmacology, basic ECG interpretation and analysis and an introduction to the Ambulance Victoria Clinical Practice Guidelines as a model of practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate and articulate the safe administration of community-based emergency medication administration.
2. Describe and demonstrate competency in managing patients with medical and trauma emergencies.
3. Demonstrate and justify the criteria for shockable or non-shockable ECG rhythms.
4. Differentiate between adult and paediatric assessments.
5. Reflect and discuss the concepts underpinning decision making, critical thinking and evidence based practice.

**Class Contact:** Lab 3.0 hrs Lecture 1.0 hr Forty-eight (48) hours or equivalent for one semester comprising lectures, practical classes and self-directed learning, plus sixty (60) hours of placement which may include simulation, clinical placement or equivalent.

**Required Reading:** Refer to the Required Web Sites for the required text.

**Assessment:** Knowledge, skills and values developed in this unit will be assessed through skills assessment, clinical scenario exam, placements (clinical or equivalent), clinical placement logbook and workbook and SDL (minimum of 12 hrs). To obtain a pass in this ungraded unit, all components of assessment must be attempted and passed. Other, Workbook, Pass/Fail. Other, Skills Assessment, Pass/Fail. Other, Simulated Patient Scenario Assessment, Pass/Fail. Practicum, Placements and completed Logbook, Pass/Fail. Other, Self-directed Learning (minimum of 12 hrs), Pass/Fail. Practical sessions have a hurdle requirement of at least 80% attendance and placement sessions have a hurdle requirement of 100% attendance. The practical sessions enables students to acquire the essential skills and knowledge expected in paramedic practice.

## HFB2104 Introduction to Research Methods

**Locations:** St Abans.

**Prerequisites:** HFB1110 - Foundations of Professional Paramedic Practice

**Description:** Paramedic practice is evolving rapidly, and in order to meet the challenges of the future in prehospital medicine, it is necessary to explore the evidence that supports current practice. This unit will introduce students to the concept of research and the underlying principles of research and the scientific method. An introduction to qualitative and quantitative approaches, their associated key methods and ethical principles of research practice will be examined. This unit will allow students to understand the terminology associated with research so that they may locate, access, understand and critically analyse research to identify appropriate evidence for their practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Define and explain what is meant by research including basic research terminology and methodology;
2. Contrast the main differences, advantages and disadvantages between qualitative and quantitative methodologies;
3. Explain at a beginning level, research design, methods of data collection, analysis, reporting and interpretation;
4. Retrieve appropriate research articles and critically appraise content;
5. Assess aspects of ethical consideration in research including consent and confidentiality.

**Class Contact:** Forty eight (48) hours for one semester, comprising lectures, flipped classes, workshops and e-learning.

**Required Reading:** Hoffman, T., Bennett, S., Del Mar, C. (2013) 2nd ed. Evidence based practice across health professions. Elsevier, Australia Hickson, M. (2008) Research handbook for health care professionals. Blackwell Publishing, United Kingdom McKenzie, S. (2013) Vital Statistics: An introduction to health science statistics. Elsevier, Sydney McKendry, S. (2015) Critical thinking skills for health care. Routledge

**Assessment:** Test, MCQ in class test (30 minutes duration + 10 mins reading time), 15%. Examination, MCQ and short answer Exam (60 minutes duration + 15 minutes reading time), 30%. Poster, Poster (equivalent of 1500 words), 55%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. The test will be run in week 5 of semester and feedback about performance in this assessment will be provided in order to guide and support students in their future learning in the unit of study.

## HFB2113 Paramedic Clinical Science 1

**Locations:** St Abans.

**Prerequisites:** HFB1213 - Paramedic Clinical Practice 2 RBM1208 - Bioscience for Paramedics 2

**Description:** This unit will introduce students to medical conditions relating to the pathophysiology of cardiac, neurological and respiratory emergencies. Assessment and management of these patients will be explored within the paramedic context.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate knowledge of and describe the appropriate pre-hospital assessment and management of patients presenting with selected cardiovascular, respiratory and neurological disorders;
2. Justify the use of and discuss the correct application of a variety of pre-hospital procedures relevant to managing selected cardiovascular, respiratory, and neurological disorders;
3. Justify the use of and discuss the correct administration of various pharmacological agents related to the management of selected cardiovascular, respiratory and neurological disorders;
4. Demonstrate reflective and analytical strategies to identify opportunities for improvement in clinical reasoning and patient management; and
5. Interpret key abnormal and normal electrocardiograms.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures supported by e-learning.

**Required Reading:** McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2009). (6th ed.) Pathophysiology: The biologic basis for disease in adults and children. St Louis, MO: Mosby. Cameron, P., Jelinek, G., Kelly, A., Murray, L and Heyworth, J. (2014). (6th ed.) Textbook of adult emergency medicine. Sydney: Churchill Livingstone. Cohn, E. G. (2009). (3rd ed.) Flip and see ECG. St Louis: Elsevier.

**Assessment:** Test, Test 1, Week 5 (500 words equivalent), 15%. Test, Test 2, Week 10 (1500 words equivalent), 35%. Examination, End of Semester Theory Exam (2 hours) (2000 words equivalent) Hurdle requirement, 50%. To obtain a passing

grade or higher in this graded unit, students must achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. The theory exam encompasses critical knowledge essential for safe paramedic practice and to meet industry expectations of graduate paramedic students. .

### HFB2117 Clinical Practice 3

**Locations:**St Albans.

**Prerequisites:**HFB1213 - Paramedic Clinical Practice 2HFB1212 - Professional Practice 2RBM1208 - Bioscience for Paramedics 2RBM1209 - Exercise Physiology & Nutrition for ParamedicsHBM1202 - Anatomy & Physiology 2HHB1204 - Australian Health and Social Care Systems and PolicyHFB1207 - Principles of Drug Actions for Health ProfessionalsFor HBPX: prerequisites are HFB1213,HFB1212, RBM1208 and RBM1209 For HBPD: prerequisites are HBM1202,HHB1204,HFB1207 and HFB1213

**Description:**This unit will build on the principles of pharmacology covered in HFB1207 whilst complementing and linking the theory delivered in HFB2113 as it introduces the student to practical components of cardiovascular, respiratory, neurological and endocrine emergencies and their prehospital emergency management.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate and demonstrate the appropriate pre-hospital assessment and management of patients presenting with selected cardiovascular, respiratory, neurological and endocrine disorders; 2. Apply the correct administration, usage and analysis of a variety of cardiac monitoring devices; 3. Analyse, demonstrate and justify the administration of various pharmacological agents related to the management of cardiovascular, respiratory, neurological and endocrine disorders; 4. Use reflective strategies to identify opportunities for improvement in clinical reasoning and patient management.

**Class Contact:**Lab3.0 hrsLecture1.0 hrForty-eight (48) hours for one semester comprising lectures, practical classes and 12 hours (minimum) of supervised self-directed learning utilising the paramedic interactive curriculum, and eighty (80) hours minimum of placement which may include simulation, clinical placement or equivalent.

**Required Reading:**Refer to the Required Web Sites for the required text.Further readings and references will be provided in the unit outline and VU Collaborate.

**Assessment:**Practicum, Clinical scenario examination, Pass/Fail. Test, Five (5) tests (15 minutes duration each), Pass/Fail. Other, Clinical workbook, Pass/Fail. Practicum, Satisfactory completion of a minimum of 80 hours of placement (clinical or equivalent) and completed logbook constitute a pass grade., Pass/Fail. Practicum, Clinical skills assessment, Pass/Fail. Other, Self-directed learning (SDL), Pass/Fail. To obtain a pass in this ungraded unit, all components of assessment must be attempted and passed. Hurdle requirements for this unit are as follows: 1. Practical sessions require at least 80% attendance and clinical placement sessions require 100% attendance (minimum of 80 hours), 2. Self-directed learning (SDL) laboratories (minimum 12 hrs), 3. Achieving a minimum score of 50% in each of the 5 tests, 4. Passing the clinical skills assessment and clinical scenario examination, 5. Submitting a completed clinical workbook and logbook. The practical sessions enable students to acquire the essential skills and knowledge expected in paramedic practice.

### HFB2120 Applied Pharmacology

**Locations:**St Albans.

**Prerequisites:**HFB1213 - Paramedic Clinical Practice 2RBM1208 - Bioscience for Paramedics 2

**Description:**This unit will introduce the student to pharmacology in the following specific areas: Pharmacodynamics and pharmacokinetics, inotropic agents, antibiotic, antiviral, antifungal and antimicrobial agents, fluid therapies, local anaesthetics, adrenergic and cholinergic agents, histamine and antihistamines, antipsychotics, anxiolytics, hypnotics, and antidepressant drugs; anticonvulsants and muscle relaxants; narcotic analgesics and antagonists; anti-inflammatory, antipyretic, analgesic, antiarrhythmic, antianginal and antihypertensive drugs; anticoagulant, fibrinolytic, antiplatelet, diuretic, bronchodilators, respiratory and antiemetic agents.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students are expected to be able to:

- Describe the clinical indications for, and adverse effects of, adrenergic and cholinergic agonists and antagonists;
- Describe the distribution and function of selected drug receptors;
- Discuss the indications, uses, mechanisms of action, contraindications and adverse effects of narcotic analgesics and non-narcotic analgesics; anxiolytic, hypnotic and anti-psychotic drugs; selected cardiovascular drugs; selected local anaesthetics; anti-convulsants, antipyretics, anti-inflammatories and analgesics, selected anti-emetics, and selected antibiotic, antiviral and antimicrobial agents;
- Discuss the indications, uses, mechanisms of action, contraindications and adverse effects of selected drugs that act on the respiratory system;
- Discuss the roles of prostaglandins in the inflammatory response;
- Contrast the actions of depolarising and non-depolarising neuromuscular blocking agents;
- State the rationales for using neuromuscular blocking agents in anaesthesia;
- Identify suitable agents for rapid sequence induction;
- Describe the actions of selected drugs used to treat heart failure;
- Discuss the indications, uses, mechanisms of action, contraindications and adverse effects of fluids and blood products in the treatment of cardiovascular instability.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**Bryant, B. and Knights, K., (2011). (3rd ed.). Pharmacology for health professionals. Sydney: Mosby Elsevier.

**Assessment:**Test, 1 hour theory test (mid semester), 25%. Assignment, 2000 words, 25%. Examination, 2 hour examination (end of semester - hurdle requirement), 50%. To obtain a passing grade or higher in this graded unit, students must attempt all assessment items, achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. Test - Graduate Capabilities 1, 2, 3, Learning Outcomes 1,2,3,& 4 Assignment - Graduate Capabilities 1, 2, 3, 4, 5 and 6, Learning Outcomes 1 to 10 Examination - Graduate Capabilities 1,2,3, and 6, Learning Outcomes 1 to 10.

### HFB2121 Paramedic Clinical Science 1 (Medical Emergencies 1)

**Locations:**St Albans.

**Prerequisites:**HBM1202 - Anatomy & Physiology 2HFB1207 - Principles of Drug Actions for Health Professionals

**Description:**This unit will build on content covered in HBM1202 Anatomy and Physiology 2 and HFB1207 Principles of drug actions for health professionals. This theoretical unit will introduce students to medical conditions and related

pharmacology and pathophysiology of sepsis, cardiac, neurological, respiratory, endocrine and environmental emergencies. Assessment and management of these patients will be explored within the paramedic context.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate knowledge of and describe the appropriate pre-hospital assessment and management of patients presenting with selected microbiological, cardiovascular, respiratory, endocrine and neurological disorders;
2. Articulate knowledge of and describe the appropriate pre-hospital assessment and management of patients presenting with selected disorders related to environmental conditions;
3. Justify the use of and discuss the mechanism of action and correct administration of the various pharmacological agents related to the management of selected cardiovascular, respiratory, endocrine and neurological disorders;
4. Demonstrate reflective and analytical strategies to identify opportunities for improvement in clinical reasoning and patient management.

**Class Contact:** Fifty-six (56) hours for one semester comprising forty-eight (48) hours face-to-face lectures/flipped classes and eight (8) hours tutorials all supported by e-learning.

**Required Reading:** McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2014). 7th Pathophysiology: The biologic basis for disease in adults and children. St Louis MO: Mosby Cameron, P., Jelinek, G., Kelly, A., Murray, L. and Heyworth, J. (2014). 6th Textbook of Adult Emergency Medicine Sydney: Churchill Livingstone. Cohn, E. G. (2009). 6th Flip and see ECG. St Louis: Elsevier Bryant, B. and Knights, K., (2014) 4th Pharmacology for health professionals. Sydney: Mosby Elsevier

**Assessment:** Test, Test 1, Week 5 (30 minutes, 500 words equivalent), 15%. Assignment, Assignment (1500 words), 35%. Examination, End of Semester Theory Exam (3 hours) (3000 words equivalent) Hurdle requirement, 50%. To obtain a passing grade or higher in this graded unit, students must achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. The theory exam encompasses critical knowledge essential for safe paramedic practice and to meet industry expectations of graduate paramedic students. .

## HFB2216 Paramedic Clinical Science 2

**Locations:** St Abans.

**Prerequisites:** HFB2113 - Paramedic Clinical Science 1 RBM2109 - Bioscience for Paramedics 3HFB2120 - Applied Pharmacology

**Description:** This unit will introduce students to assessment and management of the trauma patient in the pre-hospital and hospital setting. Trauma systems in Australia and mechanism of injury will be examined. Specific areas of focus will include: Haemorrhage and shock, soft tissue, burns, head and facial, spinal, thoracic, abdominal, musculoskeletal, toxicology and environmental trauma.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the pathophysiology and pre-hospital management of a patient in pain;
2. Describe the pathophysiology, presentation, assessment and management of haemorrhage and shock, soft tissue trauma, burns, head and facial trauma, spinal trauma, thoracic trauma, abdominal trauma, musculoskeletal trauma, toxicology and environmental trauma; and
3. Describe trauma scales used in the pre-hospital setting.

**Class Contact:** Lecture 2.0 hrs Forty-eight (48) hours for one semester comprising lectures supported by e-learning

**Required Reading:** McCance, K. L., & Huether, S. E. (2009). (6th ed.). Pathophysiology: the biological basis for disease in adults and children. St Louis, MO:

Mosby. Cameron, P., Jelinek, G., Kelly, A.-M., Murray, L., Brown, A., & Heyworth, J. (2009). (6th ed.). Textbook of adult emergency medicine Sydney: Churchill Livingstone

**Assessment:** Test, 10 theory tests (during semester) (3% each), 30%. Examination, 3 hour theory exam (end of semester), 50%. Assignment, one group assignment (2000 words), 20%. To obtain a passing grade or higher in this graded unit, students must achieve an accumulative mark of at least 50% and a mark of 50% or greater in the written exam. Test Graduate Capabilities 4 - Learning Outcomes 1 to 3 Examination Graduate Capabilities 4 - Learning Outcomes 1 to 3 Assignment Graduate Capabilities 4 - Learning Outcomes 1 to 3.

## HFB2219 Special Populations

**Locations:** St Abans.

**Prerequisites:** HFB2113 - Paramedic Clinical Science 1HFB2117 - Clinical Practice 3RBM2109 - Bioscience for Paramedics 3HFB2120 - Applied Pharmacology

**Description:** This unit will focus on special cohorts within the population, covering aspects of lifespan development from biopsychosocial approach and the key pathophysiological conditions that commonly affect these groups. Specific populations to be investigated include paediatric and geriatric populations. Specific systems to be covered include obstetrics, gynaecology, and male reproductive system.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the pathophysiology and signs and symptoms of male reproductive disorders;
2. Describe the pathophysiology of selected non-traumatic and traumatic gynaecological disorders;
3. Describe and provide an overview of pregnancy including embryological through to fetal development, parturition, labour and delivery and common obstetrics pathologies and emergencies;
4. Describe paramedics role in the management of the pregnant and labouring women;
5. Explain the physiology of ageing, the general principles of management of older adults and the most common pathologies; and
6. Describe general principles specific to paediatrics, including the pathophysiology assessment and management of specific illnesses in paediatric patients.

**Class Contact:** Lecture 2.0 hrs Forty-eight (48) hours for one semester comprising lectures.

**Required Reading:** Cameron, P., Jelinek, G., Kelly, A., Murray, L. and Heyworth, J. (2009) (6th ed.). Textbook of adult emergency medicine Sydney: Churchill Livingstone. McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2009). (6th ed.). Pathophysiology: The biological basis for disease in adults and children. St Louis, MO: Mosby.

**Assessment:** Examination, Final 2 hour examination, 50%. Test, Two online tests, 40%. Presentation, Group presentation, 10%.

## HFB2221 Health Care Organisations

**Locations:** St Abans.

**Prerequisites:** HFB1212 - Professional Practice 2

**Description:** This unit introduces students to the complex nature of contemporary organisations. An examination of the key elements that influence and define the health of a population is undertaken. The different types of health care systems and the specific characteristics that apply to the Australian health care system are examined. The role of health service managers as members of the health care team, the basic principles of health service management in health care facilities and beyond, and the functions of health service managers are explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the health services management in the context of the Australian society and the Australian health care system;
2. Identify the key elements that determine health policy;
3. Discuss the importance of quality access to health services and good management in the efficient provision of health care;
4. Evaluate a range of settings (clinic, community, society) in which health promotion activities take place and the range of relevant interventions (socio-environmental, behavioural, biomedical);
5. Explain the importance of knowledge of organisational behaviour to organisational effectiveness;
6. Discuss influences on the development of management theories; and
7. Describe the relationship between power and knowledge in decision-making in healthcare settings.

**Class Contact:** Lecture 2.0 hrs Forty-eight (48) hours for one semester comprising lectures.

**Required Reading:** Duckett, S. (2007). (3rd ed.). The Australian health care system, South Melbourne: OUP.

**Assessment:** Assignment, 1500 words, 30%. Assignment, 1500 words, 30%. Examination, 2 hour written examination, 40%.

### HFB2223 Clinical Practice 4

**Locations:** St Abans.

**Prerequisites:** HFB2113 - Paramedic Clinical Science 1/HFB2117 - Clinical Practice 3/HFB2120 - Applied Pharmacology For HBPX: prerequisites are HFB2113, HFB2117 and HFB2120 For HBPD: prerequisite is HFB2117

**Description:** This unit will introduce the student to practical components of fluid resuscitation and haemorrhage control and shock management. It will also cover assessment and management of soft tissue injuries, burns, head and facial trauma, spinal and back injuries, thoracic and abdominal trauma.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Qualify and quantify fluid replacement therapy in the pre-hospital setting;
2. Propose and demonstrate the appropriate practical application of pre-hospital assessment and management of a patient with a haemorrhage
3. Articulate and demonstrate the practical application of appropriate pre-hospital assessment and management of patients with burns, facial, head, spinal, thoracic, abdominal and musculoskeletal trauma;
4. Reflect on strategies to identify opportunities for improvement in clinical reasoning and patient management.

**Class Contact:** Lab 3.0 hrs Lecture 1.0 hr Forty-eight (48) hours for one semester comprising lectures, practical classes and 12 hours (minimum) of self-directed learning utilising the paramedic interactive curriculum, and minimum sixty (60) hours of placement which may include simulation, clinical placement or equivalent.

**Required Reading:** Refer to the Required Web Sites for the required text. Further readings and references will be provided in the unit outline and VU Collaborate.

**Assessment:** Practicum, Clinical Scenario Examination, Pass/Fail. Test, Five (5) tests (15 minutes duration), Pass/Fail. Other, Clinical Workbook, Pass/Fail. Practicum, Satisfactory completion of a minimum of 60 hours of placement (clinical or equivalent) and completed logbook constitute a pass grade, Pass/Fail. Other, Self-directed learning, Pass/Fail. Practicum, Clinical Skills assessment, Pass/Fail. To obtain a pass in this ungraded unit, all components of assessment must be attempted and passed. Hurdle requirements for this unit are as follows: 1. Practical sessions require at least 80% attendance and placement sessions require 100% attendance (minimum of 60 hours), 2. Self-directed learning (SDL) laboratories (minimum 12 hrs), 3. Achieving a minimum score of 50% in each of the 5 tests, 4. Passing the clinical skills assessment and clinical scenario examination, 5. Submitting

a completed clinical workbook and logbook. The practical sessions enables students to acquire the essential skills and knowledge expected in paramedic practice.

### HFB2232 Paramedic Clinical Science 2 (Trauma)

**Locations:** St Abans.

**Prerequisites:** HBM1202 - Anatomy & Physiology 2/HFB1207 - Principles of Drug Actions for Health Professionals

**Description:** This theoretical unit will introduce students to assessment and management of the trauma patient in the pre-hospital and hospital setting. Trauma systems in Australia and mechanism of injury will be examined. Specific areas of focus will include the medical and pharmacological treatment of haemorrhage, shock and burns, soft tissue, head and facial, spinal, thoracic, abdominal, musculoskeletal trauma. Toxicological and environmental emergencies will also be discussed. This theoretical unit complements the practical unit HFB2223 Clinical Practice 4.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate knowledge of the pathophysiology of, and describe the appropriate pre-hospital assessment and management of patients presenting with pain associated with trauma;
2. Articulate knowledge of and describe the appropriate pre-hospital assessment and management of patients presenting with haemorrhage and shock, soft tissue, burns, head and facial, spinal, thoracic, abdominal and musculoskeletal trauma;
3. Justify the use of and articulate the mechanism of action and the correct administration of the various pharmacological agents related to the management of haemorrhage and shock and various types of trauma;
4. Exemplify various toxicological emergencies and environmental trauma;
5. Appraise and recommend trauma scales used in the pre-hospital setting;
6. Demonstrate reflective and analytical strategies to identify opportunities for improvement in clinical reasoning and patient management.

**Class Contact:** Fifty-six (56) hours for one semester comprising forty-eight (48) face-to-face lectures/flipped classrooms and eight (8) hours of tutorial classes all supported by e-learning.

**Required Reading:** McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2014) 7th ed. Pathophysiology: The biologic basis for disease in adults and children St Louis MO: Mosby Cameron, P., Jelinek, G., Kelly, A., Murray, L and Heyworth, J. (2014) 6th ed. Textbook of Adult Emergency Medicine Sydney: Churchill Livingstone Bryant, B. and Knights, K. (2014) 4th ed. Pharmacology for health professionals. Sydney: Mosby Elsevier Further reading to be advised by the unit coordinator.

**Assessment:** Test, Test Week 5 (30 minutes, 500 words equivalent), 15%. Assignment, Assignment Essay (1500 words), 35%. Examination, End of Semester Theory Exam (3 hours) (3000 words equivalent), 50%. To obtain a passing grade or higher in this graded unit, students must achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. The theory exam encompasses critical knowledge essential for safe paramedic practice and to meet industry expectations of graduate paramedic students.

### HFB2233 Paramedic Clinical Science 3 (Medical Emergencies 2)

**Locations:** St Abans.

**Prerequisites:** HBM1202 - Anatomy & Physiology 2/HFB1207 - Principles of Drug Actions for Health Professionals

**Description:** This unit will discuss the pathophysiology and pre-hospital management of selected medical and trauma conditions. Students will be introduced to the pharmacology and pathophysiology of immunological, haematological, oncological, renal, gastrointestinal and endocrine emergencies and infectious diseases. Assessment and management of these patients will be explored within the

paramedic context. The role of diagnostic testing and in-hospital interventions and management of patients will be discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate the health challenges and long-term outcomes of patients with selected medical and trauma conditions and the efficacy of pre-hospital intervention in relation to immediate and long-term patient outcomes; 2. Articulate knowledge of and describe the appropriate pre- and in-hospital assessment and management of patients presenting with selected immunological, haematological, oncological, renal, gastrointestinal and endocrine emergencies and infectious diseases; 3. Justify the use of and articulate the mechanism of action and administration of the various pharmacological agents related to the management of selected medical conditions; 4. Apply knowledge of pathophysiology of selected conditions and critically analyse current pre-hospital care treatment regimens; 5. Qualify clinical tests, imaging techniques and laboratory tests used in diagnosis and assessment of patients with selected medical and trauma conditions and demonstrate advanced clinical decision making skills.

**Class Contact:** Fifty-six (56) hours over one semester comprising forty-eight (48) hours mixed mode lectures and eight (8) hours of tutorials all supported by e-learning.

**Required Reading:** McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2014). 7th Pathophysiology: The biologic basis for disease in adults and children. St Louis MO: Mosby Cameron, P., Jelinek., G., Kelly, A., Murray, L and Heyworth, J. (2014). 6th Textbook of Adult Emergency Medicine. Sydney: Churchill Livingstone. Bryant, B. and Knights, K., (2014). 4th Pharmacology for health professionals. Sydney: Mosby Elsevier

**Assessment:** Test, Test (30 minutes, 500 words equivalent), 15%. Assignment, Essay (1500 words), 35%. Examination, End of Semester Theory Exam (3 hours) (3000 words equivalent) Hurdle requirement., 50%. To obtain a passing grade or higher in this graded unit, students must achieve a mark of 50% or greater in the written exam, and achieve an overall accumulative mark of at least 50%. The theory exam encompasses critical knowledge essential for safe paramedic practice and to meet industry expectations of graduate paramedic students.

## HFB2234 Evidence Based Practice

**Locations:** St Albans.

**Prerequisites:** HFB2104 - Introduction to Research Methods

**Description:** This unit extends the development of the foundational knowledge acquired in the unit HFB2104 Introduction to research methods. This unit will provide an introduction to population health, public health and primary health care principles and the analysis of community based emergency health (CBEH). The use of health datasets in population and public health are discussed. The basis of science, knowledge and evidence is explored along with the principles and use of evidence-based practice in the CBEH setting. Students are encouraged to develop their capacity for enquiry, research, critical thought, critical appraisal and analysis through the semester. Information technology is used to access and interrogate the multitude of health datasets.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply the skills and knowledge of evidence based health care acquired in this unit to evaluate their work as an emergency paramedic; 2. Critically examine current protocol systems and how they support, constrain or inhibit the clinical decision making process; 3. Apply the decision making process as it applies to diagnostic reasoning in pre-hospital care; 4. Develop the ability to use information

technology to access resources relating to community-based emergency health care;

5. Describe the importance of clinical research, the appraisal of the relevant literature and the role of the paramedic in research that informs clinical practice; 6. Outline the principles of evidence-based practice in determining the evidence and transmitting theory to practice in the setting of CBEH.

**Class Contact:** Forty-eight (48) hours or equivalent for one semester comprising lectures, flipped classrooms and self-directed e-learning.

**Required Reading:** Hickson, M. (2008) Research Handbook for health care professionals. Blackwell Publishing. United Kingdom McKenzie, S. (2013) Vital Statistics: an introduction to health science statistics. Elsevier. Sydney, Australia McKendry, S. (2015) Critical Thinking Skills for Healthcare Routledge. United Kingdom

**Assessment:** Test, Test 1: Multichoice in class test (30 minutes duration + 10 mins reading time) (equivalent 500 words), 15%. Test, Test 2: Multichoice/short answer in class test (60 minutes duration + 15 mins reading time) (equivalent 1000 words), 30%. Poster, Poster (2000 words equivalent), 55%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. Test 1 will be undertaken by week 5 of the semester in order for students to receive feedback on their performance in this assessment that can be used as a guide to support their learning through the remainder of the unit.

## HFB3111 Professional Basis of Paramedic Practice 1

**Locations:** Online.

**Prerequisites:** No pre-requisites for students enrolled in the HBPA Bachelor of Health Science (Paramedic) degree conversion course.

**Description:** This subject challenges students to analyse their present practice by examining the principles of intervention for the acutely ill or injured person. An integral part of this subject will be the development of students' health assessment and practice skills necessary to care for the acutely ill or injured person and the adoption of those skills to improve and extend current practice. Integration of prior knowledge from basic and paramedic sciences, applied clinical sciences, paramedic clinical practice and professional issues will be incorporated throughout the subject.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically review the components of paramedic history taking and explain how clinical reasoning and examination (including trauma scoring systems) are used to make differential diagnoses; 2. Interrogate the components of abdominal examinations and critique the pre-hospital assessment and management of abdominal trauma; 3. Conceptually map the pathophysiology of neurological dysfunction and elaborate the pre-hospital assessment and management of head and spinal injuries; 4. Examine the epidemiology, pathophysiology, paramedic assessment, treatment and outcomes of respiratory, cardiovascular disorders and endocrine disorders; 5. Analyse the physiology of pregnancy, the external examination techniques used when assessing the patient and the impact of blunt and penetrating injuries on the pregnant patient; and 6. Reconstruct the examination of a paediatric patient and discriminate the physiology of the paediatric patient through various life stages as it may impact on assessment findings.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures, tutorials, practicals and self-directed learning activities or online equivalents.

**Required Reading:** Further readings and references will be provided by the Lecturer.

**Assessment:** Portfolio, Prescribed discussion posting (for portfolio), 15%. Portfolio, Prescribed discussion posting (for portfolio), 15%. Portfolio, Prescribed discussion posting (for portfolio), 15%. Portfolio, Prescribed discussion posting (for portfolio), 15%. Portfolio, Prescribed discussion posting (for portfolio), 15%. Portfolio, Written



portfolio integrating prescribed discussions, 25%. The written report contains the prescribed portfolio discussions integrated with theory and content delivered throughout the semester. To obtain an overall Pass in the subject, students must achieve an aggregate score of 50%. The total word equivalence of the combined assessment tasks is 5,000 words.

## HFB3122 Professional Basis of Paramedic Practice 2

**Locations:**Online.

**Prerequisites:**No pre-requisites required.

**Description:**This on-line unit challenges students to analyse their present practice by examining the principles of intervention for the acutely ill or injured person. An integral part of this unit is the development of students' understanding of electrocardiology and pharmacology, and their ability to apply principles in electrocardiology and pharmacology to their present practice. Integration of material from basic and paramedic sciences, applied clinical sciences, paramedic clinical practice and professional issues will be incorporated throughout this unit.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the cardiac conduction system and determine the relationship with waveforms on ECGs;
2. Justify the application of specific criteria when interpreting a basic ECG rhythm strip;
3. Describe the pathophysiology of the various arrhythmias;
4. Explain the representations on the 12 lead ECG and methods of interpreting them;
5. Integrate the various arrhythmias with discussion of the definitions, diagnostic characteristics, aetiologies and clinical significances of specific arrhythmias;
6. Conceptually map and verify heart block, bundle branch block and acute coronary syndrome; and
7. Discriminate and defend the commonly used pharmacological agents used for cardiac related conditions.

**Class Contact:**Forty-eight (48) hours for one semester comprising on-line synchronous and asynchronous lectures, tutorials, practicals and self-directed learning activities.

**Required Reading:**To be advised by Lecturer.

**Assessment:**Portfolio, Prescribed online discussion posting (for portfolio), 15%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. Portfolio, Portfolio containing integrated discussion postings, 25%. The total word equivalence of combined assessment tasks in this unit equates to approximately 5,000 words. Assessment is comprised of a portfolio comprising prescribed discussion postings integrated with theory and practice and other material delivered in this unit. To gain an overall pass in this unit students must achieve an aggregate score of 50%.

## HFB3123 Advanced Pharmacology

**Locations:**Online.

**Prerequisites:**Prerequisites do not apply for HBPA students.

**Description:**This unit will introduce the student to pharmacology of the following specific areas: Pharmacodynamics and pharmacokinetics, fluid therapies, local anaesthetics, adrenergic and cholinergic agents, antipsychotics, anxiolytics, hypnotics, antidepressants; anti-convulsants and muscle relaxants; narcotic analgesics and antagonists; anti-inflammatories, histamine and antihistamines, antipyretic analgesics; inotropic agents, diuretics, antiarrhythmic, anti-anginal and antihypertensive drugs; anticoagulants, fibrinolytic and anti-platelet agents; respiratory agents; antiemetic agents; antiviral, antifungal and antimicrobial agents.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain the basic principles of pharmacology, the distribution and function of selected drug receptors, the principles of pharmacodynamics and pharmacokinetics and their practical applications;
2. Interpret the clinical indications for and adverse effects of adrenergic and cholinergic agonists and antagonists and somatic agents;
3. Discuss the indications, uses, mechanism of action, contraindications and adverse effects of selected drugs that act on the respiratory and cardiovascular systems;
4. Examine the indications, uses and mechanism of action, contraindications and adverse effects of antipyretic, anti-inflammatory, antihistamine and non-narcotic analgesic drugs;
5. Differentiate between the indications uses, mechanism of action, contraindications and adverse effects of narcotic analgesics and antagonists and selected local and general anaesthetics;
6. Explore the indications, uses, mechanism of action, contraindications and adverse effects of drugs used to treat CNS disorders and emesis; and
7. Assess the indications, uses, mechanisms of action, contraindications and adverse effects of selected antifungal, anti-viral and anti-microbial agents.

**Class Contact:**Forty-eight (48) hours over one semester comprising of four (4) hours per week. Class activities include delivery of online material, online learning activities, discussions.

**Required Reading:**Bryant B. & Knights K. (2014) 4th ed. *Pharmacology for Health Professionals* Mosby, Elsevier, Australia

**Assessment:**Examination, Mid-semester theory examination (1 hour), 30%. Assignment, Written assignment (1500 words), 30%. Examination, End-of-semester theory examination (2 hours), 40%. The total combined assessment word equivalence is approximately 4,500 words. To obtain an overall pass in this unit students must achieve an aggregate score of 50%.

## HFB3125 Research in Paramedic Practice

**Locations:**Online.

**Prerequisites:**No prerequisites are required for HBPA degree conversion online students.

**Description:**This unit aims to introduce key concepts surrounding research so that students can become active and informed consumers of research. This will include learning to critically analyse research reports and papers. The unit also aims to promote the development of skills and concepts needed for students to undertake their own research and become a producer of research. Students are introduced to the importance of research to the discipline of paramedic care. Attention is given to exploring the range of qualitative and quantitative research designs, approaches to research, approaches to sampling, methods of data collection and analytical techniques. Ultimately, research should inform and enhance professional practice. The purpose of this unit is to simplify and demystify research so it becomes a useful and necessary part of professional practice of ambulance paramedics.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe and differentiate basic research methodology and terminology;
2. Explain at a beginning level of understanding, research design, the rigour of the research process, methods of data collection and analysis and reporting on research data;
3. Retrieve appropriate articles for a literature review;
4. Conduct an in-depth critical appraisal of research articles;
5. Recognise the significance of consent, confidentiality and other ethical considerations in relation to research; and
6. Defend their application of published research to their paramedic practice.

**Class Contact:**Forty-eight (48) hours over one semester comprising on-line lectures, tutorials, case studies and self-directed learning.

**Required Reading:**Further readings and references will be provided by the Lecturer.Griffiths, P & Mooney, G. P. (2012) 1st ed. *The paramedics guide to*

research: an introduction McGraw Hill, Open University Press Other readings and links to web-based resources will be provided.

**Assessment:** Test, One 30-minute online quiz (week 5), 10%. Test, Weekly mini-quizzes (weeks 6 - 12), 15%. Assignment, Research proposal (2000 words), 50%. Assignment, Evidence for Practice (1000 words), 25%. The total word equivalence for combined assessment tasks is 5,000 words approximately. To gain an overall pass in this unit students must achieve an aggregate score of 50%.

### HFB3130 Paramedic Clinical Science 4 (Mental Health and Mental Illness)

**Locations:** St Abans.

**Prerequisites:** HFB2223 - Clinical Practice 4

**Description:** This unit will foster an understanding of the history and epidemiology of mental health in Australia in order to provide a sound basis for the understanding of common mental health disorders. Bias, stigma and prejudice around mental health disorders will be examined in conjunction with exploration of the concept of unconscious bias and implicit association and the impact these phenomena can have on both the patient and their family as well as the quality of care provided. Students will be provided with knowledge of the underpinning pathophysiology and aetiology of common conditions required to effectively and legally assess and manage patients presenting with a mental health disorder or behavioural emergency in the prehospital setting. Additionally, the unit will cover the pharmacotherapies and other forms of treatment and therapies associated with managing these disorders.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate what is meant by the term Mental Health, including the mental health classification system and the history of mental health management;
2. Analyse and assess how psychosocial, lifestyle and cultural factors influence societal perceptions and potential treatment of mental health disorders;
3. Contextualise the mental health profile and epidemiology of the Australian population;
4. Articulate the aetiology, pathophysiology, therapeutic and pharmacological management of common mental health disorders;
5. Argue the approach, assessment and management strategies that can be utilised by paramedics and other health professionals in various behavioural emergencies and for various mental health conditions;
6. Articulate, compare and contrast the application of the National and State legislation that relates to mental health as well as Ambulance service policies and regulations that apply to patients experiencing a behavioural emergency.

**Class Contact:** A total of forty-eight (48) hours presented as a combination of lectures, flipped classes supported by e-learning and self-directed learning activities contribute to the overall mix of delivery of the content within this unit.

**Required Reading:** Recommendation of further readings and references will be provided by the lecturer or will be detailed on the VU Collaborate site. Cameron, P., Jelinek, G., Kelly, A-M., Brown, A., Little, M. (2014) 4th ed. Textbook of Adult Emergency Medicine Elsevier, Australia Barkway, P., Muir-Cochrane, E., Nizette, D. (2014) 2nd ed. Mosby's Pocket Book of Mental Health Elsevier, Australia

**Assessment:** Assignment, Written assignment (500 word equivalence), 10%. Test, Multiple choice test (duration 45 minutes + 10 minutes reading time) (total equivalence 750 words), 30%. Examination, Written examination (duration 2 hours + 15 minutes reading time), 60%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. The assignment will be submitted by week 5 of the semester in order for students to receive feedback on their performance in this assessment that can be used as a guide to support their learning through the remainder of the unit.

### HFB3131 Paramedic Clinical Science 3

**Locations:** St Abans.

**Prerequisites:** HFB2223 - Clinical Practice 4 HFB2216 - Paramedic Clinical Science 2 HFB2219 - Special Populations RBM2109 - Bioscience for Paramedics 3

**Description:** This unit will introduce students to medical conditions relating to gastro-intestinal, endocrine, renal and haematological emergencies. Pathophysiology assessment and management of these patient conditions will be explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to:

- Describe the pathophysiology, presentation, assessment and management of selected endocrine, renal, gastro-intestinal, haematological emergencies and communicable diseases.
- Describe the pathophysiology of immunity.

**Class Contact:** Lecture 2.0 hrs Forty eight (48) hours over one semester comprising lectures supported by e-learning.

**Required Reading:** McCance, K. L., & Huether, S. E., Brashers, V.L., Rote, N.S. (2009). 6th Pathophysiology: The biologic basis for disease in adults and children St Louis, MO: Mosby. Cameron, P., Jelinek, G., Kelly, A., Murray, L. and Heyworth, J. (2009) 3rd Textbook of adult emergency medicine Sydney: Churchill Livingstone

**Assessment:** Examination, 2 hour theory exam (end of semester) Hurdle Requirement, 50%. Assignment, Assignment (2000 words), 50%.

### HFB3132 Mental Health & Wellbeing for Paramedics

**Locations:** St Abans.

**Prerequisites:** HFB2223 - Clinical Practice 4

**Description:** This unit aims to provide students with the resources to help them manage their own mental health. Content includes research findings on the mental health of ambulance paramedics and how it compares with the general population and other occupational groups. The content of this unit also includes the bio-psychosocial model of health and how it might be utilized in the understanding of mental health issues. The health effects of shift work and effects on sleep are covered as well as aspects of sleep hygiene. Other topics include depression, anxiety, stress, health behaviours, substance use and abuse, psychosocial modifiers of stress, suicidality, and the basics of cognitive behavioural approaches. The culture of the ambulance service will also be explored. A model of resilience is introduced as a framework to provide the tools to help students to manage their reactions to demanding events and situations.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

- Describe the research evidence on paramedic mental health and how it compares with the general population.
- Apply the bio-psychosocial model of health to an individual's health status.
- Assess their reactions to a demanding situation using a model of resilience and appropriately modify those reactions.
- Formulate a view on how social contexts, including that of the ambulance service, influence mental health.
- Apply knowledge of sleep hygiene and knowledge of factors promoting sleep to mitigate the health effects of shift work.

- Determine which cognitive behavioural approaches might best be used to optimize their own mental health.

**Class Contact:**Lecture 2.0 hrsForty-eight (48) hours over one semester comprising lectures, group discussions, online activities and group work.

**Required Reading:**Caltabiano, M.L., Byrne, D., & Sarafino, E, P. (2008) Health Psychology: Biopsychosocial interactions an Australian perspective Milton QLD John Wiley & Sons

**Assessment:**Test, Online test (week 5) Equivalent to 500 words, 10%. Assignment, Written assignment (2500 words), 50%. Examination, Multiple Choice/Short Answer (2 hours) Equivalent to 2000 words, 40%. The total combined assessment word equivalence is approximately 5000 words.

### HFB3133 Mental Health & Mental Illness

**Locations:**St Abans.

**Prerequisites:**HFB 2120 - Applied Pharmacology RBM2109 - Bioscience for Paramedics 3

**Description:**This unit will foster an understanding of the history of mental health and epidemiology of mental health in Australia in order to provide a sound basis for the understanding of common mental health disorders. Students will be provided with the underpinning knowledge required to effectively assess and manage patients presenting with a mental health disorder or behavioural emergency in the prehospital setting, as well as a sound foundation in the pharmacology, pathophysiology and ongoing therapies related to these disorders.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students are expected to be able to:

- Describe what is meant by the term 'Mental Health'
- Discuss the history of psychiatry and psychology as it is related to mental health disorders
- Describe and discuss how psychosocial, lifestyle and cultural factors influence societal perceptions of mental health disorders
- Describe the classification systems used to define mental health disorders
- Discuss the general state of mental health and the epidemiology of mental health disorders in Australia
- Display an understanding of the concepts of neurophysiology and brain anatomy as they relate to disorders of mental health
- Detail the pathophysiology of various mental health disorders, including (but not limited to): mood disorders; anxiety disorders; substance abuse; factitious and somatoform disorders; schizophrenia and psychosis; and eating disorders.
- Discuss the approach, assessment and management strategies that can be utilised by Paramedics in various behavioural emergencies and for different mental health patients.
- Discuss the use of physical and chemical restraints in behavioural emergencies.
- Display an understanding of the pharmacology of drugs used in the management of mental health disorders and behavioural emergencies
- Discuss the range of therapies used in the ongoing management of mental health disorders

- Describe and discuss the National and State legislation, as well as Ambulance Service policies and regulations that apply to patients experiencing a behavioural emergency.

**Class Contact:**Lecture 2.0 hrsForty-eight (48) hours over one semester.

**Required Reading:**Barkway, P., Muir-Cochrane, E. & Nizette, D. (2010). Mosby's pocket book of mental health. Sydney, Australia: Elsevier.

**Assessment:**To obtain a pass or higher in this graded unit, all components of assessment must be attempted and passed. Assignment, Written Assignment Plan (500 words), 10%. Assignment, Written Assignment (3000 words), 40%. Examination, 2 hour examination, 50%.

### HFB3134 Paramedic Clinical Practice 5

**Locations:**St Abans.

**Prerequisites:**HFB 2221 - Health Care OrganisationsHFB 2216 - Paramedic Clinical Science 2HFB 2219 - Special PopulationsHFB 2223 - Clinical Practice 4HFB 2232 - Paramedic Clinical Science 2 (Trauma)HFB 2234 - Evidence Based PracticeHFB 2233 - Paramedic Clinical Science 3 (Medical Emergencies 2)For HB PX: prerequisites are HFB 2221, HFB 2216, HFB 2219 and HFB 2223 For HB PD: prerequisite are HFB 2232 and HFB 2234,HFB 2233 and HFB 2223

**Description:**This capstone unit allows the student the opportunity to apply, integrate, consolidate and extend their knowledge and skills gained from earlier years, in relation to complex yet commonly experienced patient conditions that have a cardiogenic component. This unit will further student knowledge and understanding of cardiology (3, 5 and 12 lead ECG interpretation) and care of issues arising from cardiac ischaemia and arrhythmias. The unit will focus on pre-hospital through to hospital procedures including pharmacotherapies with respect to cardiac ischaemia and arrhythmias, advanced airway management, allergies and anaphylaxis. The pathophysiology, clinical pharmacology, assessment and management using current practices relating to the above topics will be explored.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate and demonstrate the process of assessment and management of a patient with an acute cardiac, respiratory and anaphylaxis presentations;
2. Substantiate and establish techniques for 3,4,5 and 12 lead electrocardiographic monitoring, arguing advantages and disadvantages of each;
3. Analyse and interpret ECG's including the aetiology, clinical significance and the pre-hospital management of condition identified;
4. Articulate and demonstrate understanding of advanced management of cardiac emergencies;
5. Articulate and exhibit understanding of advanced airway and respiratory/ventilation management.

**Class Contact:**Lab 2.0 hrsLecture 2.0 hrsForty-eight (48) hours or equivalent for one semester comprising lectures and clinical simulation/practical classes. In addition, a minimum of eighty (80) hours placement must be met which may include simulation, clinical placement or equivalent. Clinical simulation/practical classes have a hurdle requirement of at least 80% attendance and placements have a hurdle requirement of 100% attendance.

**Required Reading:**Refer to the Required Web Sites for the required text.Further readings and references will be provided in the unit outline and VU Collaborate.

**Assessment:**Test, Test 1: MCQ/short answer (30 mins duration ), 15%. Test, Test 2: week 12 - MCQ and Written responses (60 minutes duration), 35%. Examination, Scenario Exam - practical, 50%. Practicum, Clinical logbook and completed placements, 0%. To obtain a pass or higher in this graded unit, all components of assessment must be attempted/submitted and an aggregate mark of 50% must be attained. Additional hurdle requirements include satisfactory completion of 20 minute

scenario exam, 80 hours of placements (clinical or equivalent), 80% attendance of clinical practice laboratories and submission of a satisfactorily completed clinical logbook. The practical sessions enables students to acquire the essentials skills and knowledge expected in graduate paramedic practice and to meet accreditation requirements.

### HFB3135 Paramedic Clinical Science 5 (Special Populations)

**Locations:**St Abans.

**Prerequisites:**HFB2223 - Clinical Practice 4HFB2121 - Paramedic Clinical Science 1 (Medical Emergencies 1)HFB2232 - Paramedic Clinical Science 2 (Trauma)HFB2233 - Paramedic Clinical Science 3 (Medical Emergencies 2)

**Description:**This unit will focus on physiological, anatomical and psychosocial development and aging over the lifespan, focusing on special cohorts within the population, including the indigenous population, and how they need to be considered from a paramedic treatment and management perspective. It will cover aspects of lifespan development from biopsychosocial approach and key pathophysiological conditions that may affect different life stage cohorts. Specific populations to be investigated include paediatric and adolescence through to, and including, senescence and the geriatric populations. Specific areas to be covered include obstetrics and parturition, gynaecology, male reproductive system and the impact of normal and abnormal age related changes on the body.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate a physiological and anatomical overview of pregnancy including embryological through to fetal development, parturition, labour and delivery and common obstetrics pathologies and emergencies;
2. Indicate the general physiological, anatomical and psychosocial principles specific to paediatrics and adolescents, including the common pathophysiological conditions, their assessment and management;
3. Substantiate the pathophysiology of selected non-traumatic and traumatic gynaecological disorders including the common causes of subfertility in the population and the current medical treatments;
4. Substantiate the pathophysiology and signs and symptoms of male reproductive disorders;
5. Delineate the psychosocial, physiological and anatomical changes related to normal and abnormal ageing including the general principles of prehospital management of older adults.

**Class Contact:**A total of forty-eight (48) hours per semester consisting of lectures, flipped classrooms and on-line activities.

**Required Reading:**McCance., K.I. and Huether, S.E. (2014) 7th ed. *The Biologic Basis for Disease in Adults and Children* St Louis, MO: Mosby  
Cameron, P., Jelinek, G., Kelly, A., Brown, A.F.T and Little, M. (2014) 4th ed. *Textbook of Adult Emergency Medicine* Sydney: Churchill Livingstone

**Assessment:**Test, Test 1 (30 minutes duration), 15%. Test, Test 2 (45 minutes duration), 25%. Examination, Written Examination (2 hours), 60%. Test 1 will be undertaken by week 5 of the semester in order for students to receive feedback on their performance in this assessment that can be used as a guide to support their learning through the remainder of the unit. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit.

### HFB3136 Career and Professional Development

**Locations:**St Abans.

**Prerequisites:**HFB2223 - Clinical Practice 4HFB2234 - Evidence Based PracticeHFB2232 - Paramedic Clinical Science 2 (Trauma)HFB2233 - Paramedic Clinical Science 3 (Medical Emergencies 2)Successful completion of second year

**Description:**The unit aims to support and facilitate students to become proactive and strategic career builders and gain an understanding of how to identify the career opportunities as graduates of a Health Science degree. It uses an integrated approach of delivery by using self-understanding and reflective activities, goal setting, networking and interview techniques, generating a professional image and exploration of a wide range of employment opportunities to equip students towards graduate employment. It develops a critical understanding of how to identify and highlight the value of strengths and competencies through their education, employment experiences and work integrated learning and extracurricular activities to improve their career outcomes. Leadership and mentoring will be evaluated in terms of the potential these experiences have to improve student employability. Students will learn about various potential employers, including those that relate to the pre-hospital field nationally and at an international level. Paramedic registration will be discussed alongside continuing education and career opportunities if employed as a paramedic.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Develop, reflect on and evaluate a broad range of strategies for achieving own career goals;
2. Analyse skills, career values and personality to gain a clear career direction and plan;
3. Enhance capability to be an effective professional communicator and self-marketer focusing on communicating achievements during job interviews and professional image management;
4. Establish significant knowledge and understanding of potential career options including those in the prehospital sector;
5. Work both as a team member and leader in both formal and informal teams to complete tasks, evaluate and respond to own and others performance using given parameters.

**Class Contact:**Forty eight hours (48) for one semester comprising a mixture of lectures and flipped classrooms supported by group tasks and discussions, online activities and self-directed learning activities.

**Required Reading:**Readings and references and/or their links will be provided in the VU Collaborate site.

**Assessment:**Report, Career Plan (total word equivalent 400 words), 10%.

Assignment, Personal Resume (total equivalent 1500 words), 30%. Report, Digital video submission (total equivalent 2000 words), 60%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. The career plan will be submitted in week 5 of semester and feedback about performance in this assessment will be provided in order to guide and support students in their future learning in the unit of study.

### HFB3200 Pinnacle Venture

**Locations:**St Abans.

**Prerequisites:**HFB2223 - Clinical Practice 4

**Description:**The unit of study provides students with an opportunity to undertake a project of their choice that is linked to their field of study. The Pinnacle project will challenge the student by requiring them to draw upon their knowledge and skills acquired in their studies to date and apply them in meaningful way to showcase their abilities. The types of Pinnacle venture undertaken may broadly include a small research or community project or a work based placement. The students activities will "value add" for their discipline field and/or community and/or organisation where they are undertaking the venture. When undertaking the Pinnacle Venture unit of study, the student will be supervised by a staff member of the Paramedic or related discipline within the College of Health and Biomedicine. It is an overarching objective of the unit that the venture will enable the student to undertake a unique practical and educational experience that will challenge and promote growth on

many levels for the student and thus significantly contribute to their marketability and salience, increasing their competitive edge for employment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Manage and undertake a work, community or research based project with minimal supervision, demonstrating self and time management and project related organisational skills; 2. Articulate and justify project goals, objectives, timeline, approaches and methods; 3. Establish proficiency in writing a project final report, including self-reflection, an evaluation of the outcomes and a summary of strengths and limitations; 4. Demonstrate proficiency in elucidating the findings of the project to peers, supervisors and wider community audience.

**Class Contact:** Seventy-two (72) hours per semester, consisting of six (6) hours per week (or equivalent) undertaken in an appropriate setting which may include laboratory, community or workplace setting. Included within the 72 hours, a short series of lectures (4 hours) will be given at the commencement of the unit to provide an introduction and orientation to the unit.

**Required Reading:** Required readings and reference will be provided on the VU Collaborate site.

**Assessment:** Other, Project proposal and rationale (750 words), 20%. Report, Final project report (equivalent 2500 words), 60%. Presentation, Final project presentation (duration 15 minutes), 20%. Students are expected to complete each component of the assessment and must achieve a total aggregate score of 50% in order to obtain a pass in the unit. The project proposal and rationale (Other) will be due for submission by week 4 of semester. The assessment of the student's performance on this submission and the feedback provided will be used to help guide the student over the remainder of the semester.

## HFB3202 Paramedic Health and Wellbeing

**Locations:** St Abars.

**Prerequisites:** HFB3130- Paramedic Clinical Science 4 (Mental Health and Mental Illness) HFB2223 - Clinical Practice 4

**Description:** This unit aims to provide students with the resources to help them manage and optimise their own physical and mental health. Content includes research findings on the mental health and physical health of Paramedics and how it compares with the general population and other occupational groups. The content of this unit also includes the bio-psycho-social model of health and how it might be utilized in the understanding of mental health issues. The physical and psychological health effects of shift work and effects on sleep are covered as well as aspects of sleep hygiene. Topic areas covered with respect to nutrition and exercise include key concepts of metabolism, diet and the shift worker and lifelong health supporting choices. Other topics include depression, anxiety, stress, health behaviours, substance use and abuse, psychosocial modifiers of stress, suicidality, and the basics of cognitive behavioural approaches. The culture of the ambulance service will also be explored. A model of resilience is introduced as a framework to provide the tools to help students to manage their reactions to demanding events and situations.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Elucidate the research evidence on paramedic mental health and how it compares with the general population; 2. Analyse the key concepts and definitions related to exercise and nutrition for the paramedic; 3. Extrapolate the bio-psycho-social model of health to an individual's health status; 4. Assess reactions to a demanding situation using a model of resilience and appropriately modify those reactions; 5. Formulate a view on how social contexts, including that of the ambulance service, influence mental and physical health; 6. Adapt knowledge of

sleep hygiene and knowledge of factors promoting sleep to mitigate the health effects of shift work; 7. Determine which cognitive behavioural approaches might best be used to optimize their own mental health.

**Class Contact:** A total of fifty-six (56) hours per semester consisting of forty-eight (48) hours of lectures, flipped classrooms and on-line activities plus eight (8) hours of tutorials.

**Required Reading:** Sarafino, E. P., Caltabiano, M.L., & Byrne, D. (2008) 2nd Australasian ed. Health psychology : Biopsychosocial interactions Milton, Qld: John Wiley & Sons Australia

**Assessment:** Test, Online Test . 1hr duration., 10%. Assignment, Written Assignment (2500 words), 50%. Examination, Multiple Choice/Short Answer Exam (2 hours), 40%. To pass this unit, students are required to achieve an aggregate score of at least 50%.

## HFB3211 Integration of Paramedic Practice 1

**Locations:** Online.

**Prerequisites:** Nil.

**Description:** This unit addresses how students might properly integrate evidence into their own practice in order to develop the care they provide to patients. Students are expected to identify a clinical practice and how it might be changed in the light of current and best evidence. This includes finding, appraising and critically reviewing the relevant published research and describing how the findings could impact on clinical practice and care plans. Students will be expected to articulate a process for evaluating the effectiveness of implementing evidence based change.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and plan a clinical practice change; 2. Discuss the principles and nature of evidence-based practice; 3. Formulate and describe a search strategy for locating evidence in the published literature; 4. Appraise and critically review the relevant research literature; 5. Develop and articulate a process for implementing evidence-based findings into care plans; and 6. Devise and articulate a process for evaluating the effectiveness of implementing evidence-based change.

**Class Contact:** Forty-eight (48) hours for one semester comprising on-line lectures, tutorials, practicals and self-directed learning activities.

**Required Reading:** Further readings and references will be provided by the Lecturer.

**Assessment:** Portfolio, Written Portfolio Integrating Prescribed Discussions, 40%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. Portfolio, Prescribed online discussion posting (for portfolio), 20%. The total of the combined assessment tasks approximates to 5,000 words. The written report contains the prescribed portfolio discussions integrated with theory and content delivered throughout the semester. To obtain a pass in this unit an aggregate score of 50% must be obtained.

## HFB3222 Integration of Paramedic Practice 2

**Locations:** Online.

**Prerequisites:** Nil.

**Description:** This subject re-introduces and extends the medical fundamentals of paramedicine. A systems approach reinforces the anatomical, physiological, pathophysiological and pharmacological aspects of care from the perspectives of the paramedic. Applied considerations will be given to a range of adult and paediatric emergencies.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe and discuss the organisation and physiology of the central and peripheral

nervous systems and the various CNS disorders; 2. Discuss the basic principles of pharmacology and how various drugs are classified and appraise the use of specific drugs as they relate to paramedic practice; 3. Explain the anatomical and pathophysiological aspects of pain and fever and their pharmacological management;

4. Describe the anatomy, physiology and pathophysiology of the respiratory system and appraise the pharmacological management of disorders; 5. Explain the anatomy, physiology and pathophysiology of the endocrine system and renal systems and discuss and appraise the clinical uses of diuretics; 6. Describe the anatomy, physiology and pathophysiology of the musculoskeletal system and various injuries to the musculoskeletal system; 7. Describe the various structures associated with the thoracic region; 8. Describe the general rules for assessing trauma and compare and contrast the various steps in the shock process; 9. Examine the major body compartments and their fluid composition and evaluate the use of various fluid therapies; and 10. Describe the anatomy, physiology and pathophysiology of the integumentary system, as well as assessing burns and contrasting the various types and their treatment.

**Class Contact:** Forty-eight (48) hours for one semester comprising on-line lectures and self-directed learning activities.

**Required Reading:** Further readings and references will be provided by the Lecturer.

**Assessment:** Essay, Written essay (1500 words), 25%. Other, Online activities and discussion postings (1500 words), 25%. Examination, Online two (2) hour examination, 50%. Total combined word equivalence of the assessments is approximately 5,000 words. To gain an overall pass in this unit, students must achieve an aggregate score of 50% and pass the final examination (hurdle requirement).

## HFB3225 Research in Paramedic Practice

**Locations:** St Albans.

**Prerequisites:** HFB3131 - Paramedic Clinical Science 3/HFB3134 - Paramedic Clinical Practice 5

**Description:** Principles of research. Research ethics. Research paradigms. Qualitative and quantitative research designs. Data collection and data analysis. Critical evaluation of research. Analysis and criticism of research reports.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Define basic research methodology and terminology; 2. Describe the main differences between qualitative and quantitative research; 3. Discuss the advantages and disadvantages of the different methodologies; 4. Explain at a beginning level, research design, establishing the rigour of a research process, methods of data collection and analysis and reporting on research data; 5. Retrieve appropriate articles for a literature review; 6. Conduct an in-depth critical appraisal of research articles; and 7. Explain the significance of consent, confidentiality and other ethical considerations in relation to research.

**Class Contact:** Lecture 2.0 hrs Forty eight hours (48) or equivalent for one semester comprising lectures, tutorials, online workshops / discussions and self directed e-learning.

**Required Reading:** Richardson-Tench, M., Taylor, B., Kermode, S., & Roberts, K., (Eds.) (2011) (4th ed.). Research in Nursing: Evidence for Best Practice. Sth Melbourne, Vic. Thomson.

**Assessment:** Other, Online Assessment, 40%. Assignment, Written assignment (total 3000 words), 60%. In order to obtain a pass or higher in this graded unit, all components of assessment must be passed.

## HFB3226 Major Incidents

**Locations:** Online, St Albans.

**Prerequisites:** HFB3134 - Paramedic Clinical Practice 5/HFB3135 - Paramedic Clinical Science 5 (Special Populations)/HFB3130 - Paramedic Clinical Science 4 (Mental Health and Mental Illness) Prerequisite is not applicable to HBPA students.

Prerequisite HBPX is HFB 3134 Prerequisite HBPD is HFB3134, HFB3135, HFB3130

**Description:** The capstone unit is the culminating experience of the student's paramedic program and provides students with the opportunity to apply and integrate their knowledge and skills gained from earlier years. This unit focuses on the theory and practice of major incident management and recovery. Students will research, scope, design, plan and execute a simulated major incident event. Students will work autonomously and in teams to simulate and ultimately facilitate the pre-hospital management of both the scene and simulated patients. The theoretical component of the unit will cover the history of major incidents, principles of major incident planning, preparation, response and recovery. The roles, responsibilities and communications of emergency services and the sociological and psychological impacts of major incidents, including epidemics, pandemics, terrorism/bioterrorism and natural disasters involving major incidents is also considered. The focus is primarily on the prehospital emergency medicine response to a major incident and the interaction of paramedics with other emergency staff and support agencies is addressed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse the principles of risk assessment and major incident planning, preparation, and coordination; 2. Adapt and apply the main elements of the national major incident and disaster policy and the roles of the emergency services response to a major incident which includes police, fire, ambulance, health, state emergency service and other support agencies; 3. Conceptually map medical service major incident planning, preparation, response and recovery in the context of a multi-disciplinary and multi-agency major incident response; 4. Report on the principles of major incident management including principles of command and control, the Incident Command System (ICS) and triage of patients; 5. Predict and formulate strategies for addressing prevalent major psychological and sociological effects following a major incident including survival, bereavement, and post-traumatic stress; 6. Demonstrate practical applications of the prehospital emergency medicine response in simulated major incident scenarios.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Further readings and references and/or their links will be provided by the Lecturer via VU Collaborate. Hodgetts, T.J., & Mackway Jones, K. (2014) 6th ed. Major incident medical management and support London, BMJ Books

**Assessment:** Other, On campus students: Workbook (2000 words), 20%. Other, On campus students: Tutorial exercises, 30%. Examination, On campus students: Final examination (2 hours duration plus 15 minutes reading time), 50%. Other, Online students (see below for assessment weighting): Tutorial exercises/online discussions, 0%. Assignment, Online students:(see below for assessment weighting): Written (assignment 2000 words), 0%. Students will be expected to attempt all pieces of assessment and must obtain an aggregate score of 50% in order to successfully complete the unit of study. For HBPX and HBPD (on campus students): Assessment item 1, 2 and 3 only are applicable. For HBPA (on-line) students: Assessment items 4 and 5 only are applicable. Assessment item 4 contributes to 40% of total grade and assessment item 5 contributes to 60% of the final grade for HBPA students.

## HFB3231 Paramedic Science 4

**Locations:**St Abans.

**Prerequisites:**HFB3131 - Paramedic Clinical Science 3HFB3134 - Paramedic Clinical Practice 5

**Description:**Review and revision of the pathophysiology and pre-hospital management of selected medical and trauma conditions. The role of diagnostic testing; x-ray, computed tomography (CT scan), magnetic resonance imaging (MRI), ultrasound, angiography, biochemistry, haematology and microbiology/pathology. In-hospital interventions and management of patients with selected medical and trauma conditions. Prognosis and long-term outcomes of patients with selected medical and trauma conditions.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the health challenges and long-term outcomes of patients with selected medical and trauma conditions;
2. Discuss the efficacy of pre-hospital intervention in relation to immediate and long-term patient outcome;
3. Discuss in-hospital diagnosis and management of patients with selected medical and trauma conditions;
4. Apply knowledge of pathophysiology of selected conditions;
5. Critically analyse current pre-hospital care treatment regimes;
6. Describe clinical tests, imaging techniques and laboratory tests used in diagnosis and assessment of patients with selected medical and trauma conditions; and
7. Demonstrate advanced clinical decision making skills

**Class Contact:**Lecture 2.0 hrsForty-eight (48) hours over one semester of mixed mode lectures and tutorials

**Required Reading:**Additional hardcopy and audiovisual material developed and supplied by the Paramedic Science Unit, School of Biomedical and Health Sciences will support these texts. McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2009). (6th. ed.). Pathophysiology: The biological basis for disease in adults and children. St Louis, MO: Mosby.

**Assessment:**Knowledge, skills and values developed in this unit will be assessed through group discussion and case-based problem solving exercises. To obtain a pass or higher in this graded unit, all components of assessment must be submitted and an aggregate mark of 50% must be attained. Test, Online Tests (x4 @ 10% each), 40%. Case Study, Written Case Study (x2 @ 30% each) Total 3000 words, 60%.

## HFB3234 Paramedic Clinical Practice 6 - Extended Practice

**Locations:**St Abans.

**Prerequisites:**HFB3134 - Paramedic Clinical Practice 5HFB3132 - Mental Health & Wellbeing for ParamedicsHFB3131 - Paramedic Clinical Science 3HFB3133 - Mental Health & Mental IllnessHFB3135 - Paramedic Clinical Science 5 (Special Populations)For HBPX: prerequisites are HFB3134,HFB3132,HFB3131,HFB3133 For HBPD: prerequisite is HFB3134, HFB3135

**Description:**This unit is the culminating experience in clinical practice of the student's paramedic program and provides students with the opportunity to apply and integrate their knowledge and skills gained from earlier years. The unit will extend the student's knowledge and skill set by the amalgamation of advanced life support skills with extended care practices in the community-based emergency health environment. There will be a focus on the intersection of hospital and pre-hospital care, and integration of health practices. It will also consolidate student's clinical practice at the expected level of graduate entry practice. Specific areas of interest will include improved clinical reasoning and critical decision making, awareness of and working with scopes of practice beyond the expected level of graduate entry practice (both in jurisdiction and depth), awareness of patient treatment and management after handover to other health professionals (with an emphasis on

understanding of diagnostic tests and procedures the patient is likely to encounter).

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate through active participation in a variety of clinical settings, including inter-professional environments, an understanding of the integration of health care practices in order to provide extended patient care;
2. Critically use reflective strategies to identify opportunities for improvement in clinical reasoning, patient management and interprofessional collaboration;
3. Report on the extended practice roles of the paramedic both nationally and internationally;
4. Articulate and demonstrate an understanding of the current scope of paramedic clinical care including ongoing care of the patient in the hospital/definitive care environment;
5. Articulate a basic understanding of advanced wound and fracture management beyond traditional scopes of paramedic practice, such as suturing and plastering;
6. Critically review and discuss the pathophysiology and then demonstrate the assessment, treatment and management of a range of related complex patient presentations.

**Class Contact:**Lab 2.0 hrsLecture 2.0 hrsPlus sixty (60) hours placement which may include simulation, clinical or equivalent placement. Clinical practical laboratories have a hurdle requirement of at least 80% attendance and placements have a hurdle requirement of 100% attendance.

**Required Reading:**Refer to the Required Web Sites for the required text. Additional readings will be advised in VU Collaborate.

**Assessment:**Test, Test 1 (30 minutes duration), 15%. Assignment, Written submission with presentation component, 35%. Examination, Scenario Exam (20 minutes), 50%. Practicum, Placements and completed Logbook, 0%. To obtain a pass or higher in this graded unit, all components of assessment must be submitted and an aggregate mark of 50% must be attained. Hurdle requirements include satisfactory completion of the 20 minute scenario exam and 60 hours of placement (clinical or equivalent) and completed logbook. Practical sessions require at least 80% attendance. The practical sessions and the scenario exam enable students to acquire and then demonstrate the essential skills and knowledge expected in paramedic practice and in accordance with accreditation requirements.

## HFB3301 Issues in Prehospital Health Service Delivery

**Locations:**Online.

**Prerequisites:**There is no prerequisite for this unit for students enrolled in the HBPA online paramedic degree conversion course.

**Description:**This subject introduces students to aspects of medical sociology as they relate to pre-hospital care. The unit addresses sociological perspectives of health in order for students to develop a better understanding of the concept of illness outside of the biomedical model. Cultural & religious diversity are also explored in order to broaden the perspectives and attitudes of students and to develop an awareness of how these issues may impact upon the pre-hospital presentation and management of patients, and health outcomes.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain and critique key concepts of sociology and their relevance for understanding experiences of health and illness;
2. Elaborate various models and frameworks of health and illness and extrapolate their impact on the delivery of pre-hospital health care;
3. Conceptually map different models of death, dying and grief within different socioeconomic, religious and cultural groups;
4. Explain the potential interaction of sociological, religious and cultural constructs and moulding on traits traditionally considered to be biological like age and gender;
5. Evaluate an individual's health status within their broader social framework.

**Class Contact:**The online equivalent of forty-eight (48) hours for one semester comprising lectures, tutorials, discussions and self-directed learning activities.

**Required Reading:**Further readings and references will be provided by the Lecturer.Gray, D.E. (2005) Health Sociology - An Australian Perspective. Sydney: Pearson Prentice Hall

**Assessment:**Some or all of the written assessment may take the form of a portfolio as negotiated with the Unit Coordinator. This is to allow for flexibility in assessment consistent with the nature of the content of this subject and in line the Victoria University, "Student Assessment and Progress Policy," (pp 41 & 42). Test, Open book, online quiz in week five covering material delivered in weeks 1- 4., 10%. Test, Open book, online quiz in week twelve covering material delivered throughout the semester., 10%. Assignment, Written Assignment 1 (2000 words), 40%. Assignment, Written Assignment 2 (2000 words), 40%. The total word equivalence for assessment tasks within this unit is 5,000 words.

### HFB3401 Prehospital Ethical and Legal Issues

**Locations:**Online.

**Prerequisites:**Nil.

**Description:**This unit enables students to explore ethical and legal issues and their implications for paramedics and paramedic science. Students' prior knowledge, skills and experiences will be drawn upon to demonstrate and scrutinise their responses to common situations that occur in paramedic practice, which may cause ethical and legal dilemmas. The themes of client autonomy, self-determination, patient rights and independent professional paramedic practice will be explored in the context of pre-hospital care.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Define the terminology and abbreviations used in ethics and law; 2. Discuss how ethical and legal practices, principles and issues may influence paramedic practice; 3. Identify and apply in simulated contexts steps in ethical decision making; 4. Analyse ethical and legal problems arising in paramedic practice and propose and justify acceptable solutions. (E.g. in futile situations, obligation to provide care, patient advocacy); 5. Conceptually map the relationship between legal and professional responsibility and exemplify how it impacts on paramedic practice; and 6. Apply legal requirements and ethical principles to specified individual clients cases drawn from real-life paramedic experience.

**Class Contact:**Forty-eight (48) hours for one semester comprising on-line lectures, tutorials, discussions and self-directed learning activities.

**Required Reading:**Further readings and references will be provided by the Lecturer.Eburn, M. (2010). 3rd Emergency Law NSW: The Federation Press

**Assessment:**In order to obtain a pass or higher in this graded unit, all components of assessment must be passed. If the assessment item is failed, it may be resubmitted once only. Maximum possible marks to be obtained on any resubmission will be 50%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%. Assignment, Written Assignment #1 (500 words), 15%. Assignment, Written Assignment #2 (500 words), 15%. Case Study, Written Case Study (1000 words), 20%. Examination, Online Final Examination (3 hours), 50%. The total combined assessment word equivalence is approximately 5,000 words. Case study will be drawn from the student's (ambulance service) workplace. .

### HFP6901 Research Thesis (Full Time)

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral

Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### HFP6902 Research Thesis (Full Time)

**Locations:**Werribee, Industry, Footscray Park, St Albans.



**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HFP6911 Research Thesis (Part Time)

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the

School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### HFP6912 Research Thesis (Part Time)

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of

the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### HFS1140 Introduction to Food Science

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**This unit provides students with an introduction to food science. This unit provides students with an introduction to the discipline of food science and the potential career opportunities within the food industry, government, agricultural, marine, trade and other organizations both in Australia and internationally. Students will learn the basic concepts and principles of food composition, food processing, preservation and safety, and will explore possible solutions to world food supply problems.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the role of the food industry in Australia and overseas in meeting world food production challenges;
2. Discuss the composition of foods, including the accuracy and use of food composition data
3. Conceptually map the basic principles of food processing and the importance of food safety; and
4. Articulate basic food preservation techniques for various food commodity groups.

**Class Contact:**Lab2.0 hrsLecture2.0 hrs

**Required Reading:**Shewfelt, R. L. Orta-Ramirez, A. and Clarke, A.D. (2009) Second edition *Introducing Food Science: Issues, Products, Functions and Principles*, Boca Raton, FL, USA:CRC Press Referencing style to be consistent with APA or Harvard.

**Assessment:**Assignment, Two case study assignments (300 words each = 600 words), 30%. Examination, Final examination - 2 hour written paper, 50%. Exercise, Tutorial and online exercises, 20%. Combined assessments approximately equivalent to 3,000 words (year 1 level).

### HFS1142 New Communication Literacies for the Food Scientist

**Locations:**Werribee, St Albans.

**Prerequisites:**Nil

**Description:**This unit will explore the application and impact of current communication modalities in the food industry. It will provide the students with a critical understanding of the organisation, function and impact of communication media, and develop the student's ability to use such communication media. This unit aims to give students communication skills in written, oral, audio-visual and digital media, in order to develop good academic performance and to prepare the student for professional practice in the food industry in the 21st century.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate the technical skills required to perform research searches using the internet;
2. Identify and solve problems with intellectual independence;
3. Prepare academic reports at an appropriate year 1 university level;
4. Deliver clear and coherent messages to relevant audiences using a range of communication media;
5. Interrogate the role of new communication technologies for the food industry; and
6. Articulate and elaborate on the ethical, social, cultural and financial issues related to the use of these new technologies in the public domain.

**Class Contact:**Thirty-six (36) hours for one semester comprising lectures, tutorials/workshops and online activities. In addition, it is recommended that students spend 3 hrs a week in out-of-class activities such as studying and reading.

**Required Reading:**Needs to be updated

**Assessment:** Research Paper, Individual written research assignment (1000 words), 50%. Presentation, Team presentation using multi-media to present a solution to a food industry challenge/social issue, with marks given for creative use of new tech., 50%. Additional Information Item 1 - Assignment will be on food science problem/challenge to demonstrate internet searching and critical analysis skills, with marks given for written report (30%) and oral presentation (20%) Total word equivalence is 3000 words.

## HFS2001 Properties of Food

**Locations:** Werribee, Footscray Park, St Albans.

**Prerequisites:** HPC1001 - Food Components

**Description:** This unit will provide students with an understanding of the functional properties of carbohydrate, protein and fats in food. This will include the interactions between emulsifiers and flavours within a food matrix, and interactions between water-proteins, water, lipids, protein-proteins, protein-lipids, protein-carbohydrates, and carbohydrate-lipids. It will also provide students with the knowledge of conducting formal sensory evaluation of foods using all the sensory attributes. This core knowledge will underpin future learning for all aspects of the food production from physical characteristics related to shelf life, transportation and storage, to the sensory attributes for the consumer.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Review the functional properties of carbohydrate, protein and fats in food and interactions of ingredients in food systems; 2. Explain the interactions of emulsifiers with other food components; 3. Articulate principles underpinning laboratory testing and procedures of food physicochemical properties; 4. Elaborate on factors contributing to the stability of foods; and 5. Discuss similarities/differences in a range of dishes/products and suggest improvements.

**Class Contact:** Lab 3.0 hrs Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Damodaran, S., Parkin, K. & Fennema, O.R. (2008) 4th ed. Fennema's food chemistry Boca Raton : CRC press Walstra, P. (2003) Physical chemistry of foods New York : Marcel Dekker

**Assessment:** Assignment, Individual written assignment (1400 words), 20%. Report, Two (2) Lab reports (1000 words each), 30%. Examination, Written final examination (2 hours), 50%.

## HFS2002 Food Safety and Preservation

**Locations:** Footscray Nicholson, Werribee, Footscray Park, St Albans.

**Prerequisites:** HFS2003 - Food Microbiology

**Description:** This unit provides basic concepts and principles of food safety and preservation, food legislation and food standards as applied to production of safe, clean and hygienic food. Students will be introduced to the principles of various techniques of food preservation such as by controlling moisture, controlling temperature (cooking, pasteurizing, sterilizing, canning, chilling, freezing), using chemicals and irradiation, and modified atmospheres. The impact of the various preservation techniques on the product safety, quality and nutritional value of food will be discussed. They will also be introduced to the basic concept and principles of HACCP food safety methodology that ensures the production of clean and hygienic food, and will rigorously evaluate the cleaning and sanitation practices in the food, beverage, and hospitality industries, including retail and industrial food production settings. This unit of study will focus importantly on potential consequences of inadequate preservation and poor food safety management and the ethical dilemmas resulting from food recalls, foodborne illness outbreaks, and human illness and death. As such, students will have the opportunity to consider their individual

responsibility to the scientific community and the broader community at large, and develop an understanding of the intricacies of balancing individual and public good.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply and integrate the principles and practices of food safety management to preparation, production, preservation, storage and distribution of food; 2. Develop preparation and production techniques using the HACCP approach to ensure the production of safe, clean and hygienic food; 3. Analyse different methods of preservation and propose appropriate methods of preservation, including the concept of hurdles to control safety and quality risks; 4. Evaluate preparation and production processes in order to determine practical approaches to food safety; and 5. Plan and design innovative food safety procedures for food services and industrial processors.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** Links to additional reading and supporting material will be provided by the unit coordinator via VU Collaborate.

**Assessment:** Assignment, Two written assignments on current issues relevant to food safety and food preservation (500 words each), 30%. Presentation, Oral presentation and report (1000 words) on a team case study, 30%. Examination, Final Written Examination (2 hours, equal to 2000 words), 40%.

## HFS2003 Food Microbiology

**Locations:** Footscray Nicholson, Werribee, Footscray Park, St Albans.

**Prerequisites:** HPC1000 - Introduction to Human Nutrition and Food

**Description:** This unit will provide students with an understanding of the characteristics of commonly encountered foodborne pathogens, including bacteria, viruses, parasites and fungi. It will cover the ways in which these pathogens contaminate and survive in foods, possibly produce toxins and subsequently cause disease. The importance of indicator organisms and potential foodborne pathogens will also be covered.

Furthermore, the role of legislation and Australian and international standards relating to microbiological criteria for foods, control and prevention of food-borne diseases will also be examined to include hygiene, sanitation and waste treatment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Assess the interactions between microorganisms and food, and factors influencing their growth and survival; 2. Explain the significance and activities of microorganisms in food; 3. Summarise the characteristics of foodborne, waterborne and spoilage microorganisms, and methods for their isolation, detection and identification; 4. Advise why microbiological quality control programmes are necessary in food services and production; and 5. Determine the effects of fermentation in food production and how it influences the microbiological quality and status of the food product.

**Class Contact:** Lab 3.0 hrs Lecture 3.0 hrs

**Required Reading:** Bibek R., Arun B. (2013) 5th ed. Fundamental Food Microbiology Boca Raton: CRC press Montville, T.J., Karl R. Matthews, K.R., Kalmia E. Kniel, K.E., (2012) 3rd ed. Food Microbiology: An Introduction Washington: VA, USA Jay, J.M., Loessner, M.J., Golden, D.A. (2005) 7th ed. Modern Food Microbiology New York: Springer Aspen Publishers Inc.

**Assessment:** Assignment, Written research report (1000 words), 25%. Report, Practical work - two (2) lab reports (each approx. 500 words), 25%. Examination, Final examination (2 hours), 50%.

## HFS2004 Food Quality Assurance

**Locations:** Footscray Park, St Albans.

**Prerequisites:**HPC1001 - Food ComponentsHFS2003 - Food Microbiology

**Description:**Consumers expect high quality, safe food produced and packaged under hygienic conditions. When food is recalled because of contamination or spoilage, consumers lose confidence in our food production systems and the food industry suffers financial losses. In our global economy, where ingredients may be sourced from around the world and different manufacturing and production standards may be used, it becomes increasingly important to understand regulatory systems and ensure that standards are enforced. This unit provides an introduction to the concepts and principles of food quality evaluation assurance, food legislation, food standards, sensory and objective evaluation of foods and relevant testing. It explores the concept of quality from sensory, scientific, regulatory and legal perspectives, including the concepts of total quality control (TQC) and total quality management (TQM). The importance of quality assurance principles and systems and both Australian and International food standards codes are emphasized.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Review and apply principles of quality assurance and quality management systems in food manufacturing, distribution and services; 2. Interpret Australian and International food legislations and food standard codes with respect to quality assurance of a food in the food manufacturing and services sectors; 3. Assess principle statistical control techniques to assure the quality of a food; and 4. Identify and create particular sensory tests for evaluation of a food of interest with respect to quality assurance of that particular food within food production and services divisions.

**Class Contact:**Lab2.0 hrsLecture2.0 hrs

**Required Reading:**Hubbard, M. R. (2012) 3rd ed. Statistical quality control for the food industry. NY: Chapman and Hall Lyon, D.H., Francombe, M.A., Terry A. Hasdell, T.A. (2012) Guidelines for sensory Analysis in Food Product Development and Quality Control NY: Springer Publishers

**Assessment:**Assignment, Written Assignment (1500 words), 25%. Presentation, Oral Presentation based on the assignment topic (500 words equivalent), 10%. Report, Laboratory Report on testing food quality (1000 words), 15%. Examination, Final Written Examination (2 hours, 2000 words equivalent), 50%. Total combined assessment word equivalence is approximately 5000 words.

## HFS2212 Food Properties

**Locations:**Werribee, St Albans.

**Prerequisites:**HFS1140 - Introduction to Food ScienceRBF1140 - Introduction to Food, Nutrition and Health 1Either HFS1140 Introduction to Food Science or RBF1140 Introduction to Food, Nutrition and Health are required but not both.

**Description:**This unit will provide students with knowledge of the nutritional and chemical properties of food, food components, and the transformations resulting from food processing. Students will learn the chemistry of food components, the relationship of each type of food component with the nutritional value of foods, the effects of agricultural methods on food production, and the changes that occur during the processing, storage and cooking of food.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Articulate the factors that determine consumer acceptability of foods; 2. Identify the major food commodity groups and analyse their contribution to the nutritional value of diets; 3. Critically review the beneficial and negative changes in chemical and nutritional properties during food processing; and 4. Describe the common post-harvest changes in the chemical and nutritional value of food components.

**Class Contact:**Lab2.0 hrsLecture2.0 hrs

**Required Reading:**Damodaran, S., Parkin, K. and Fennema, O.R. (eds)., 2013 4th Edition Fennema's Food Chemistry CRC Press, Boca Raton, FL, USA Referencing style to be consistent with Harvard or APA

**Assessment:**Project, Group research project and oral presentation, 50%. Examination, Final Written Examination (2 hours), 50%. Additional Information Item 1 - Project - Students will work collaboratively in small teams to research a food processing process and consumer acceptability. Students will provide a written report (approximately 1500 words from each student) (30%) and 20 minute oral presentation to the class (20%). Total combined assessment word equivalence is approximately 4,000 words.

## HFS2214 Food Analysis 1

**Locations:**Werribee, St Albans.

**Prerequisites:**HFS1140 - Introduction to Food ScienceHFS2212 - Food Properties

**Description:**This unit emphasises experimental techniques as applied to food studies and the rationale for the various experimental procedures used in foods analysis. Topics will include: classifiable and instrumental methods of food analysis; principles and procedures for analysis of foods using HPLC, GC, UV/Vis, IR; statistical analysis in food analysis; analysis of macro and micronutrients of foods, method selection and development; food composition labelling; and analysis of colour, flavour and texture of foods.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Evaluate and defend the principles of and procedures for food analysis and labelling; 2. Compare and evaluate different methods used in the analysis of foods; 3. Distinguish amongst various methods used in quality control and in rapid screening techniques; 4. Estimate accuracy and reproducibility in food analysis; and 5. Propose, design and establish novel methods of food analysis.

**Class Contact:**Thirty-six (36) hours for one semester comprising lectures, tutorials, laboratories and site visits. St Albans - lectures and tutorials Werribee - practicals  
**Required Reading:**Nielsen, S. S. 2010 4th Edition Food analysis Spring Publishing Wrolstad, r. e. (Ed.), Acree, T. E. (Ed.), Decker, E. A. (Ed.), penner, M. H. (Ed.), Reid, D. S. (Ed.), Schwartz, S. J. (Ed.), et al. (2004) Handbook of food analytical chemistry Hoboken, NJ: John Wiley & Sons

**Assessment:**Assignment, One written assignment (1000 words), 25%. Practicum, Practical work: 1 report on site visit + 1 food analysis (500 words each), 25%. Examination, One 2 hour written examination, 50%. Combined assessments are approximately equivalent to 4000 words (year 2 level).

## HFS2215 Physicochemicals Properties of Foods

**Locations:**Werribee, St Albans.

**Prerequisites:**HFS2212 - Food Properties

**Description:**Consumers demand high quality, attractive food, and this requires an understanding of the factors that contribute to food stability, characteristics such as long shelf-life, and physical characteristics that withstand transport and storage. This unit will explore the physicochemical properties of foods including visual, ofactory and other sensory attributes that contribute to stability and consumer attractiveness.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Design and implement appropriate laboratory testing of the physicochemical properties of food; 2. Articulate the principles underpinning the laboratory testing procedures; and 3. Identify and elaborate on the factors contributing to the stability of foods.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs

**Required Reading:** Textbooks, journal readings will be assigned for weekly topics.

**Assessment:** Assignment, Individual written assignment (1400 words), 30%. Report, 2 Lab reports (300 words each = 600 words total), 20%. Examination, Written final examination 2 hours, 50%. Total word equivalence is approximately 4000 words.

## HFS2216 Food Analysis 2

**Locations:** Werribee, St Albans.

**Prerequisites:** HFS1140 - Introduction to Food Science

**Description:** This unit concentrates on the rationale for analytical procedures used in food science as well as experimental designs and statistical analyses appropriate to the nutritive value of foods. Topics will include: bomb calorimetry; biochemical markers of dietary intakes; animal feeding trials; N balance studies; amino acid score, digestibility of food, dietary instrument design, energy values of nutrients; analysis of nutritive value of foods and use of analysis software.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Debate the advantages and disadvantages of a range of techniques used in food research;
2. Select and defend experimental methods appropriate to particular research objectives and designs;
3. Identify the limitations of presently-available experimental methods in assessing dietary intakes; and
4. Demonstrate the correct procedures for interpreting food composition data.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures and practical laboratories. St Albans - lectures and tutorials Werribee - practicals

**Required Reading:** Nielsen, S. S. 2010 4th Edition Food analysis Springer Publishing

**Assessment:** Practicum, Practical work and 4 laboratory reports (500 words each), 50%. Examination, One 2 hour written examination, 50%. Combined assessments are approximately equivalent to 4000 words (year 2 level).

## HFS3001 Food Processing

**Locations:** Footscray Nicholson, Werribee, Footscray Park, St Albans.

**Prerequisites:** HPC1001 - Food Components

**Description:** This unit will provide students with the basic concepts and principles about global food resources and the distribution of food products. Students will learn the preservation and processing techniques for various food products and the manufacturing and use of fractionated products and by-products. This knowledge provides the foundations to address changing patterns of food consumption and production world-wide and meet increasing food needs of the population

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically appraise and defend the techniques used in processing of foods;
2. Articulate and apply the mechanisms underlying short and long term food preservation using authentic case studies from the food industry;
3. Conceptually map the positive and negative effects of processing and preservation on various foods; and
4. Plan and design innovative food processing techniques to solve complex problems related to the safety and quality of processed foods.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Reading materials will be negotiated in consultation with the lecturer(s) and will be appropriate to the topic under investigation.

**Assessment:** Test, class test (30mins), 10%. Presentation, Oral presentation (10mins/student), 10%. Assignment, Assignment (2000 words), 30%. Examination, Final examination (2 hours), 50%.

## HFS3132 Food Biotechnology

**Locations:** Werribee, St Albans.

**Prerequisites:** RBF3730 - Food Microbiology RBM2260 - Diet and Nutrition

**Description:** This unit will explore the application and impact of current innovative and often controversial biotechnology processes to the food industry. Students will gain knowledge of the current principles and application of biotechnology and genetic engineering techniques to food processing, including the production of nutraceuticals. In addition, students will gain an understanding of the ethical, social and legislative issues related to the use of biotechnology in food production. This unit will focus on enzymology, bio separations, biotransformation, industrial microbiology, fermentation technology, and the production and application of food enzymes in food production.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Elaborate the factors and conditions influencing enzyme action, and identify and explain the process used in bio separations;
2. Explain biochemical mechanisms involved in bio-transformation;
3. Conceptually map the fermentation process involved in food and beverage production;
4. Analyse the production and use of food enzymes in food processing;
5. Interrogate the production and use of genetically modified micro-organisms as starter cultures; and
6. Critically review the legislative, ethical and social issues related to biotechnology in food production.

**Class Contact:** Sixty (60) hours for one semester are comprised of lectures, laboratory/practical sessions, and tutorials: 3 hour lecture: Weeks 1-12 of semester (36 hours) 3 hour laboratory: Weeks 2-8 of semester (21 hours) 1 hour tutorial: Weeks 9-11 (3 hours) In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 5 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** Pometto, A., Shetty K., Palvath, G., Levin R., 2008 2nd Edition Food Biotechnology CRC Press

**Assessment:** Research Paper, Individual written research assignment (1500 words) on the application of biotechnology and ethical/social implications, 30%. Laboratory Work, Two Lab reports 750 words (total = 1500 words), 30%. Examination, 2 hour examination with short answer and long answer question, 40%. Total assessment word equivalence is 5000.

## HFS3233 Managing Food Enterprises

**Locations:** Werribee, Footscray Park, St Albans.

**Prerequisites:** HPC1000 - Introduction to Human Nutrition and Food

**Description:** This unit examines the attributes of small, medium and large scale food manufacturing enterprises, and their management and financial characteristics. Students will gain knowledge of the managerial arrangements, and the principles of financial and human resources management that will prepare them for the food industry workforce.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse the range of operations used in food manufacturing;
2. Critically review the optimal management of factory timelines;
3. Conceptually map the principles of human resources management;
4. Interrogate the legislative occupational health requirements of food manufacturing;
5. Propose solutions to unit operation problems in a variety of settings; and
6. Prepare simple business plans and planned maintenance schedules for food manufacturing enterprises.

**Class Contact:** Forty-eight (48) hours for one semester, comprising lectures, tutorials, and workshops/practical sessions: 2 hour lectures: Weeks 1-12 of semester (24 hours) 2 hour tutorials/workshops: Weeks 2-11 of semester (20 hours) Observation

excursions to industrial food processors may be arranged as appropriate. In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 3 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** The Lecturer will provide students with a selection of Journals and Websites.

**Assessment:** Assignment, Written Assignment (individual) - business plan and maintenance schedule (1500 words), 30%. Assignment, Written Team Assignment and Presentation - proposed solution to operations challenge (1500 words + 20 min. presentation), 30%. Examination, Examination (2 hours, short answer and long answer questions), 40%. Total combined assessment word equivalence is approximately 5000 words.

### HFS3234 Plant Food Processing

**Locations:** Werribee, St Albans.

**Prerequisites:** RBF2242 - Food Preservation

**Description:** Most of the world subsists on plant-based diets with grains or cereals as staple foods. This unit explores the nature, distribution and production of global plant food resources. Students will learn about the composition, functional properties and uses of commodity foods such as rice, wheat, fruit, vegetables, sugar, tea, coffee, fats and oils, as well as how various components are isolated and used in other products. Anti nutritional components are also examined.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically appraise the techniques used in processing of plant foods such as fruits, vegetables, grains, sugar, tea and coffee; 2. Articulate the mechanisms underlying the short and long term preservation of plant foods such as fruits, vegetables, grains, sugar, tea and coffee; and 3. Conceptually map the positive and negative effects of food processing and preservation on the nutrient content, structural properties and sensory attributes of a variety of plant foods.

**Class Contact:** Thirty-six (36) hours for one semester comprising lectures, tutorials and practicals. St Albans - lectures and tutorials Werribee - practicals

**Required Reading:** Reading materials will be negotiated in consultation with the lecturer(s) and will be appropriate to the topic under investigation.

**Assessment:** Assignment, Team case study assignment (approximately equal to 2000 words each student), 40%. Presentation, Oral presentation by team of final project (approximately equal to 1000 words per student), 20%. Examination, Final examination (2 hours), 40%. Individual assessment tasks combined equate to approximately 5000 words (year 3 level).

### HFS3235 Functional Foods

**Locations:** Werribee, St Albans.

**Prerequisites:** RBF3256 - Food Product Development

**Description:** This unit examines the role and potential of functional foods in human health, including the role of gut microflora, probiotics, prebiotics and symbiosis, natural anti-microbial substances in human nutrition, micronutrient supplementation programs, and genetically modified foods. Students will gain knowledge of the health benefits of a range of functional foods, their preparation, and the ethics of their use in public health campaigns, micronutrient supplementation of foods, and probiotics.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Elaborate and defend the role of gut microflora in human health; 2. Critically

review the health benefits of probiotics and prebiotics to human health; 3. Conceptually map the process involved in developing a new functional food; 4. Analyse the production and use of micronutrient supplementation in common foods; and 5. Interrogate the production and use of genetically modified functional foods.

**Class Contact:** Forty-eight (48) hours for one semester, comprising lectures, tutorials, and workshops/practical sessions: 2 hour lectures: Weeks 1-12 of semester (24 hours) 2 hour tutorials/workshops: Weeks 2-11 of semester (20 hours) In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 3 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** Stallings, W., 2014 6th Edition Cryptography and network security: principles and practices Prentice Hall

**Assessment:** Assignment, Written research assignment critically reviewing the evidence supporting the health benefits of a functional food (1500 words), 30%. Assignment, Written research proposal for the development of a new functional food (1500 words), 30%. Examination, 2 Hour examination with short answer and long answer questions, 40%. Total word equivalence is 5000 words.

### HFS8900 Food Sciences and Technology (Full-Time)

**Locations:** Werribee, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist

(industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations;. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals;. 6. intellectual independence, initiative and creativity in new situations and/or for further learning;. 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:**Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

### HFS8901 Food Sciences and Technology (Part-Time)

**Locations:**Werribee, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly

publications, reports and formal presentations;. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals;. 6. intellectual independence, initiative and creativity in new situations and/or for further learning;. 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:**Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

### HH1171 Anatomy 1

**Locations:**City Flinders, St Albans.

**Prerequisites:**Nil.

**Description:**HH1171 Anatomy 1 introduces students to anatomical studies and develops a broad knowledge of the regional musculoskeletal anatomy of the upper limb, head and neck, spine, thorax and abdomen. This unit provides the fundamental knowledge for subsequent anatomy units within the Bachelor of Science (Clinical Sciences). The major topics examined include the arthrology, osteology, neurology, angiology and myology of the upper limb, head and neck, spine, thorax and abdomen. An introduction to the somatic and autonomic nervous systems and the clinical applications of the musculoskeletal anatomy covered within the unit are also addressed. Anatomy 1 complements HH01170 Osteopathic Science 1.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Apply anatomical language to identify and describe structures, planes and motions of the musculoskeletal system; 2. Locate, on models and cadaveric specimens, the bones, muscles, joints, ligaments, nerves and vasculature of the upper limb, head and neck, spine, thorax and abdomen; 3. Summarise the features of the bones, muscles, joints, ligaments, nerves and vasculature of the upper limb, head and neck, spine, thorax and abdomen; and 4. Analyse the three dimensional relationship between the anatomical structures of the upper limb, head and neck, spine, thorax and abdomen.

**Class Contact:**Seventy-two (72) hours for one semester comprising of lectures, tutorials and laboratory practicals.

**Required Reading:**Moore, K. L., & Dalley, A. F. (2014). (7th ed.). Clinically oriented anatomy. Philadelphia: Lippincott Williams & Wilkins.

**Assessment:**Examination, End of Semester Practical/Oral (15 min), 30%.

Examination, End of Semester Written Theory Exam (2 hour), 50%. Test, Two tests (MCQs) held week 5 & 10, 20%. Total combined assessment word equivalency is approximately 3000 words. Students are required to participate in practical and tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the semester tests and each end-of-semester examination is required to satisfactorily complete the unit overall. .

### HH1272 Anatomy 2

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHA1171 - Anatomy 1

**Description:** HHA 1272 students will develop a broad knowledge of the regional musculoskeletal anatomy of the pelvis and lower limb. This unit, the second in a series of four anatomy units within the Bachelor of Sciences (Clinical Sciences), provides students the opportunity to build on their developing knowledge of anatomy. The major topics are arthrology, osteology, neurology, angiology and myology of the pelvis and lower limb. This unit complements HHA 1271 Osteopathic Science 2.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Use anatomical language to describe structures, planes and motions of the musculoskeletal system of the lower body;
2. Identify, on models and cadaveric specimens, the bones, muscles, joints, ligaments, nerves and vasculature of the lower body;
3. Describe in detail the features of the bones, muscles, joints, ligaments, nerves and vasculature of the lower body;
4. Describe in detail the three dimensional relationship between the anatomical structures covered;
5. Identify and explain the clinical relevance of key anatomical features of the lower body; and
6. Employ a basic level of anatomical problem solving and clinical reasoning.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures, tutorials and laboratory practicals.

**Required Reading:** Moore, K. L., & Dalley, A. F. (2014). (7th ed.). Clinically oriented anatomy. Philadelphia: Lippincott Williams & Wilkins.

**Assessment:** Total combined assessment word equivalency is approximately 3000 words. Students are required to participate in practical and tutorial sessions with at least 90% attendance except under extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the mid semester tests and each end-of-semester examination is required to satisfactorily complete the unit overall. Test, Week 5 and 10 of semester (Online), 20%. Examination, End of semester practical/oral (15 minutes), 30%. Examination, End of semester practical/oral 2-hour written, 50%.

### HHA2171 Anatomy 3

**Locations:** City Flinders, St Albans.

**Prerequisites:** Nil.

**Description:** HHA2171 Anatomy 3 students will develop a broad knowledge of the visceral anatomy of the head and neck (cranial nerves, respiratory system), thorax (heart and great vessels, respiratory system, mediastinum,), abdomen (spleen, renal system) and pelvis (urogenital systems), including the nerve supply, circulation, lymphatic drainage and histology of visceral tissues. This unit, the third in a series of four anatomy units within the Bachelor of Sciences (Clinical Sciences), provides students the opportunity to build on their developing knowledge of anatomy. This unit complements topics in HHY2172 Pathology 2 and HHP2171 Clinical Physiology 2.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply anatomical language to identify and describe structures within the human head (cranial nerves), neck (respiratory system), thorax (respiratory system, heart and great vessels, mediastinum), abdomen (spleen, renal system) and pelvis (urogenital system);
2. Exhibit knowledge of the Autonomic Nervous System and its relationship to viscera;
3. Locate on models and cadaveric specimens visceral structures including the nerve supply and vasculature;
4. Articulate knowledge of the anatomy of the human head, neck, thorax, abdomen and pelvis appropriately to peers, lay and professional audiences; and
5. Relate relevant anatomical structures within the human head, neck, thorax, abdomen and pelvis to osteopathic

practice.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Moore, K. L., & Dalley, A. F. (2014). (7th ed.). Clinically oriented anatomy. Philadelphia: Lippincott Williams & Wilkins.

**Assessment:** Total combined assessment word equivalency is approximately 4000 words. Students are required to participate in practical and tutorial sessions with at least 90% attendance except in extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the mid semester tests and each end-of-semester examination is required to satisfactorily complete the unit overall. The practical examination for this unit has increased from 30% weighting to 40% from Anatomy 2 (first year unit). The practical application of anatomy is crucial to Osteopathic practice and students have had the experience of practical examinations in previous units (HHA1171 & HHA1272). The 40% weighting reflects the importance of the practical application of anatomy. Test, Week 5 and 10 of Semester On Line Tests, 20%. Examination, End of Semester Practical / Oral examination (15 min), 40%. Examination, End of Semester Written examination (2 hours), 40%.

### HHA2272 Anatomy 4

**Locations:** City Flinders, St Albans.

**Prerequisites:** HHA2171 - Anatomy 3

**Description:** HHA 2272 Anatomy 4 students will develop a broad knowledge of the visceral anatomy of the head (orbit, ear, nose, nasal cavity, paranasal sinuses, oral cavity, salivary glands), neck (pharynx, thyroid and parathyroid glands), thorax (oesophagus, mediastinum,) and abdomen (stomach and intestinal tract, pancreas, suprarenal glands, liver and gall bladder) including the nerve supply, circulation, lymphatic drainage and histology of visceral tissues. This unit, the fourth in a series of four anatomy units within the Bachelor of Sciences (Clinical Sciences), provides students the opportunity to build on their developing knowledge of anatomy. This unit complements topics in HHY2273 Pathology 3 and HHP2272 Clinical Physiology 3.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply anatomical language to identify and describe structures within the human head (Orbit, Ear, Nose, Nasal and Paranasal Sinuses, Oral Cavity, Salivary Glands), neck (Pharynx, Larynx, Thyroid and Parathyroid Glands), thorax (Oesophagus and Mediastinum) and abdomen (Stomach and Intestinal Tract, Pancreas, Suprarenal Glands, Liver and Gall Bladder);
2. Exhibit knowledge of the Autonomic Nervous System and its relationship to viscera;
3. Locate on models and cadaveric specimens visceral structures including the nerve supply and vasculature;
4. Articulate knowledge of the anatomy of the human head, neck, thorax and abdomen appropriately to peers, lay and professional audiences; and
5. Relate the relevant anatomical structures within the human head, neck, thorax and abdomen to osteopathic practice.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Young, B., Woodford, P. & O'Dowd, D. (2014). (6th ed.). Wheater's functional histology. A text and colour atlas. Philadelphia: Churchill Livingstone. Moore, K. L., & Dalley, A. F. (2014). (7th ed.). Clinically oriented anatomy Philadelphia: Lippincott Williams & Wilkins.

**Assessment:** Total combined assessment word equivalency is approximately 4000 words. Students are required to participate in practical and tutorial sessions with at least 90% attendance except in extenuating circumstances (hurdle requirement). A minimum pass grade (50%) for the mid semester tests and each end-of-semester examination is required to satisfactorily complete the unit overall. Test, Week 5 and 10 of Semester On Line Tests, 20%. Examination, End of Semester Practical / Oral



examination (15 min), 40%. Examination, End of Semester Written examination (2 hours), 40%.

### HHA3175 Anatomy 5 (Clinical Neurology)

**Locations:**City Flinders, St Albans, Lectures, workshops and tutorials will be held on the City Flinders campus while laboratory sessions will be held on the St Albans campus.

**Prerequisites:**HHA2272 - Anatomy 4

**Description:**HHA3175 Anatomy 5 aims to build on Osteopathic students' knowledge of neuroanatomy and aid them in developing an integrated understanding of the major components of the nervous system, their neuroanatomy and physiology, and an ability to critically apply this knowledge to clinical problem solving.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Investigate and describe the gross and developmental anatomy of the nervous system;
2. Explain and discuss the clinical implications of the three dimensional relationship between the neuroanatomical structures covered;
3. Conceptually map the integrated functions of the nervous system at a neurological and systemic level; and
4. Critically apply this knowledge to demonstrate capabilities of problem solving and clinical reasoning.

**Class Contact:**Lab 1.0 hrLecture 2.0 hrsTutorial 1.0 hrWorkshop 1.0 hr

**Required Reading:**Bear, M. F., Connors, B. W., & Paradiso, M. A. (2007). (3rd ed.). Neuroscience: Exploring the brain. Philadelphia: Lippincott Williams & Wilkins. Nolte, J. (2009). (6th ed.). The human brain: An introduction to its functional anatomy. St Louis, MO: Mosby. Nolte, J., & Angevine, Jr. J. B. (2000). (2nd ed.). The human brain in photographs and diagrams. St Louis, MO: Mosby.

**Assessment:**Test, Mid-semester exam (30 minute online quiz- 750 words equivalent), 15%. Examination, Combined practical/oral exam (20 minutes in total- 1500 words equivalent), 30%. Examination, Written Exam (2 hours- 2000 words), 40%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment. The total word equivalence of the combined assessment tasks equates to 5000 words for a 12 credit point unit. .

### HHA3276 Anatomy 6 (Clinical and Radiology)

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHA3175 - Anatomy 5 (Clinical Neurology)

**Description:**HHA3276 Anatomy 6 aims to build on Osteopathic students' knowledge of regional anatomy and aid them in developing an integrated understanding of how various regions work together functionally and an ability to critically apply this knowledge to clinical problem solving and the systematic review of radiographs.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Identify and describe in detail, anatomical structures and relationships from a regional perspective;
2. Prosect cleanly and accurately a nominated musculo-skeletal region of the human body;
3. Communicate knowledge of anatomy to colleagues and to lay people in ways that each group can understand, and using prosected material, anatomical models or radiographs as appropriate;
4. Explain the relationships between anatomical structure, function and dysfunction from a regional and clinical perspective; and
5. Systematically review and describe a radiograph and communicate your findings to colleagues and to lay people in ways that each group can understand.

**Class Contact:**Lab 1.5 hrsLecture 1.0 hrTutorial 1.0 hrWorkshop 1.0 hrClinical Anatomy Lectures and tutorials will be delivered at the City Flinders Campus, while Clinical Anatomy Dissection classes are conducted in the Anatomy Laboratory on the St Albans campus. Radiographic Anatomy lectures and tutorials will be delivered online using VU Collaborate.

**Required Reading:**Agur, A., & Dalley, A. F. (2008). (12th ed.). Grant's atlas of anatomy. United States, Lippincott Williams & Wilkins. American Psychological Association. (2001). (5th ed.). Publication manual of the American Psychological Association. Washington, DC: Author. Moore, K. L., & Dalley, A. F. (2010). (6th ed.). Clinically oriented anatomy. Baltimore, Lippincott Williams & Wilkins. Wicke, L. (2004). (7th ed.). Atlas of radiologic anatomy. Baltimore, Saunders.

**Assessment:**Project, Prosection project (500 words equivalent), 15%. Presentation, Oral presentation of cadaveric prosection (10 minutes- 500 words equivalent), 15%. Presentation, Group presentation on the clinical anatomy of a common condition (10 minutes- 500 words equivalent), 20%. Examination, 20 minute OSCE Exam involving 2 x 10 minute practical/oral stations (1000 words equivalent), 50%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. The total word equivalence of the combined assessment tasks equates to 2500 words for a 6 credit point unit.

### HHB1104 Introduction to Public Health and Wellness

**Locations:**Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**This unit will assist students to develop skills in describing the origins and concepts of public health and its relationship to contemporary public health initiatives, challenges and practices. Students will gain knowledge on health and its determinants and how these impact on public health interventions. The role of public health at each stage of the disease continuum will be used to introduce definitions and interventions that address identified health priorities.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the development of primary health care and public health in Australia and beyond;
2. Explain the basic principles and concepts that underpin public health practice;
3. Identify the potential role and the interface of political, cultural, social, behavioural and environmental determinants of health in the design and delivery of public health programs;
4. Recognise local, national and global health disparities including the determinants of inequity;
5. Identify, analyse and act on information from a range of sources related to public /population health and wellness;
6. Prioritise health issues affecting Australia's diverse population;
7. Participate in debates and reflection on public health and practice; and
8. Demonstrate in their writings and presentations their respect for diversity; underpinned by concern for equity, equality, humanity and social justice.

**Class Contact:**Lecture 2.0 hrsTutorial 2.0 hrs

**Required Reading:**Fleming, M.L. and Parker, E. (2011) 2nd ed. Introduction to Public Health Churchill Livingstone, Elsevier, Sydney

**Assessment:**Portfolio, Response to guided questions on a media article (1000 words), 30%. Test, Multiple Choice Quiz (1000 words), 30%. Presentation, Group Presentation and Portfolio (1500 words), 40%. Total combined assessment word equivalence is approximately 3000-3500 words.

### HHB1105 Evidence and Health 1

**Locations:**St Albans.

**Prerequisites:** Nil.

**Description:** This unit introduces students to the different sources of public health information and develops their skills in identifying, locating, retrieving and evaluating health literature based on evidence. While the emphasis of the unit is on scientific literature students will also be exposed to other sources of health information around evaluating health care claims. The unit introduces students to different research methodologies used in health care literature and further assists them to develop basic writing skills.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the origins and development of evidence based practice;
2. Identify health literature in population health;
3. Search for evidence using bibliographic data bases;
4. Briefly describe qualitative and quantitative research methodologies;
5. Summarise scientific papers on public health;
6. Question the validity of health claims in the population; and
7. Identify barriers and facilitators to implementing evidence-based practice.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Liampittong, P. (2010) 2nd ed. Research methods in health: Foundations for evidence-based practice. Melbourne, Vic: Oxford university Press Fleming, M., Parker, E. (2011) 2nd ed. Introduction to Public Health Churchill Livingstone: Elsevier Australia. Aveyard, H. (2014) 3rd ed. Doing a literature review in health and social care: A practical guide. Maidenhead: McGraw-Hill Education.

**Assessment:** Assignment, Summarise one journal article (300 words), 10%. Project, Group health related poster and presentation (1200 words), 40%. Annotated Bibliography, Annotated Bibliography of Media Health Claims and associated evidence (600 words), 20%. Test, In class tests x 3 (900 words), 30%. Total combined assessment word equivalence is 3000 words.

## HHB1106 Professional Pathways in Health Sciences

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** It is widely acknowledged that the health workforce in Australia is under tremendous pressure because of an ageing population, growth in chronic disease and increased community expectations. It is essential to build capacity by delivering more professionals more quickly and efficiently and boosting productivity with new workforce models that maximise the skills and flexibility of all health professionals across the entire workforce. Who are our existing health professionals? What is their training and where do they work? How do they interact with each other? This unit examines these questions as a basis for assisting students locate their study of health sciences and plan their career within the contemporary health workforce.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify contemporary trends which influence the practice of health professionals;
2. Explain the nature of various health professions and identify likely work settings;
3. Articulate and demonstrate knowledge and skills implicit in the notion of 'inter-professional practice';
4. Locate and explore career options for their disciplinary studies in 'health sciences';
5. Compose entries into an e-portfolio as a means of documenting and reflecting upon strategies for future learning and work; and
6. Demonstrate skills in participating in group work and preparing collaborative assessments.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs Forty-eight (48) hours per semester consisting of lectures, tutorials or visits to health and community settings. Students should expect to spend an additional two (2) hours in independent study.

**Required Reading:** Recommended reading will be provided by the Unit Co-ordinator.

**Assessment:** Case Study, Brief description and analysis of known health setting and experience within it (500 words), 10%. Report, Interview with health professional (1000 words), 40%. Portfolio, E-portfolio compilation of information, reflections and strategies for future learning and career options (1500 words), 50%. Individual assessment tasks combined equate to approximately 3000 words equivalent.

## HHB1203 Patterns of Health and Disease

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The unit introduces students to disease patterns and their causes in diverse populations. The basic theory of epidemiological inquiry will be explored using case studies to develop student's knowledge of epidemiology and its application in public health. The health profile of Australia's population will be used to introduce students to common chronic diseases, their distribution in the population and the opportunities and challenges in addressing them through public health interventions.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify common chronic health conditions and their distribution across community groups in Victoria and Australia;
2. Outline the risk factors and causes of chronic diseases affecting Australia's population;
3. Describe basic epidemiological approaches to disease causation, patterns and interventions;
4. Explain how epidemiological concepts has been applied to the understanding of disease patterns in Australia and the identification of health priorities; and
5. Demonstrate knowledge of new and emerging diseases within the community.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Buettner, P., & Muller, R. (2011) Epidemiology South Melbourne, Vic: Oxford University Press RECOMMENDED TEXTS AND READINGS: McCance, K. L., & Huether, S. E. (2014). Pathophysiology: The biologic basis for disease in adults and children. 7th ed. St. Louis, Missouri: Elsevier. Gordis, L. (2004). Epidemiology. 3rd ed. Philadelphia: Elsevier Saunders.

**Assessment:** Presentation, Group presentations (4 hours total time including 3 hours preparation time), 35%. Assignment, Online Activity and contributions (500 words), 15%. Assignment, Written Assessment (1500 words), 50%. For Students to successfully complete this Unit, Students are expected to have an aggregate score of 50% in the Assessments Tasks and required 80% attendance at Tutorials. Total combined assessment word equivalence is 3000 words.

## HHB1204 Australian Health and Social Care Systems and Policy

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit introduces students to the Australian healthcare system and policies. It explores the public versus private health sectors and the role of the different levels of government in healthcare delivery. It demonstrates how Australian healthcare systems compare with other regional and global health systems. It provides a comprehensive introduction to the diversity of the health workforce, health management and health decision making in Australia. Students are introduced to some key international health policies that inform local health policies. It introduces health policy development process and role of stakeholders in policy.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the policy development processes in relation to the Australian health policy;
2. Examine how the Australian healthcare system functions;
3. Outline the Australian health workforce and the roles and responsibilities of the different

stake holders; 4. Describe how Australia's health policies align with regional and other global health policies.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**Duckett, S., & Willcox, S. (2011) 4th The Australian Health Care System South Melbourne, Vic: Oxford University Press.

**Assessment:**Assignment, Assignment 1 (equivalent 1000 words), 30%. Assignment, Assignment 2 (equivalent 1000 words), 30%. Examination, Final Written Exam (1.5 hours), 40%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. Assignment 1 will be submitted by week 5 of semester and feedback about performance in this assessment will be provided in order to guide and support students in their future learning in the unit of study.

### HHB1205 Challenge: a Healthy West

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:** In the challenge unit "A Healthy West", students will be involved in teams to explore the contribution Voluntary Organisations in the West make to raising key public health issues. Focusing the challenge around voluntary organisations the students will gain important insight into how these organizations work to raise awareness of key public health issues in the western region and support social change which is required to address the key determinants of good health. Students will be required to investigate, synthesise and contextualise their learning from previous and concurrent units in body structure and function, notions of health and wellness, patterns of disease, the health care system, the health workforce and the collection and evaluation of evidence.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Relate Voluntary Organisations priorities to the western region of Melbourne;
2. Identify, propose and justify strategies for investigating the take-up of priorities;
3. Produce and present a case study (individual or community) which encapsulates the progress of Voluntary Organisations priorities in the western region of Melbourne; and
4. Identify and demonstrate in structured situations the skills required to work collaboratively to maximise team outputs.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**Nil required Texts. The Lecturer will provide reading materials as appropriate.

**Assessment:**Annotated Bibliography, Addressing the Voluntary Organisations priorities in the Western Melbourne Region (Team - 500 words each), 20%. Project, Project Proposal (Team - 1000 words each), 20%. Report, Written Report on Team Project (1000 words each), 40%. Presentation, Team Project Presentation (20 minutes), 20%. Each team member is expected to make a 2500 word equivalent contribution to team tasks.

### HHB2000 Social Epidemiology

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**The unit introduces students to the social distribution and social determinants of states of health in national, including indigenous and global contexts. Social epidemiology seeks to understand the ways in which social, psychological, political, cultural and economic circumstances influence our chances for a healthy life. It examines theory from the social sciences with rigorous epidemiological methods so that we can illuminate the connections between social factors and health and use what we find to improve health. It will identify social

environmental exposures that may be related to a broad range of physical and mental health outcomes. It will focus on specific socio phenomena such as a socio economic stratification, social network and support, discrimination, work demands and control.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the historical framework for social epidemiology;
2. Determine common key social determinants that contribute to states of health;
3. Advise the connections between social inequalities and health inequalities;
4. Evaluate health behaviours and their contributions to overall health.

**Class Contact:**Forty eight (48) hours for one semester, comprising lectures, flipped classes, workshops and e-learning.

**Required Reading:**Berkman,L.F., Kawachi,I. & Glymour,M. (2014) 2nd ed. Social Epidemiology New York, Oxford University Press RECOMMENDED TEXTS AND READINGS: McCance, K. L., & Huether, S. E. (2014). Pathophysiology: The biologic basis for disease in adults and children. (7th ed.). St. Louis, Missouri: Elsevier. Gordis, L. (2004). Epidemiology. (3rd ed.). Philadelphia: Elsevier Saunders.

**Assessment:**Test, Test (500 words), 15%. Assignment, Group presentation, 35%. Examination, Examination 1.5 hours (1500 words equivalent), 50%. Students are expected to attempt all pieces of assessment and must obtain a total aggregate score of 50% or greater to pass the unit. The test will be run in week 5 of semester and feedback about performance in this assessment will be provided in order to guide and support students in their future learning in the unit of study.

### HHB2301 Health Promotion

**Locations:**Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**This unit introduces students to the primary health care approaches, conventions and practice strategies for health promotion and injury prevention across the lifespan, in diverse population groups and diverse settings. Central to the unit is the study of effective frameworks for disease prevention and the importance of partnerships, supportive environments, participation and capacity development for successful health promotion. Models of health behaviour will be examined and applied to the practice of health promotion.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically analyse the evolution of the health promotion movement as articulated in various health charters of the 20th and 21st Century;
2. Illustrate knowledge of health promotion principles, and frameworks used in health;
3. Determine the elements of successful health promotion projects and programs; and
4. Utilise health behaviour models in health promotion projects.

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrs

**Required Reading:**Naidoo,J.,Wills, J. (2012) 3rd ed. Foundations for Health Promotion London: Bailliere Tindal/Elsevier Talbot, L., & Verrinder, G. (2014) 5th ed. Promoting health: The primary health care approach Sydney: Churchill Livingstone/Elsevier Recommended Reading; Egan, G. (2014) The skilled helper: A problem-management and opportunity development approach to helping. Belmont, CA:Brooks/Cole,Cengage Learning.

**Assessment:**Presentation, Individual class presentation (1200 words), 50%. Other, Group health promotion activity development and presentation (2000 words), 50%. The total combined assessment word equivalence is approximately 3200 words.

### HHB2302 Health Culture and Society

**Locations:**St Albans.

**Prerequisites:** Nil.

**Description:** This unit will examine and promote transcultural health and cultural competency in healthcare. Ethics of social care and cross cultural awareness in health care delivery will be an important focus of this unit. Models of health behaviour will be explored and applied to the practice of cross cultural health promotion and health delivery. The principles of social justice, gender equity, inclusion and exclusion especially in decision making will be studied. Health communication by service providers and interpreters in a diverse Australia and the influences of culture in service delivery will also be addressed. Central to the unit is the study of effective frameworks for appropriate health delivery to disadvantaged groups. The cultural determinants of health will be revisited.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate the diversity of the Australian population, health care providers and consumers of health care;
2. Evaluate the significance of transcultural health care and frameworks such as cultural competence, social model of health and human rights in health care delivery;
3. Develop and justify culture specific competencies essential for the provision of care to Australia's diverse population groups;
4. Examine and illustrate the role of allied service providers in cross culture health care delivery;
5. Argue the concept of respect for diversity which is underpinned by the principles of social justice, equity and humanity; and
6. Critique social policies relating to cross cultural health delivery in a multicultural Australia.

**Class Contact:** Lecture 4.0 hrs

**Required Reading:** Gray, D., (2006) Health Sociology An Australian Perspective. Frenchs Forest NSW: Prentice Hall. Purnell, L. D. (2012) 4th Edition Transcultural health care: A culturally competent approach. Philadelphia: F. A. Davis Company  
**RECOMMENDED READING** Egger, G., Binns, A., & Rossner, S. (2011). Lifestyle medicine: Managing diseases of lifestyle in the 21st century. (2nd Edition). North Ryde, NSW: McGraw-Hill Hampton, R., & Toombs, M. (2013). Indigenous Australians and health: The wombat in the room. South Melbourne, Victoria: Oxford University Press.

**Assessment:** Assignment, Group assignment (2000 words), 50%. Case Study, Reflective Journal (500 words), 10%. Examination, 2 hour written exam (1500 word equivalent), 40%. Total assessment word equivalence is 4000 words.

## HHB2303 Health and Behaviour

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The focus of this unit will be skills development and acquisition in psychosocial health and wellbeing in the community with a focus on Melbourne and Australia's diverse population groups. Prevalent psychosocial health conditions in the community shall be explored with emphasis on body, mind, soul and intrinsic health issues. Strategies for prevention, health restoration and management shall be examined in conjunction with policies on psychosocial health promotion and government initiatives to promote individual and community psychosocial health and wellbeing.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate the incidence of psychosocial illness occurrence and distribution across different population groups;
2. Debate and apply management strategies, support and care approaches for families and communities in relation to psychosocial health; and
3. Analyse policy initiatives and programs directed at addressing psychosocial health in the community.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Abraham, C., Norman, P., & Conner, M. (2013). Understanding and changing health behaviour: From health beliefs to self-regulation. Hoboken: Taylor and Francis. **RECOMMENDED READING - TEXTS:** Jones, K. V., & Creedy, D. K. (2012). Health and human behaviour. (3rd ed.). South Melbourne, Vic: Oxford University Press. Barkway, P. (2013). (2nd ed.). Psychology for health professionals. Chatswood, NSW: Elsevier Australia.

**Assessment:** Presentation, Presentation (group) on psychosocial health and wellbeing (1500 words), 40%. Assignment, Written assignment on psychosocial health focusing on alternative forms of treatment (2000 words), 60%. Total combined assessment word equivalence is 3500.

## HHB2304 Traditional and Contemporary Health Interventions

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** In this unit students will explore some traditional and contemporary health interventions used in different societies. Emphasis will be on individual determinants of health including the social, economic and cultural factors that influence usage of traditional and/or contemporary health interventions. Selected strategies and alternative forms of treatments used in maintaining and improving health in different population groups will be explored as will their policy implications.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate traditional and contemporary health interventions used by individuals and diverse population groups;
2. Identify and describe the origins of selected alternative health interventions and approaches;
3. Compare holistic health care and conventional medicine practices and approaches;
4. Identify and appraise factors and determinants that influence traditional and contemporary health intervention usage; and
5. Summarise and evaluate relevant health policies and programs directed at alternative forms of treatment and interventions.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Reading materials will be supplied by the Lecturer.

**Assessment:** Presentation, Presentation (group) on psychosocial health and wellbeing (1000 words each), 40%. Assignment, Written assignment on psychosocial health focusing on alternative forms of treatment (2000 words), 60%. Total assessment word equivalence is 3000 words.

## HHB2402 Health Program Planning and Evaluation

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HHB2301 - Health Promotion

**Description:** In this unit students are introduced to the principles and practice of designing, implementing, managing and evaluating health promotion programs in the community. The program planning process will be applied to a range of health issues. Using case histories, students will identify and analyse what makes programs successful.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify health priorities through the collection, analysis and interpretation of information on a community or population group;
2. Design a health promotion intervention using theory and evidence to guide selection of strategies and identification of outcomes;
3. Identify physical, human and financial resources required to implement a health promotion program;
4. Develop mechanisms to monitor and evaluate programs for their effectiveness and quality; and
5. Write a project proposal to address an identified health issue in a specific community.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Dwyer, J., Liang, Z., Thiessen, V., & Martini, A. (2013). 2nd Edith Project management in health and community services: Getting good ideas to work. Crows Nest, NSW: Allen & Unwin. Recommended Reading: Barraclough, S., & Gardner, H. (2008). Analysing health policy: A problem-oriented approach. Marrickville, N.S.W: Elsevier.

**Assessment:** Report, Written Report - Health Needs Assessment for a specified community or population group to form basis of health promotion project proposal (1000 words), 30%. Assignment, Written Proposal - Written grant proposal for a community health promotion project (3000 words), 70%. The total combined assessment word equivalence is approximately 3000 words.

## HHB2403 Health Law and Ethics

**Locations:** St Albans.

**Prerequisites:** HHB 1204 - Australian Health and Social Care Systems and Policy

**Description:** The focus of this unit is the Australian legal system, processes and constitutional arrangements and important legal concepts related to healthcare delivery. The behaviour of individuals within the healthcare system will be examined. Students will be introduced to the philosophies and theories underpinning ethics, the essence of ethics in health care and its importance to their professional practice will all be addressed relevant to ethical frameworks, professionalism, confidentiality and informed consent. The relationship between health, law, ethics and how they intersect will be explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

- Conceptually map ethics and legal frameworks relevant to health care in Australia. GC1, GC2.
- Apply knowledge of professional codes of conduct /guidelines for different groups of health care providers in various contexts. GC2.
- Discuss the roles and responsibilities of health professionals and consumers within the health legal frameworks GC2.
- Understand the rights of healthcare consumers. GC2, GC3.
- Articulate and describe the concept of 'negligence' and 'duty of care'. GC1a, GC3.
- Elaborate the ethical obligations of confidentiality and consent. GC1a, GC2, GC3.

**Class Contact:** Forty-eight (48) hours for one semester, comprising lectures, tutorials, and workshops/practical sessions: 2 hour lectures: Weeks 1-12 of semester (24 hours). 2 hour tutorials/workshops: Weeks 1-12 of semester (24 hours). In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 3 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** White, B.P., McDonald, F. J. & Willmott, L. (2010) Health law in Australia Pyrmont, NSW: Thomson Reuters (Professional) Australia

**Assessment:** Examination, Exam (two hours 1500-2000 words), 50%. Case Study, Case Study (2000 words), 50%. Total word equivalence is 3500-4000 words.

## HHB2404 Health Policy and Planning

**Locations:** St Albans.

**Prerequisites:** HHB 1204 - Australian Health and Social Care Systems and Policy HHB 1203 - Patterns of Health and Disease

**Description:** This unit introduces students to health care policies, approaches,

conventions and policy development. Central to the unit are policies in relation to the Australian healthcare system, public policy analysis, health insurance and financing of health services and organisation of health services. Further to be explored are medical services and technologies and health policy reforms with a focus on disadvantaged groups. The role of public health in health policy will be visited.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and analyse key public health policies in Australia;
2. Conceptually map health policy development and health systems financing in Australia;
3. Critically evaluate the socioeconomic determinants of healthcare utilisation;
4. Articulate the role of public health and health professions in policy formulation and reforms; and
5. Illustrate opportunities and suggest best practice for future policy development and reform.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Lin, V., Smith, J., Fawkes, S., Robinson, P., & Gifford, S. (2014). 2nd Public health practice in Australia: The organised effort. Crows Nest, NSW: Allen & Unwin. RECOMMENDED READINGS: Barraclough, S., & Gardner, H. (2008). Analysing health policy: A problem-oriented approach. Marrickville, N.S.W: Elsevier. Palmer, G. R., & Short, S. D. (2010). Health care and public policy: An Australian analysis. (4th ed.). South Yarra, Vic: Palgrave Macmillan.

**Assessment:** Presentation, Individual class presentation on a selected health policy (2000 words), 45%. Assignment, Topic: socioeconomic determinants of service utilisation and suggestions for future policies (2000 words), 55%. Total assessment word equivalence is 4000 words.

## HHB2405 Women, Gender and Health

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HHB 2301 - Health Promotion

**Description:** The unit examines gender issues specific to women and girls. It looks at gender violence and its impact on women and girls. Gender health disparities across all genders will be explored. Central to this unit will be adolescent health issues, early parenthood and its impact on all genders but more so for young women, their families and their children. Other issues specific to women and girls to be examined in this unit will be early motherhood, early marriage, and practices and customs that affect women's health negatively especially in developing countries. Policies and frameworks used in the advancement of women's rights will be explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically review gender, traditional and customary practices that disproportionately affect women's health;
2. Identify, analyse and synthesise information from a range of sources related to gender health and wellness;
3. Participate in debates and reflection on gender related public health issues;
4. Demonstrate in their writings and presentations their respect for gender equality underpinned by concern for equity, equality, humanity and social justice; and
5. Evaluate policies and frameworks relevant in ensuring women's rights and promoting gender health equity.

**Class Contact:** Forty-eight (48) hours for one (1) semester, comprising lectures, tutorials, and workshops/practical sessions as well as one (1) hour on-line weekly activity over eight (8) weeks.

**Required Reading:** Liamputtong 2007, Reproduction, Childbearing and Motherhood: A cross-cultural perspective. NY Nova Science Publishers

**Assessment:** Assignment, Written assessment (2000 words), 50%. Presentation, Class presentation on gender equality (2000 words), 50%. The total combined assessment word equivalence is approximately 4000 words.

## HHB3000 Traditional and Contemporary Health Interventions

**Locations:**St Abans.

**Prerequisites:**HHB 1104 - Introduction to Public Health and WellnessHHB2301 - Health Promotion

**Description:** In this unit students will explore some traditional and contemporary health interventions used in different societies. Emphasis will be on individual determinants of health including the social, economic and cultural factors that influence usage of traditional and/or contemporary health interventions. Selected strategies and alternative forms of treatments used in maintaining and improving health in different population groups will be explored as will their policy implications.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate traditional and contemporary health interventions used by individuals and diverse population groups;
2. Identify and describe the origins of selected alternative health interventions and approaches;
3. Compare alternative health care and conventional health care practices and approaches;
4. Identify and appraise factors and determinants that influence traditional and contemporary health intervention usage; and
5. Summarise and evaluate relevant health policies and programs directed at alternative forms of treatment and interventions.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:**Reading materials will be supplied by the Lecturer.

**Assessment:**Presentation, Presentation (group) on psychosocial health and wellbeing (1500 words each), 40%. Assignment, Written assignment on psychosocial health focusing on alternative forms of treatment (2000 words), 60%. Total assessment word equivalence is 3500 words.

## HHB3001 Indigenous Health Research Project

**Locations:**St Abans.

**Prerequisites:**AEK2201 - Learning in Indigenous Australian CommunitiesAEK3202 - Global Indigenous Leadership

**Description:**This Unit of study provides students with an opportunity to apply the knowledge and skills gained during the course in a work-base placement in a selected Indigenous Health setting or undertake a brief research project in an area of Indigenous Health. This unit offers students the opportunity to reflect, review, and observe the principles and practice of public health, health promotion and community health in an Indigenous Health setting. Both the research and work-based placements enable the student to undertake a structured work experience program as an integral part of their degree course. Students will reflect on best practice and identify areas of improvement for them and for practice. Central to the unit is the primary experience of the work place culture and observation of others with different culture backgrounds and how it influences health care programs and practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Integrate and synthesise prior knowledge and learning from multiple and diverse topic areas to produce a coherent response to a contemporary challenge in respect to Indigenous Health;
2. Investigate the role of health professionals in community and institutional health care settings in relation to practice and service delivery especially for marginalised persons or groups;
3. Critically analyse strengths and weaknesses in the selected work environment and hypothesise suggestions for improvement; and
4. Exhibit investigative, reporting and presentation skills commensurate with graduate level career entry requirements.

**Class Contact:** Forty-eight (48) hours for one semester, comprising practicum placement, research and supervised sessions with academic staff.

**Required Reading:**Tesoriero, F., (2010) 4th Community development: community-

based alternatives in an age of globalisation Frenchs Forest, N.S.W. Pearson  
Lin, V., Smith, J., Fawkes, S., Robinson, P., & Gifford, S. (2014) 2nd Public health practice in Australia: The organised effort Crows Nest, NSW: Allen & Unwin.

**RECOMMENDED READINGS:** Barraclough, S., & Gardner, H. (2008). Analysing health policy: A problem-oriented approach. Marrickville, N.S.W: Elsevier. Dwyer, J., Liang, Z., Thiessen, V., & Martini, A. (2013) Project Management in Health and Community Services: Getting good ideas to work (2nd ed.). Melbourne, VIC. Allen & Unwin.

**Assessment:** Presentation, Individual class presentation (1500 words), 25%. Report, Written report following completion of practicum or research (3500 words), 75%.

## HHB3003 Health Priority in the Western Region

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**The goal of the National Preventative Health Strategy's is to focus on building preventative health strategies in Australian communities with a specific focus on obesity, tobacco and alcohol. In this unit, students will be involved in teams to explore how each of the National Preventative Health Strategy priorities manifests and is being addressed in the Western region of Melbourne. A comparison will be made with other regions in Melbourne. Students will be required to investigate, synthesise and contextualise their learning from previous and concurrent units in body structure and function, notions of health and wellness, patterns of disease, the health care system, the health workforce and the collection and evaluation of evidence.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Relate National Preventative Health Strategy priorities to the western region of Melbourne;
2. Identify, propose and justify strategies for investigating the take-up of priorities;
3. Produce and present a case study (individual or community) which encapsulates the progress of National Preventative Health Strategy priorities; and
4. Identify and demonstrate in structured situations the skills required to work collaboratively to maximise team outputs.

**Class Contact:** Forty-eight (48) hours per semester consisting of lectures, tutorials or visits to health and community settings. Students should expect to spend an additional four (4) hours per week in independent study.

**Required Reading:**Nil required Texts. The Lecturer will provide reading materials as appropriate.

**Assessment:**Annotated Bibliography, Addressing the Voluntary Organisations priorities in the Western Melbourne Region (Team - 500 words each), 20%. Project, Project Proposal (Team - 1000 words each), 20%. Report, Written Report on Team Project (1000 words each), 40%. Presentation, Team Project Presentation (20 minutes) (500 words), 20%. Each team member is expected to make a 3000 word equivalent contribution to team tasks.

## HHB3501 Disease and Injury Prevention and Control

**Locations:**St Abans.

**Prerequisites:**HHB 1104 - Introduction to Public Health and WellnessHHB 1203 - Patterns of Health and DiseaseHHB 1204 - Australian Health and Social Care Systems and PolicyHHB 2301 - Health Promotion

**Description:**This unit examines the principles and practice of preventing and controlling diseases of public health significance. The unit covers disease monitoring and surveillance, disease outbreaks and responses, levels of intervention and disease control policies and practices. The epidemiology and major causes and risk factors for

injury and public health initiatives to prevent injury are examined.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

- Identify and analyse the patterns of disease and injury across population groups in the community
- Discuss the contribution of disease and injury surveillance and monitoring to health policy and program planning
- Explain the procedures undertaken to investigate and control an outbreak of communicable disease
- Evaluate disease and injury prevention and control policies and strategies.
- Analyse a health problem and identify the appropriate levels at which to target the disease, condition or determinant.

**Class Contact:** Forty-eight (48) hours for one semester, comprising lectures, tutorials, and workshops/practical sessions: 2 hour lectures: Weeks 1-12 of semester (24 hours) 2 hour tutorials/workshops: Weeks 2-11 of semester (20 hours) In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 3 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** Remington, P.L., Brownson, R.C., & Wegner, M.V. (2010) 3rd Edition Chronic disease epidemiology and control Washington, DC: American Public Health Association Press Miller, R. E. (2012) Epidemiology for health promotion and disease prevention professionals Hoboken: Taylor and Francis RECOMMENDED TEXT Bonita, R., Beaglehole, R., Kjellstrom, T. (2007). Basic epidemiology. (2nd Edition). Geneva: World Health Organisation.

**Assessment:** Assignment, Written assignment on disease surveillance and control (1500 words), 30%. Case Study, Case History on the prevention and control of a specific injury type of public health significance (1500 words), 30%. Examination, Final Exam with short answer and long answer questions (2 hours), 40%. Total word equivalence of combined assessments tasks approximately 4000 words.

## HHB3502 Health Research

**Locations:** St Abans.

**Prerequisites:** HHB 1104 - Introduction to Public Health and Wellness HHB 1105 - Evidence and Health 1 HHB 1104 pre-requisite for students enrolled in HBHN. HHB 1105 pre-requisite for students enrolled in HBHL.

**Description:** This unit deals with health and social research skills acquisition. Relevant qualitative and quantitative research paradigms will be explored, together with major principles used when conducting research and systematic reviews. The research process, from conceptualization through to dissemination of findings will be illustrated. Central to this unit is research applications to evidence-based practice in health.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Demonstrate an understanding of the different Qualitative and Quantitative approaches and practices in Health Research; 2. Critique various health research designs and paradigms; 3. Interpret and synthesise qualitative and quantitative reports; 4. Display an understanding of systematic data collection and management; 5. Apply analytical skills appropriate to specific and varied research contexts; and 6. Effectively communicate information acquired from research and

other reports to a variety of audiences.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Liamputtong, P. (2010). 2nd Research methods in health: Foundations for evidence-based practice. Melbourne, Vic: Oxford University Press.

**Assessment:** Test, Tests x 5 (1000 words), 30%. Assignment, Written Research Design/Proposal (1000 words), 20%. Examination, Exam (2000 words), 50%. Total word equivalence of combined assessment tasks is 4000 words. .

## HHB3503 Health Services Management

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** In this unit the focus is on skills development in health services management, leadership and government regulations in the health industry. The diversity of health care institutions in Australia, their structures, duties and responsibilities are all addressed. In addition the diverse roles of health professionals and how different types of health organisations is examined.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate health industry governance and management in Australia;
2. Identify and interrogate the roles of different health services and organisations in Australia;
3. Debate the roles of managers, directors, CEOs and leaders in the health industry;
4. Apply critical analysis and evaluation skills in all aspects of leadership and management;
5. Analyse policy formation, development and its application in the Australian health care industry; and
6. Propose and exemplify effective leadership skills in an Australian health services context.

**Class Contact:** Forty-eight (48) hours comprising of 2 hours of lectures and 2 hours of tutorials per week over 8 weeks. Students will spend another 16 hours in an organisation of their choice to observe and study how the organisation is managed and to build on their management and leadership skills. The 16 hours to be spread over three days of 5 hours (2) and 6 hours (x1).

**Required Reading:** Wager, K. A., Lee, F. W., & Glaser, J. P. (2013). 3rd Health care information systems: A practical approach for health care management. Hoboken: Wiley. Tan, J. K. H. (2008). Healthcare information systems and informatics: Research and practices Hershey, PA: Medical Information Science Reference.

**Assessment:** Presentation, Individual presentations on leadership and proposed community service project (2000 words), 50%. Report, Report following visit to a health service or organisation (2000 words), 50%. Total word equivalence of combined assessment tasks is 4000 words.

## HHB3504 Occupational and Environmental Health

**Locations:** St Abans.

**Prerequisites:** HHB 1105 - Evidence and Health 1 HHB 1203 - Patterns of Health and Disease HHB 2301 - Health Promotion

**Description:** This unit examines the environmental influences on health and the strategies available to control and minimize risks associated with physical, chemical and biological health hazards. Local and global environmental health challenges such as climate change, pollution, food safety and water and sanitation will be used to examine the framework of risk assessment, risk management and risk communication. The unit will also examine the causes and the human and economic cost of occupational disease and injury in Australia and the legal framework for Occupational Health and Safety.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

- Identify the main environmental and occupational determinants of health and disease and critically analyse how these factors contribute to disease and injury risk or prevention.
- Conceptually map the contribution of epidemiology, toxicology and ecology to risk assessment and risk control strategies.
- Identify and outline the methodologies for exposure measurement and risk assessment for common environmental health hazards.
- Interpret the legal framework for Occupational Health and Safety in Australia
- Apply the principles of health promotion to communicate risks related to environmental and occupation health.

**Class Contact:** Forty-eight (48) hours for one semester, comprising lectures, tutorials, and workshops/practical sessions: 2 hour lectures: Weeks 1-12 of semester (24 hours) 2 hour tutorials/workshops: Weeks 2-11 of semester (20 hours) In addition to active involvement in the teaching and learning hours, students will also need to spend time studying outside the classroom. It is estimated that each student will need to spend at least 3 hours per week independently engaging in learning activities relating to the learning outcomes of the subject.

**Required Reading:** Levenstein, C. (2009) *At the Point of Production: The Social Analysis of Occupational and Environmental Health*. Amityville, NY. Baywood Publishing Company, Inc.

**Assessment:** Assignment, Written assignment on Occupational Health and Safety (1500 words), 30%. Assignment, Develop a communication resource on a specific occupational or environmental health hazard (1000 words), 20%. Examination, Final Examination with short answer and long answer questions (2 hours), 50%. Total word equivalence of combined assessment tasks is approximately 5000 words.

## HHB3602 Global Health

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HHB 1104 - Introduction to Public Health and Wellness HHB 2302 - Health Culture and Society

**Description:** This unit examines current and emerging topics in health from a global perspective. It looks at the impact of globalisation on health care with a focus on low income countries. Global threats to health and the health disparities across countries and populations groups and the international agreements and policies to address these are explored. Specific issues of maternal and child health, migrant and refugee health, HIV/AIDS and other communicable diseases of global public health significance and the increasing global epidemic of chronic disease are covered.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interrogate the global influences on health and health care systems and policies;
2. Analyse the economic, political, cultural and social determinants of health in low income countries;
3. Critically review the specific health needs of vulnerable population groups such as women, children and internally displaced people and refugees and the global initiatives to address these groups; and
4. Discuss and critique health programs and initiatives aimed at particular global health issues such as HIV/AIDS, nutritional and chronic disease and injury prevention.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Markle, W. H., & Fisher, M. A. (2013) 2nd Edition *Understanding global health* New York: McGraw-Hill RECOMMENDED READINGS McInnes, C., & Lee, K. (2013). *Global health and international relations*. Hoboken: Wiley. Muennig, P., & Su, C. (2012). *Introducing global health*. Hoboken: Wiley. Murray, C.J.L., & Lopez, A.D. (2013) *Global Burden of Disease and Injury- A comprehensive*

assessment of mortality and disability from disease, injury and risk factors in 1990 and projected 2020.

**Assessment:** Presentation, Tutorial presentation (1000 words), 20%. Case Study, Case history on the health issues, determinants and needs of a specified low income country (1500 words), 30%. Assignment, Written assignment critically reviewing global policies and actions to address a global health issue of public health significance (2500 words), 50%. The total combined assessment word equivalence is approximately 5000 words.

## HHB3603 Health Challenge

**Locations:** Werribee, Footscray Park, Sunshine, St Albans.

**Prerequisites:** Foundation units (Year 1); Specialisation Core units (Years 2 & 3); Select Electives (Years 2 & 3)

**Description:** The Health Challenge Capstone involves a negotiated, authentic, project-based activity that responds to a local, national or global health 'challenge' and closely relates to professional work in the health sciences field. Students will synthesise and apply their learning across the degree program, demonstrate holistically their development of graduate capabilities and successfully negotiate the transition to their next career stage.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Integrate and synthesise prior knowledge and learning from multiple and diverse topic areas to produce a coherent response to a contemporary health challenge;
2. Exhibit investigative, reporting and presentation skills commensurate with graduate level career-entry requirements; and
3. Articulate their development of Victoria University Graduate Capabilities and predict how these will inform their future professional practice in the field of health sciences.

**Class Contact:** Fifty-six (56) hours per semester. Students will generally be working independently to conduct the negotiated investigative project that constitutes the Health Challenge capstone. Contact hours will be scheduled for independent consultations with capstone supervisory staff. There will be three (3), two (2) hour seminars scheduled through the semester for students to report on progress to their peers. In addition a professional development workshop (2 hours) will be scheduled mid semester.

**Required Reading:** No required reading text. Reading material will be provided by the Lecturer.

**Assessment:** Presentation, Individual project presentation (1000 words), 45%. Report, Written project report including summary/abstract and reflective section for inclusion in e-portfolio (3500 words), 55%. The total combined assessment word equivalence is approximately 4500 words.

## HHB3604 Health and Community Development

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HHB 1104 - Introduction to Public Health and Wellness HHB 1203 - Patterns of Health and Disease HHB 2301 - Health Promotion HHB 2302 - Health Culture and Society HHB 2402 - Health Program Planning and Evaluation

**Description:** This unit examines critically the different philosophies and practices of community development in national and international contexts in relation to improving health outcomes. The unit focuses on development frameworks and their alignment with notions of human rights, health equality, sustainability and empowerment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discriminate and critique philosophies of community development;
2. Critically review methods by which community development and community education can



facilitate change towards better health; 3. Debate the challenges posed by putting community development theory into practice and the limitations of specific approaches; and 4. Propose and justify methods to facilitate desired change around a health issue in an authentic or hypothetical community.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:**Tesoriero, F., (2010) 4th Edition Community development: community-based alternatives in an age of globalisation Frenchs Forest, NSW Pearson Dwyer, J., Liang, Z., Thiessen, V., & Martin, A. (2013) 2nd Edition Project Management in Health and Community Services: Getting good ideas to work Melbourne, VIC. Allen & Unwin

**Assessment:**Examination, Debate as part of a team on a contemporary issue or challenge in community development (10 minutes, 1500 words), 20%. Assignment, Written Assignment (2500 words), 40%. Presentation, Poster Presentation (10 minutes presentation, 1000 word poster), 40%. The total combined assessment word equivalence is approximately 5000 words.

## HCB3605 Health Program Practicum

**Locations:**St Albans.

**Prerequisites:**HCB 1104 - Introduction to Public Health and Wellness HCB 2403 - Health Law and Ethics HCB 2404 - Health Policy and Planning HCB 3503 - Health Services Management

**Description:**This unit offers students the opportunity to integrate and apply the knowledge and skills gained during the course in a selected health or community setting. This practicum unit offers students the opportunity to reflect, review, and observe the principles and practice of public health, health promotion and community health in a supported learning environment at primary level. Students will reflect on best practice and identify areas of improvement for them and for practice. Central to the unit is the primary experience of the work place culture and observation of others with similar backgrounds or interests, as well as the opportunity for knowledge exchange and constructive feedback on practice.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Conceptually map the preinciples of integrated health care delivery and interprofessional practice and their relationship to health promotion; 2. Interrogate the role of health professionals in community and institutional health care settings in relation to practice and service delivery especially for marginalised persons or groups; and 3. Critically analyse strengths and weaknesses in the selected work environment and hypothesise suggestions for improvement.

**Class Contact:**Forty-eight (48) hours for one semester, comprising practicum placement and supervising sessions with academic staff.

**Required Reading:**Tesoriero, F., (2010) 4th Community development: community-based alternatives in an age of globalisation Frenchs Forest, N.S.W. Pearson Lin, V., Smith, J., Fawkes, S., Robinson, P., & Gifford, S. (2014). 2nd Public health practice in Australia: The organised effort Crows Nest, NSW: Allen & Unwin. RECOMMENDED READINGS: Barraclough, S., & Gardner, H. (2008). Analysing health policy: A problem-oriented approach. Marrickville, N.S.W: Elsevier. Dwyer, J., Liang, Z., Thiessen, V., & Martini, A. (2013) Project Management in Health and Community Services: Getting good ideas to work (2nd ed.). Melbourne, VIC. Allen & Unwin.

**Assessment:**Presentation, Individual class presentation (1500 words), 25%. Report, Written report/portfolio following completion of practicum (3500 words), 75%. Total word equivalence of combined assessment tasks is approximately 5000 words.

## HHC2171 Biomechanics 1

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHA1272 - Anatomy 2HHP1170 - Cell Physiology

**Description:**The aim of this unit is to introduce biomechanical principles and prompt students to consider the applications to osteopathic practice. Major topics include kinematics and kinetics, levers, moments and torque, analysis of joints (general type, structure and function) and mechanics of biological tissue: bone, muscle, ligament, cartilage.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Articulate biomechanical terminology and principles in relation to osteopathic practice; 2. Classify joints in terms of their structure and function; 3. Compare the functions of tissues in the human body; and 4. Present findings of laboratory analysis of kinetics, kinematics and gait.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**Neumann, D. A. (2010). (2nd ed.). Kinesiology of the musculoskeletal system. Sydney, Australia: Mosby.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). Laboratory Work, Submit 4 laboratory reports (12.5% @ 250 words each), 50%. Examination, End of semester written examination (1 hour - 1000 words), 50%. Total combined assessment word equivalency for this six (6) credit point unit is approximately 2000 words.

## HHC2272 Biomechanics 2

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHC2171 - Biomechanics 1

**Description:**HHC2272 Biomechanics 2 aims to further develop students' knowledge of biomechanics through application of principles to the understanding of specific joints in the human body, namely, the thorax and spine, hip, shoulder, knee and ankle. The application of these principles provides the basis to examine injury processes resulting from interruption to the biomechanics of these joints. The unit examines injury to individual joints by analysing the joint components, muscles and passive structures.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Review the biomechanics of thorax and spine, hip, shoulder, knee and ankle. 2. Conceptualise and articulate the process of injury to individual joints; 3. Summarise common causes of injury to the joints of the thorax and spine, hip, shoulder, knee and ankle; 4. Present findings of laboratory analysis of altered biomechanics in an osteopathic context; and 5. Review and appraise published research papers on mechanics of the body and its joints.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**Neumann, D. A. (2010) (2nd) Kinesiology of the musculoskeletal system Sydney, Australia: Mosby

**Assessment:**Formative quizzes are conducted on-line, 10 minute duration, eight questions (mix of multi-choice and true/false). Presentation, 10-minute video on injury topic (1000 words), 50%. Examination, 1-hour final theory exam (1000 words), 50%. Other, Formative quizzes = 5 on-line topic quizzes, 0%. Total combined assessment word equivalency is approximately 2000 words.

## HHC3173 Biomechanics 3

**Locations:**City Flinders.

**Prerequisites:**HHC2272 - Biomechanics 2

**Description:**The aim of this unit is to advance the understanding of biomechanical and osteopathic principles developed in previous units and focus attention on the topics of posture and gait. Particular emphasis is placed on deviations and compensations from standard patterns that are likely to lead to injury.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Apply biomechanical and osteopathic principles to the analysis of both typical and deviant gait and posture; 2. Apply biomechanical and osteopathic principles to the analysis of gait and posture compensations that occur as a result of deviations from typical patterns; and 3. Present findings regarding 1-2 above in simulated clinical setting.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hr

**Required Reading:**Neumann, D. A. (2010). (2nd) Kinesiology of the musculoskeletal system. Sydney, Australia: Mosby.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). Other, Oral Tutorial questions (week 5 - 500 words), 20%. Other, Oral Tutorial questions (week 10 - 500 words), 20%. Examination, 15-minute oral exam as part of the third year OSCE (1500 words), 60%. The total word equivalence for combined assessment tasks in this six (6) credit point unit is approximately 2500 words.

### HHD1271 Clinical Diagnosis & Management 1

**Locations:**City Flinders.

**Prerequisites:**HHA1171 - Anatomy 1HHD1170 - Osteopathic Science 1

**Description:**The aim of this unit is to introduce students to clinical examination within the context of osteopathic practice. Students commence their development of physical examination skills and have the opportunity to work with diagnostic equipment they will use in clinical practice as osteopaths. Major topic areas include examination of the cardiovascular, respiratory, abdominal and neurological systems.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Role play clinical examination; 2. Report the basic skin lesions and recognise their aetiology and clinical significance; 3. Perform an examination of the following structures: head, eyes, ears, nose, mouth, neck, nervous system, including the cranial nerves and reflexes, muscles and joints, the thorax including lungs, heart and great vessels, the peripheral vascular system, and the abdomen; 4. Discuss the abnormal signs and symptoms of the named structures and systems resulting from pathology; and 5. Explain the purpose of and demonstrate competence in the use of the basic tools of clinical medicine, such as the stethoscope, otoscope, ophthalmoscope, reflex hammer, tuning fork and sphygmomanometer.

**Class Contact:**Twenty- four (24) hours for one semester comprising lectures and practical classes.

**Required Reading:**Kiatos, J. (2014). HHD1271 Clinical diagnosis & management 1 manual. Melbourne, Australia: Victoria University, School of Biomedical and Health Sciences, Osteopathy Unit. Dorland, W. A. N. (2011). (32nd ed.). Dorland's illustrated medical dictionary. W. B. Saunders Co. Bickley, L. S. (2012). (11th ed.). Bates' guide to physical examination and history taking. Lippincott Williams & Wilkins.

**Assessment:**Formative and summative assessments are hurdle requirements. Examination, 15 minute practical (equivalent of 1500 words), 100%. Assessment word equivalence is 1500 words for this six credit point unit. This reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and knowledge of theory and anatomy.

### HHD2112 Dermal Science 1

**Locations:**City Queen.

**Prerequisites:**SIBBCCS403A - Recognise body structures and systems in a beauty therapy contextSIBBCCS301A - Apply the principles of skin biology to beauty treatments

**Description:**The unit introduces students to theoretical aspects of anatomy, physiology, and microbiology relevant to the practice of dermal therapy. The unit provides important underpinning knowledge that students will require in their practical applications throughout the degree program. Topics include; introduction to anatomical terminology; introduction to cell and tissue biology; the musculoskeletal system and circulatory system with emphasis on craniofacial anatomy and physiology of these systems; introduction to endocrine system biology with emphasis on homeostasis and feedback mechanisms; the identification and biochemistry of micro-organisms as a basis for the dermatology and pathology material in later units; and a grounding in microbiology sufficient for infection control and sterile procedures required in the clinical practice units.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain the basic structure and function of cells and tissues, including cell membranes;
2. Discuss the general structure and function of the circulatory system and associated vasculature of the skin, using correct anatomical terminology;
3. Recognise and describe the structure and function of the musculoskeletal system and associated craniofacial musculature and osteology, using correct anatomical terminology;
4. Understand the regulatory role of the endocrine system in terms of homeostatic feedback mechanism; and
5. Discuss the structure and functions of microorganisms, including bacteria, viruses, fungi and protists.

**Class Contact:**Lab2.0 hrsLecture3.0 hrs

**Required Reading:**Tortora, G.J., & Derrickson, B. (2014). (14th ed.). Principles of anatomy and physiology. Hoboken, NJ: Wiley and Sons. Lee, G., & Bishop, P. (2012). (5th ed.). Microbiology and infection control for health professionals. NSW: Pearson Education Australia.

**Assessment:**Test, 2 Online Tests (each test 60 minutes duration), 30%. Essay, Written Essay (1500 words), 30%. Examination, Written Examination (2 hours), 40%. Total combined assessment word equivalency is approximately 2000 words.

### HHD2113 Health Research and Dermal Studies

**Locations:**Online, City Queen.

**Prerequisites:**Nil.

**Description:**This unit provides an introduction to research and critical thinking, it will also provide many of the necessary academic skills required to complete a dermal therapies degree. A primary aim of this unit will be to facilitate the student's ability to critically analyse and evaluate selected literature relating to health sciences with particular reference to the safe practice of applied dermal therapies. Preparatory academic skills required for the rest of the course will also be covered; these include APA referencing, writing academic essays, study skills, communicating in groups and sourcing appropriate information.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Compare and contrast basic philosophical arguments;
2. Interrogate industry based evidence using critical thinking methods;
3. Source relevant academic and research articles related to topics in health and dermal therapies through a database search;
4. Demonstrate appropriate APA referencing and in text citations;
5. Compose an academic essay which follows formal conventions and is expressed clearly, persuasively and effectively; and
6. Exhibit effective collaborative skills in

an ethical and responsible manner to influence the work of team members in the achievement of group outcomes while exhibiting individual responsibilities within the group.

**Class Contact:**Lecture3.0 hrsOnline1.0 hr

**Required Reading:**Required texts, please check as some of these titles are available as eBooks from the VU library and do not need to be purchased. Germov, J. (2011). (3rd ed). Get great marks for your essays, reports, and presentations Crows Nest: Allen & Unwin. Rosenberg, A. (2012). (3rd ed). Philosophy of science a contemporary introduction New York: Routledge. McLaren, N. (2012). (1st ed). A (somewhat Irreverent) Introduction to philosophy for medical students and other busy people Ann Arbor, MI: Future Psychiatry Press.

**Assessment:**Essay - An essay to be submitted individually on a set topic from the dermal industry. The essay must be well researched and referenced in APA format (1500 words). Project - Students will work in groups of 2-3 and will need to plan and self-manage their group, they will need to investigate claims made in the beauty industry and critique them using philosophical arguments and an scientific evidence base, students submit one project per group (2000 words). Test - Students are to complete 10 x 5 minute online weekly quizzes in a set time. The quizzes will cover information from the tutorials (1500 words equivalent). Essay, Essay on a selected topic (1500 words), 45%. Project, Group project - Beauty claims critique (2000 words), 45%. Test, Online Mini Quizzes (10 x 5 minutes duration each), 10%. The total word equivalence for the combined assessments is 5,000 words. .

### HHD2115 Permanent Hair Removal

**Locations:**City Queen.

**Prerequisites:**HLTN402B - Maintain infection control standards in office practice settingsSIBBCCS301A - Apply the principles of skin biology to beauty treatmentsSIBBCCS406A - Use electricity in beauty therapy treatmentsSIBBCCS403A - Recognise body structures and systems in a beauty therapy contextSIBBCCS404A - Work in a skin therapies framework

**Description:**This unit explores the biology and physiology of hair and its associated structures including the cycle of hair growth and its impact on permanent hair reduction procedures. The underpinning science behind the process of electrolysis and thermolysis and the effects this has on permanent hair removal will be examined in detail. The student will be able to apply this knowledge to designing and performing permanent hair removal procedures on patients to the level of a professional dermal clinician

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Describe anatomy and physiology of hair and associated structures; 2. Describe normal hair growth cycle and influence on permanent hair removal procedures; 3. Explain disorders of hair growth and biological factors that influence overgrowth of hair; 4. Describe the underpinning science of electrolysis and thermolysis and effects on the structure of the hair and associated structures; 5. Perform thorough consultation identifying contraindications and indications and design a safe and effective treatment plan with post care advice; and 6. Perform permanent hair removal procedures to the level of a professional dermal clinician.

**Class Contact:**Lecture3.0 hrsPlus thirty (30) hours of supervised attendance at the Dermal Teaching Clinic. Theoretical classes are held at Queen Street Campus and the practicum and dermal teaching clinic will be located at the King Street Campus.

**Required Reading:**Either of these would be sufficient for required readingGior, F. (2000). (3rd ed.). Modern electrology: Excess hair its causes and treatment. USA: Hair Publishing. Godfrey, S. (2001). (3rd ed.). Principles and practice of electrical epilation. UK: Elsevier.

**Assessment:**Hurdle requirement; Supervised placement comprising successful completion of 30 hours at Dermal Teaching Clinic. Attendance and participation in all activities required in the Dermal Teaching Clinic. Test, 12 Online Tests (each test 10 minutes duration), 20%. Case Study, Perform and document permanent hair removal treatments (minimum 5), 30%. Assignment, Written Assignment (1000 words), 25%. Examination, Practical Exam (1 hour), 25%.

### HHD2116 Industry Experience 1

**Locations:**City Queen.

**Prerequisites:**Nil.

**Description:**In this unit students will explore the workplace context by examining the organisational structure and identifying and defining their role as an active and accountable employees within industry. They will gain a better understanding as to what techniques are best suited for particular conditions. Student engage in experiential learning. Students will also be able to reflect on the integration of academic and workplace learning.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Perform treatments within a beauty therapy workplace to the standard of a qualified beauty therapist;
2. Critique and assess their own participation and interaction within a beauty therapy workplace;
3. Critique and assess the standard of treatments they offer within a beauty therapy workplace;
4. Investigate and evaluate treatments, products or equipment used within a beauty therapy workplace; and
5. Apply the knowledge and skills learnt in the Diploma of Beauty Therapy to practice within a beauty therapy workplace.

**Class Contact:**Workshop3.0 hrsPlus180 hours within an approved clinical setting.

**Required Reading:**Duncan, P. (2010). Values, ethics and health care. London, UK: Sage.

**Assessment:**Learning in the workplace- 180hrs paid work within an approved beauty therapy workplace is required to be completed for this unit. Portfolio, Log book of treatments performed, 20%. Case Study, Case report on a series of treatments performed (1500 words), 30%. Other, Reflective practice journal (approx 200 words, completed fortnightly), 50%.

### HHD2172 Clinical Diagnosis & Management 2

**Locations:**City Flinders.

**Prerequisites:**HHD1271 - Clinical Diagnosis & Management 1HHY1271 - Pathology 1

**Description:**The aim of this unit is to build students' knowledge and skills from Clinical Diagnosis and Management 1 by exploring the clinical presentations and associated laboratory tests of common and life-threatening diseases affecting the haematological, cardiovascular, renal and urogenital systems. Students were introduced to regional examination in HHD1271 and this unit provides the opportunity to integrate the practical skills with simulated case scenarios reflecting what may present in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain the likely presentations of common and life threatening haematological, cardiovascular, renal and urogenital systems;
2. Role play cardiovascular, renal and urogenital systems examinations;
3. Interpret symptoms or signs warranting referral to another practitioner;
4. Apply patient centred communication skills involved in the consultative process; and
5. Recognise the appropriate applications of widely employed laboratory, radiological and other special investigations of the haematological, cardiovascular, renal and urogenital systems and interpret typical

pathological findings.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 1.0 hr Forty-eight (48) hours comprising of weekly lectures (2 hours), practical workshops (1 hour) and tutorials (1 hour).

**Required Reading:** Bickley, L. S. (2012). (11th ed.). Bates' guide to physical examination and history taking. Philadelphia: Lippincott Williams & Wilkins. Fitzgerald, K., & Kiatos, J. (2014). HHD2172 CD&M 2 and HHD2273 CD&M 3 unit manual. Melbourne, Australia: Victoria University, College of Health and Biomedicine Osteopathy Unit.

**Assessment:** Participation in practical session requires at least 90% attendance (hurdle requirement). All formative and summative assessment tasks are hurdle requirements. Examination, 15 minute practical examination (equivalent of 1500 words), 35%. Examination, 2 hour written exam (equivalent of 1000 words), 65%. Total combined word equivalence is approximately 2500 words for this six-credit point unit. The practical examination is equivalent to 1500 words of assessment. This represents the requirement of the student to draw on a range of skills sets including communication, psychomotor skills, interpersonal skills and knowledge of theory and anatomy. It should be noted that the 2 hour exam is in reality equivalent to a 1-1.5 hour exam; the students are given more time to complete the assessment in order to reduce their stress levels.

## HHD2212 Dermal Science 2

**Locations:** City Queen.

**Prerequisites:** HHD2112 - Dermal Science 1

**Description:** The unit will introduce students to theoretical aspects of integumentary system embryology, structure and function, patho-physiology, immunology, cellular damage, allergy, inflammation, wound repair, neoplasia and tissue responses to stress relevant to the practice of Dermal Therapy. The unit will provide important underpinning knowledge that students will require in their practical applications throughout the degree program. Knowledge to be developed will include: wound repair, integumentary system biology, embryology and biochemistry, inflammatory response and associated damage, infection, immunity and allergy and neoplasia.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and discuss cellular damage, inflammation and wound healing processes;
2. Develop and demonstrate knowledge of inflammation and wound healing relevant to the practice of dermal therapies;
3. Develop and demonstrate knowledge of skin biochemistry;
4. Describe and discuss how a common plastic surgery procedure can affect normal structure and function of the integumentary system
5. Discuss the main stages of embryological development and the development of the Integumentary system;
6. Describe the process of neoplasia and compare and contrast benign and malignant neoplasias; and
7. Identify and describe immunological and hypersensitivity responses.

**Class Contact:** Online 2.0 hrs Forty-eight (48) hours for one semester comprising lectures, tutorials and online interactive demonstrations.

**Required Reading:** Kumar, V., Abbas, A.K., Fausto, N., & Mitchell, R.N. (2010). (9th ed.) Robbins basic pathology. Philadelphia, PA: Saunders Elsevier. Tortora, G. J., & Derrickson B. H. (2009). (12th ed.) Principles of anatomy and physiology. Hoboken, NJ: Wiley and Sons.

**Assessment:** Assignment, Written Assignment (1500 words), 35%. Test, 10 Online Tests (each test 12 minutes duration), 25%. Examination, Written Examination (2 hours), 40%.

## HHD2213 Dermal Workplace Issues

**Locations:** City Queen.

**Prerequisites:** SIBB CCS403A (Recognise body structure and systems in a beauty therapy context) and SIBB CCS301A (Apply the principles of skin biology to beauty treatments) are from the diploma of beauty therapy

**Description:** This unit will look at various aspects of how our mental state and that of others can affect our workplace environment. Through a better understanding of themselves, students will be able to gather a better understanding of others. Students will not only examine different psychological techniques but also what to do when various issues arise. Students will consider various psychological conditions that affect workplace functioning such as stress and horizontal violence. They will also consider psychological conditions that clients may present with such as body dysmorphic disorders, terminal illness, personality disorders and how to deal with them in the workplace.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Define the different cognitive processes that they will encounter in clients and colleagues;
2. Apply and demonstrate techniques in managing conflict, respecting individual, cultural, social and educational differences with colleagues and clients;
3. Reflect on their own cognitive and behavioural processes and the role this may play in their clinical practice; and
4. Identify and assess when a client or colleague may need emergency or professional help and how to refer or arrange this care for clients or colleague.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** Upton, D. (2010). Introducing psychology for nurses and healthcare professionals New Jersey: Pearson Education.

**Assessment:** Reflective Journals: Students are to present a reflective journal encompassing their opinions and related arguments or agreements to each of the first 8 lectures. Protocol Workbook: Students are to select 4 issues covered in the lectures and prepare a standard protocol on how to address these issues in the workplace setting. Journal, Reflective Journal Weeks 1-4 (800 words), 20%. Journal, Reflective Journal Weeks 5-8 (800 words), 20%. Assignment, Protocol Workbook (2000 words), 60%.

## HHD2215 Laser Fundamentals and Safety

**Locations:** City King St, City Queen, City Flinders.

**Prerequisites:** Nil.

**Description:** This unit covers the fundamentals of laser physics, the properties of laser, delivery systems and biological effects on the human tissue. Australian standards and relevant local government laws will be explained in relation to the use of cosmetic lasers.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Contextualise the properties of light when applied to laser and light-based procedures in dermal therapies;
2. Critique the different types of laser and light-based delivery systems in relation to safety;
3. Discuss the biological effect of light and its interaction with tissue;
4. Review laser safety officer duties as required by Australian Standard (AS/NZS 4173:2004 or equivalent);
5. Evaluate the processes associated with laser and light-based procedures; and
6. Explain the theories in relation to light-based procedures in dermal therapies.

**Class Contact:** Thirty-six (36) hours for one semester comprising lectures and tutorials.

**Required Reading:** Standards Australia (2nd ed.). AS/NZS 4173:2004 (2004). Guide to the safe use of lasers in health care standards Australia Standards Australia

Publications

**Assessment:** Test, Ten (10) Online Mini-Tests (each test 12 minutes duration), 20%. Assignment, Written Assignment (1500 words), 35%. Examination, Written Examination (2 hours), 45%.

## HHD2216 Industry Experience 2

**Locations:** Online, City Queen.

**Prerequisites:** HHD2116 - Industry Experience 1

**Description:** In this unit students will explore the workplace context by examining the organisational structure and identifying and defining their role as active and accountable employees within industry. Students will develop an understanding of the key issues relating to the transition to the professional workplace, including workplace culture, professional etiquette, interpersonal skills, personal and professional organisational skills and decision making. They will gain a better understanding as to what techniques they can apply and how to apply them. Students will also be able to reflect on the integration of academic and workplace learning and learn to value and respect diversity.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Perform treatments within a beauty therapy or health care workplace to the standard of a qualified beauty therapist or health care professional;
2. Critique and assess their own participation and interaction within a beauty therapy or health care workplace;
3. Critique and assess the standard of treatments they offer within a beauty therapy or health care workplace;
4. Investigate and evaluate treatments, products or equipment used within a beauty therapy or health care workplace; and
5. Apply the knowledge and skills to practice within a beauty therapy or health care workplace.

**Class Contact:** Tutorial 2.0 hrs Workshop 1.0 hr Plus one hundred and eighty (180) hours within an approved clinical setting.

**Required Reading:** School developed manual. Stanford, C and Connor, V. (2014) Ethics for Health Professionals Burlington, MA: Jones and Bartlett Learning.

**Assessment:** Learning in the workplace- 180hrs paid work within an approved beauty therapy or health care workplace is required to be completed for this unit. Portfolio, Log book of treatments performed (1100 words), 20%. Case Study, Case report on a series of treatments performed (1000 words), 30%. Other, Written Reflective Journals (6 x 150 words), 50%. The total combined assessment word equivalence is approximately 3,000 words.

## HHD2273 Clinical Diagnosis & Management 3

**Locations:** City Flinders.

**Prerequisites:** HHD2172 - Clinical Diagnosis & Management 2

**Description:** The aim of this unit is to build on students' knowledge and skills from Clinical Diagnosis and Management 1 and 2 by exploring the clinical presentations of common and life-threatening diseases affecting the respiratory, gastrointestinal and endocrine systems. Students were introduced to regional examination in HHD1271 and haematological, cardiovascular, renal and urogenital systems examination in HHD 2172. This unit extends the student's established examination skills through application to additional systems and provides the opportunity to integrate with simulated case scenarios reflecting what may present in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the likely presentations of common and life threatening conditions affecting the respiratory, gastrointestinal and endocrine systems;
2. Role play respiratory, gastrointestinal and endocrine systems examinations;
3. Interpret

4. Apply patient centred communication skills involved in the consultative process; and
5. Recognise the appropriate applications of widely employed laboratory, radiological and other special investigations of the respiratory, gastrointestinal and endocrine systems and interpret typical pathological findings.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Workshop 1.0 hr

**Required Reading:** Required texts Bickley, L. S. (2008). (10th ed.). Bates' guide to physical examination and history taking. Lippincott Williams & Wilkins. Fitzgerald, K., & Kiato, J. (2014). HHD2273 CD&M 3 unit manual. Melbourne, Australia: Victoria University, College of Health and Biomedicine, Osteopathy Unit.

**Assessment:** 90% attendance at practical classes (hurdle requirement). All formative and summative assessments are hurdle requirements. Examination, 15 minute practical examination (equivalent to 1500 words), 35%. Examination, 2-hour written examination (equivalent to 1000 words), 65%. Total combined word equivalence is approximately 2500 words for this six-credit point unit. The practical examination is equivalent to 1500 words and reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and the knowledge of theory and anatomy. It should be noted that the 2 hour exam is in reality equivalent to a 1-1.5 hour exam; the students are given more time to complete the assessment in order to reduce their stress levels.

## HHD3112 Light Based Hair Reduction

**Locations:** City King St, City Queen, City Flinders.

**Prerequisites:** HHD2215 - Laser Fundamentals and Safety HHD2212 - Dermal Science 2

**Description:** This unit will provide students with skills and knowledge required to assess, design and plan hair reduction treatments safely utilizing different Class 4 Lasers and intense pulsed light (IPL) for the reduction of unwanted hair on areas of the face or body.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain codes of conduct in laser procedures as outlined in AS/NZS 4173:2004;
2. Explain the processes, including the physics, associated with laser and light based treatments for hair reduction;
3. Perform hair reduction treatments using laser and intense pulsed light (IPL) techniques as appropriate;
4. Appropriately and safely develop treatment plans for hair reduction in relation to different wavelengths and its relation to Fitzpatrick photo skin type; and
5. Manage light-based and laser treatments for hair reduction with safety and confidence.

**Class Contact:** Lecture 2.0 hrs Placement 2.0 hrs On Campus Plus thirty (30) hours of supervised attendance at the Dermal Teaching Clinic. Online Seventy-eight (78) hours for one semester comprising forty-eight (48) hours of online lectures and tutorials and thirty (30) hours of supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus per semester. Practical exams will be included in the 1-2 weeks on campus.

**Required Reading:** Reading materials will be provided by the lecturer in line with the different student projects.

**Assessment:** Assignment, Written Assignment (1500 words), 25%. Examination, Written Examination (2 hours), 35%. Test, 12 Online Tests (each test 10 minutes duration), 20%. Practicum, Practical skills assessments, 20%.

## HHD3113 Nutrition for Dermal Therapies

**Locations:** City Queen.

**Prerequisites:** HHD2212 - Dermal Science 2

**Description:** In this unit students will further their understanding of the role of various

vitamins, minerals, food groups and nutritional supplements in promoting well-being. Students will also study the beneficial and deleterious effects of various diets on skin health and the relationship of nutritional eating patterns to eating disorders. Topics include carbohydrates, lipids, proteins, energy balance, water soluble, vitamins, fat soluble vitamins, minerals, dieting. The advantages and disadvantages of popular diets are discussed along with referral and client management for specific dieting needs in respect to vitamins and minerals the effects of excessive amounts of vitamins and minerals and the relationship between dieting disorders and skin conditions, referrals, nutritional status of the skin.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe and discuss various common conditions, which may result from, or result in, important nutritional imbalances, which can adversely affect skin;
2. Discuss the nutritional implications of various eating disorders;
3. Describe and discuss the role of various macro and micro nutrients in nutritional wellbeing;
4. Identify and describe factors that promote nutritional well-being, conditions in which it is appropriate to provide nutritional advice to clients; and
5. Identify and describe situations in which is necessary to refer clients to specialist health practitioners.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** Wahlqvist, M. L. (Ed.). (2011). (3rd ed.). Food and nutrition Sydney, Australia: Allen and Unwin

**Assessment:** Assignment, Written Assignment (2000 words), 50%. Examination, Written Examination (2 hours), 50%.

### HH3115 Wound Care for Dermal Practice

**Locations:** City Queen.

**Prerequisites:** HH2212 - Dermal Science 2

**Description:** Students will cover topics such as infection, infectious processes and infection control in healthcare settings as well as abnormal and atypical wound repair and iatrogenic complications in the treatment of wounds. Students will practice and perform aseptic techniques including hand hygiene for clinical practice, donning and doffing clean and sterile gloves, wound cleansing and redressing and wound bandaging techniques.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate infectious processes as well as evaluate infectious control methods employed in a health care setting;
2. Assess risk and prescribe management of infection and adverse wound healing outcomes;
3. Assess and classify a variety of wounds;
4. Prescribe patient care plans in the role as dermal clinician for the assessment and management of wounds;
5. Assess and prescribe as required referral to health practitioners in the care of clients with wounds; and
6. Adapt knowledge and treatment techniques within the scope of the dermal clinician to client scenarios.

**Class Contact:** Tutorial 3.0 hrs Online Thirty-six (36) hours for one semester comprising online lectures and tutorials as well as one week intensive practicum on campus. Practical exams will be included in the on campus week.

**Required Reading:** Bishop, P. & Lee, G. (2009). (4th ed.). Microbiology and infection control for health professionals Frenchs Forest, NSW: Pearson Education. Sussman, C & Bates-Jensen, B. (2007). (3rd ed.). Wound Care: A collaborative practice manual for health professionals Philadelphia, PA: Lippincott, Williams and Wilkins.

**Assessment:** Practicum, 2 Practical Assessments, 30%. Assignment, Written Assignment (2000 words), 40%. Examination, Written Examination (1.5 hours), 30%. The above assessments have a total equivalent word count of 5,000 words.

### HH3116 Lymph and Adipose Biology

**Locations:** City Queen.

**Prerequisites:** HH2212 - Dermal Science 2

**Description:** This unit builds on knowledge gained from HH2112 Dermal Science 1 and HH2212 Dermal Science 2 with a focus on the lymphatic system and adipose tissue and how they relate to Dermal Therapies. The unit covers lymphatic system biology and immunology and this knowledge is then applied to practical scenarios using manual lymphatic drainage techniques to enhance surgical outcomes and aid improvement of lymphatic conditions. Adipose biology and endocrinology are covered with specific reference to adipose disorders likely to be encountered in clinical practice. A minimum of thirty (30) supervised hours are to be completed at the University's Dermal Teaching Clinic.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the structure and function of the lymphatic system and immunology in relation to the lymphatic system;
2. Apply knowledge of the lymphatic and immune systems to the development and design of effective treatment plans relevant to the Dermal Clinician;
3. Explain the structure and function of the adipose organ and endocrinology in relation to the adipose organ;
4. Assess effective adipose treatments using evidence based research; and
5. Students will perform treatments at the level of a professional dermal therapist.

**Class Contact:** Lecture 2.0 hrs Placement 2.0 hrs On Campus Plus thirty (30) hours supervised attendance at the Dermal Teaching Clinic. Practical Hours completed at City King St. Online Seventy-eight (78) hours for one semester comprising forty-eight (48) hours of online lectures and tutorials and thirty (30) hours supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus. Practical exams will be included in the 1-2 weeks on campus.

**Required Reading:** Tortora, G., and Derrickson, B. 13th Ed. Principles of Anatomy and Physiology USA/Wiley Symonds, M. (ed) Adipose Tissue Biology (ebook) USA/Springer

**Assessment:** Practicum, Practical Examination (1 hour), 30%. Assignment, Written Assignment (1500 words), 35%. Examination, Written Examination (1.5 hours), 35%. Hurdle requirement; Supervised placement comprising successful completion of 30 hours at Dermal Teaching Clinic. Attendance and participation in all activities required in the Dermal Teaching Clinic.

### HH3171 Professional Ethics

**Locations:** City Flinders.

**Prerequisites:** HHU2271 - Clinical Practicum 2

**Description:** Professional Ethics considers society's morals and their relation to ethics and application of ethics to osteopathic practice. The unit will consider aspects of law, regulation and professional image that relate to clinical practice. Students will consider and develop their view points and reflect on how these may apply to their student practice context and to the practice of osteopathy generally.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse the legal framework and relevant acts under which osteopathy operates in Australia;
2. Reflect on the values of contemporary Australian society and extrapolate these into business and research practice relevant to the role of osteopathy in Australia;
3. Debate and negotiate a place for osteopathy in Australia's healthcare system; and
4. Interrogate the ethical issues, requirements and standards facing practitioners in a multicultural society.

**Class Contact:** Lecture 1.0 hr

**Required Reading:** Kerridge, Ian H., Lowe, Michael., Steward, Cameron (2013) 4th

Ethics and law for the health professions. The Federation Press, Sydney  
**Assessment:** Test, Quiz - 20 minutes, 20%. Presentation, 20 minute class presentation in small groups (4-6) of report ethical case and associated issues., 80%. The total word equivalence of combined assessment tasks for this 6 credit point unit is 2500 words approximate.

### HHD3212 Dermal Science 3

**Locations:** City Queen.

**Prerequisites:** HHD2212 - Dermal Science 2

**Description:** This unit will build on the knowledge base provided by HHD2112 Dermal Science 1 and HHD2212 Dermal Science 2 by further researching dermatology, specifically in the area of dermatological conditions. This unit will also cover the management of non-infectious dermatological conditions such as dermatitis, eczema, psoriasis, benign and pre-malignant skin lesions and skin cancers. A range of vascular and connective tissue disorders will also be considered. This unit will also expand on the microbiology knowledge gained in HHD2112 Dermal Science 1 to include the identification, biochemistry and treatment of infectious skin diseases. Knowledge of skin disorders and diseases will lead into related pharmacology and will include studies of the effects of various drugs and chemicals, both topical and oral, used in the treatment of skin conditions. The unit will introduce the student to the basic concepts of chemistry. Particular emphasis will be placed on increasing student knowledge of enzymes, pH and buffer systems in preparation for the more in depth cosmetic chemistry covered in HHD4112 Resurfacing Science.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:  
1. Identify and discuss the structure of atoms, ions, molecules and compounds;  
2. Identify the types of chemical bonds and describe the basic chemistry of macromolecules;  
3. Explain the mechanisms of enzyme action and the concept of pH and buffer systems;  
4. Discuss the aetiology, epidemiology, clinical features, differential diagnosis and treatments for a range of dermatological diseases and disorders;  
5. Recognise a range of dermatological conditions; and  
6. Discuss the role of a dermal clinician in the treatment of a range of dermatological conditions.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures, tutorials, laboratory sessions and online interactive demonstrations.

**Required Reading:** Weller, R., Hunter, J., Savin, J., & Dahl, M. (2008). (4th ed.). *Clinical Dermatology* Malden, MA: Blackwell Publishing  
Tortota, G., & Derrickson, B.H., (2009). (12th ed.). *Principles of Anatomy and Physiology* Hoboken, NJ: Wiley and Sons.

**Assessment:** Presentation, Oral presentation (10 minutes), 20%. Assignment, Written assignment (1000 words), 20%. Test, 10 Online Tests (each test 12 minute duration), 20%. Examination, Written examination (2 hours), 40%.

### HHD3213 Electrotherapy

**Locations:** City Queen.

**Prerequisites:** HHD2112 - Dermal Science 1 HHD2212 - Dermal Science 2 HHD3115 - Wound Care for Dermal Practice

**Description:** This unit will build upon the underpinning knowledge of wound healing, the nervous system, fluid, electrolyte, acid-base balance and electrical theory required to safely and effectively perform electrotherapy procedures in Dermal Therapies. Students will practice evaluative skills in determining efficacy of a range of electrotherapy modalities used in relation to dermal therapies. This will require written and research skills and will also include on-going evaluation of electrotherapy treatments in progress and final evaluation of completed treatments.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the processes associated with certain electrotherapy treatments relevant to the dermal clinician;
2. Perform and manage electrotherapy treatments safely and effectively where appropriate;
3. Explain electrical theory in relation to electrotherapy procedures in dermal therapy;
4. Explain how electrotherapy procedures are related to the nervous system, fluid, electrolyte and acid base balance;
5. Explain how electrotherapy procedures are related to and can assist wound healing processes; and
6. Evaluate the efficacy of electrotherapy for use in dermal practice.

**Class Contact:** Lecture 2.0 hrs Placement 3.0 hrs Tutorial 1.0 hr Online Sixty-six (66) hours for one semester comprising thirty-six (36) hours of online lectures and tutorials and thirty (30) hours supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus per semester. Practical exams will be included in the 1-2 weeks on campus. Practicum to be undertaken at City King St.

**Required Reading:** Robertson, V., Ward, A., Low, J., & Reed, A. (2006). (4th ed.). *Electrotherapy explained: Principles and practice* Edinburgh ; Sydney : Butterworth-Heinemann Elsevier. Students can access online and other resources as determined by unit coordinator

**Assessment:** Hurdle requirement; Supervised placement comprising successful completion of 30 hours at Dermal Teaching Clinic. Attendance and participation in all activities required in the Dermal Teaching Clinic. Assignment, Written Assignment (1500 words), 40%. Examination, Written Exam (1.5 hours), 40%. Practicum, Practical Examination (45 minutes), 20%.

### HHD3215 Advanced Health Research

**Locations:** Online, City Queen.

**Prerequisites:** HHD2113 - Health Research and Dermal Studies

**Description:** In this unit students will examine the importance of proper research design in evidence-based practice. Concepts include comparing and contrasting quantitative and qualitative research designs, principles of reliability and validity and their importance in measurement. Various forms of data analysis will be discussed. Students will be guided through the process of how research is developed, data collected, analysed and how reports are written.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Contextualise research theory by taking part in a group research project with both qualitative and quantitative components;
2. Critique dermal research study designs;
3. Apply data collection methods for both quantitative and qualitative information in a controlled manner;
4. Analyse basic statistical data and report on research findings.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** Please note books are often available online as eBooks via the VU library. Liamputtong, P. (2013). (2nd ed.). *Research Methods in Health. Foundations for Evidence Based Practice.* South Melbourne : Oxford University Press. Lecturer(s) will provide a list of further recommended books as required via the learning management system (VU Collaborate).

**Assessment:** Test, Students are to complete 10 x 5 minute online weekly quizzes in a set time. The quizzes will cover information from the tutorials, 20%. Examination, End of semester examination. Two hours in duration, 30%. Report, Class research project: The research will be designed as a class, students will collect data, analyse results and write a report., 50%.

## HH3216 Dermal Professional Practice

**Locations:**City Queen.

**Prerequisites:**HH3213 - Dermal Workplace Issues

**Description:**This unit is an integrating unit for the course and has been designed to provide students with a framework to link the main elements of the course. The unit enables students to enhance their critical thinking and integration of knowledge. Particular emphasis will be given to ethical and legal issues and dilemmas confronting dermal therapies, networking with medical practitioners and other health professionals including referrals and approaches to establishing effective and safe working relationships and presenting research findings and clinical results.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Identify and describe legal and ethical issues related to dermal therapy practice and generate appropriate solutions or refer them to the appropriate professionals;
2. Record client information in the appropriate format with appropriate levels of privacy and where appropriate communicate this information to allied healthcare professionals and medical practitioners;
3. Identify and describe the major components of our legal system and how it functions especially in relation to health law; and
4. Demonstrate public speaking abilities by planning a research presentation and expressing the findings to an audience.

**Class Contact:**Lecture 3.0 hrs

**Required Reading:**Pattison, S., & Pill, R. (2004). Values in professional practice: lessons for health, social care and other professionals. Oxford, UK: Radcliffe Medical Press.

**Assessment:**Assignment, Problem solving exercise (500 words), 10%. Examination, Multiple Choice Exam (100 MCQs), 50%. Presentation, Class presentation (A 20 minute presentation to the class on a set topic), 40%.

## HH3275 Clinical Diagnosis and Management 4 (Neurology)

**Locations:**City Flinders.

**Prerequisites:**HH3273 - Clinical Diagnosis & Management 3

**Description:**The aim of this unit is to build on students' knowledge and skills from Clinical Diagnosis and Management 1, 2 and 3 by exploring the clinical presentations of diseases affecting the neurological system. Students were introduced to regional examination in HH3271 and other systems examination in HH3272 and HH3273. This unit extends students established examinations skills through application to the neurological system and provides the opportunity to integrate with simulated case scenarios reflecting what may present in osteopathic practice. This unit aligns with the students preparing to commence their clinical hours as treating practitioners in the student led clinic at Flinders Lane campus.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Competently use the vocabulary of the neurological examination;
2. Explain the fundamentals of the clinical history as it pertains to neurological disease;
3. Explain the key diagnostic procedures, tests and investigations employed in neurology;
4. Competently use standard diagnostic equipment (e.g., stethoscope, otoscope, ophthalmoscope, reflex hammer, tuning fork) to conduct a rapid screening test of the nervous system;
5. Competently use standard diagnostic equipment to carry out the detailed examination of the key components of the nervous system (sensory, motor, cranial nerves, cerebral cortex, basal ganglia, cerebellum, upper and lower motor neurons, skeletal muscles, nerve damage in the upper and lower limb);
6. Use a basic diagnostic algorithm to arrive at a differential diagnosis;
7. Predict basic abnormal signs and symptoms that may be encountered when named structures are affected by pathology; and
8. Recognise the main classes of

headache and their specific clinical manifestations.

**Class Contact:**Lecture 1.0 hr Workshop 1.0 hr

**Required Reading:**Kiatos, J. (2013), 2013 HH3275 Clinical Diagnosis and Management 6 Lecture Manual. Jim Kiatos Bickley, L 11th Bates' Guide to Physical Examination and History-Taking Lippincott Williams & Wilkins

**Assessment:**90% attendance at practical sessions is a hurdle requirement. Formative and Summative assessments are hurdle requirements. Examination, 15-minute final practical exam (equivalent of 1500 words), 50%. Examination, 2 hour final written exam (equivalent of 1000 words), 50%. Total combined assessment word equivalence is approximately 2500 words for this six credit point unit. The practical examination is equivalent to 1500 words. This reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and knowledge of theory and anatomy. It should be noted that the 2 hour exam is in reality equivalent to a 1-1.5 hour exam; the students are given more time to complete the assessment in order to reduce their stress levels.

## HH4111 Cosmetic Chemistry

**Locations:**City King St, City Queen, City Flinders.

**Prerequisites:**HH3212 - Dermal Science 3

**Description:**This unit provides students with advanced knowledge in regard to the interaction of cosmetic products and the skin. Topics include the critique and development cosmetic formulations in accordance with safety and regulatory requirements and guidelines. A strong emphasis is placed upon the student's ability to formulate and prepare common cosmetic preparations in the laboratory sessions.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss and apply knowledge of the chemistry and function of cosmetic products;
2. Evaluate and implement compliance, regulatory and safety requirements in regards to cosmetic formulations;
3. Discuss and apply knowledge of preservatives and product stability for the formulation of cosmetic products;
4. Analyse the interaction between skin biochemistry and cosmetic formulations;
5. Analyse and discuss issues of toxicity, skin irritation and allergy in regard to cosmetic formulations; and
6. Formulate, produce and critique common cosmetic formulations.

**Class Contact:**Seventy-two (72) hours for one semester comprising of lectures, tutorials and laboratory sessions.

**Required Reading:**Barel, O., Paye, M. & Maibach, H. (Eds.). (2009). (3rd ed.). Handbook of Cosmetic Science and Technology. New York, NY:Informa Healthcare.

**Assessment:**Presentation, One poster presentation, 25%. Report, One 1000 word laboratory report, 25%. Examination, One 2hr written examination, 50%. Presentation assesses: Learning outcomes 1, 2, 3, 4, 5, 6 and graduate capabilities 1, 2, 3, 4, 5, 6 Laboratory report assesses: Learning outcomes 1, 2, 3, 4, 5, 6 and graduate capabilities 1, 2, 3, 4, 5, 6 Examination assesses: Learning outcomes 1, 2, 3, 4, 5 and graduate capabilities 1, 2, 3.

## HH4112 Resurfacing Science

**Locations:**City King St, City Queen.

**Prerequisites:**HH3212 - Dermal Science 2 HH3115 - Wound Care for Dermal Practice HH3212 - Dermal Science 3

**Description:**This unit will cover the underpinning knowledge of chemistry, pharmacology and toxicology required to safely and effectively perform procedures using chemical preparations. This subject uses knowledge gained in HH3211 2 Dermal Science 1 HH3212 Dermal Science 2, HH3212 Dermal Science 3 and HH3115 Wound Care for Dermal Practice and extends this to understanding the



wound healing process and barrier function in various resurfacing procedures. Practical application of resurfacing techniques will be undertaken and students will develop skills in case management and recording to meet professional and legal requirements. A minimum of thirty (30) supervised hours are to be completed at the University's Dermal Teaching Clinic

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Assess the pharmacological and toxicological implications of using specific chemical preparations in dermal therapies;
2. Analyse the chemistry of specific chemical preparations and the varied effects they have on the skin;
3. Integrate previously acquired knowledge of skin histology and wound healing and adapt it to resurfacing procedures;
4. Critically review evidence based research to identify effective resurfacing procedures;
5. Devise effective and safe treatment protocols through the evaluation and application of evidence based research to various resurfacing techniques;
6. Exhibit the ability to perform safe and effective resurfacing procedures at the level of a professional dermal therapist through the integration and adaption of theoretical knowledge to clinical practice; and
7. Report on resurfacing procedures by documenting case information to meet professional and legal requirements.

**Class Contact:** Practicum to be completed at City King St. On Campus Students: For this unit Students will complete a total of Seventy-eight (78) hours for one semester. This comprises of thirty-six (36) hours of face-to-face lectures (on campus) and 12 hours of tutorials (on-line) and thirty (30) hours supervised attendance at the Dermal Teaching Clinic. Burst Mode Students: Seventy-eight (78) hours for one semester comprising forty-eight (48) hours of online lectures and tutorials and thirty (30) hours supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus. Practical exams will be included in the 1-2 weeks on campus.

**Required Reading:** Students can access online and other resources as determined by the unit coordinator.

**Assessment:** Essay, Essay (2000 words), 30%. Practicum, Practical Exam (1 hour), 30%. Examination, Written Examination (2 hours), 40%. Hurdle Requirement: Students are required to successfully participate and complete 30 hours at the Dermal Teaching Clinic, as part of the Industry requirement to perform procedures safely and effectively prior to the practical examination. Attendance and participation in all activities are required at the Dermal Teaching Clinic.

### HHD4113 Advanced Laser and Light 1

**Locations:** City Queen.

**Prerequisites:** HHD3212 - Dermal Science 3HHD3112 - Light Based Hair Reduction

**Description:** This unit builds on and consolidates knowledge and techniques covered in the HHD2215 Laser Fundamentals and Safety and HHD3112 Light Based Hair Reduction, as well as sequencing as part of case management. Students will be monitored through the on-going evaluation of treatments in progress and final evaluation of completed treatments. Practical application of advanced dermal treatment techniques will be undertaken. Specific techniques to support clinical procedures will include class 3b, class 4 lasers and intense pulsed light (IPL).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain codes of conduct in laser procedures as outlined in AS/NZS 4173:2004;
2. Explain the processes, including the physics, associated with laser and light based treatments for dermatological conditions appropriate for phototherapy;
3. Perform treatments techniques as appropriate for dermatological conditions using intense pulsed light (IPL), class 3B and class 4 lasers;
4. Appropriately and safely

develop treatment plans for dermatological conditions in relation to different wavelengths and its relation to Fitzpatrick photo skin type; and 5. Manage light based and laser treatments for specific dermatological conditions with safety and confidence.

**Class Contact:** Lecture 2.0 hrs Placement 3.5 hrs Online Sixty-six (66) hours for one semester comprising thirty-six (36) hours of online lectures and tutorials and thirty (30) hours of supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus. Practical exams will be included in the 1-2 weeks on campus. Practicum and dermal teaching clinic at King Street Campus.

**Required Reading:** Online Journal articles are determined by unit co-ordinator Goldberg, D. (2008). Laser dermatology: Pearls and problems Malden, MA: Blackwell Publishing.

**Assessment:** Assignment, Written Assignment (2000 words), 25%. Examination, Practical Examination (1 hour), 20%. Examination, Written Examination (1.5 hours), 35%. Test, 12 Online Tests (each test 10 minute duration), 20%. Hurdle requirement; Supervised placement comprising successful completion of 30 hours at Dermal Teaching Clinic. Attendance and participation in all activities required in the Dermal Teaching Clinic.

### HHD4115 Post Operative Micropigmentation

**Locations:** City Queen.

**Prerequisites:** HHD2112 - Dermal Science 1HHD2212 - Dermal Science 2HHD3115 - Wound Care for Dermal Practice

**Description:** This unit will give students the underpinning knowledge and practical skills to perform a range of cosmetic and reconstructive micropigmentation procedures. Topics will include infection control in skin penetration techniques, indications and contraindications for micropigmentation procedures, complications and the management of adverse events that arise from micropigmentation procedures, as well as the implications of using pigments in skin penetration for wound repair.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss and demonstrate an understanding of indications and contra-indications for micropigmentation;
2. Assess, recommend and perform appropriate micropigmentation techniques for a range of cosmetic and reconstructive procedures;
3. Assess the implications for infection control in the use of skin penetration techniques;
4. Discuss and assess the implications for wound repair when using pigments inserted into the skin with skin penetration techniques;
5. Demonstrate knowledge of anatomy and physiology to design and undertake micropigmentation procedures; and
6. Perform a range of cosmetic and reconstructive micropigmentation procedures to the standard of a professional dermal clinician.

**Class Contact:** On Campus Sixty-six (66) hours for one semester comprising thirty-six (36) hours of face-to-face lectures, tutorials and practical demonstrations and thirty (30) hours supervised attendance at the Dermal Teaching Clinic for the semester. Online Sixty-six (66) hours for one semester comprising thirty-six (36) hours of online lectures, tutorials and practical demonstrations and thirty (30) hours of supervised attendance at the Dermal Teaching Clinic to be completed as 1-2 weeks intensive practicum on campus. Practical exams will be included in the 1-2 weeks on campus. Practicum and clinic hours will be at City King.

**Required Reading:** De Cuyper, C & Perez-Cotapos, S. (2009). Dermatologic complications with body art: Tattoos, piercing & permanent makeup. Springer Link (electronic book)

**Assessment:** Hurdle requirement; Supervised placement comprising successful completion of 30 hours at Dermal Teaching Clinic. Attendance and participation in all activities required in the Dermal Teaching Clinic. The emphasis in this unit is on

attaining proficiency in the practical skill of post operative micropigmentation, therefore the assessment is weighted more heavily for the practical examination Practicum, Practical Examination (1 hour), 60%. Assignment, Major Assignment (1500 words), 40%. Practical examination assesses: Learning outcomes 1, 2, 3, 5, 6 and graduate capabilities 1, 2, 3, 4, 5, 6 Major assignment assesses: Learning outcomes 1, 2, 3, 4 and graduate capabilities 1, 2, 3, 4.

## HHD4116 Human Biology

**Locations:**City Queen.

**Prerequisites:**HHD3212 - Dermal Science 3HHD3113 - Nutrition for Dermal TherapiesHHD3116 - Lymph and Adipose Biology

**Description:**This elective unit builds upon knowledge gained throughout the Bachelor of Health Science Dermal Therapies. The chemical basis of life is examined and applied to the development of human life and maintenance of homeostasis. Students will review a variety of human organ systems not previously reviewed in their undergraduate studies and apply this knowledge to the understanding of how humans function in both health and disease states. The transmission of genetic information will be examined and used to predict how genotype may translate to phenotype and students will revisit their current knowledge of cell biology and biochemistry but apply this to the explanation of human development. The unit concludes with an introduction to human evolutionary theories and ecology, where students will explore the impact humans have had on the wider environment. It provides final year dermal therapies students with a broader human biology foundation for undertaking post-graduate studies in the allied health or medical science fields.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Analyse chemical basis of life and relate to the development of humans and maintenance of homeostasis; 2. Review the human organ systems and critically apply this to the understanding of how humans function in health and disease states; 3. Examine the transmission of genetic information from parent to daughter cells to predict how genotype may translate to phenotype and apply this to understanding the genetic basis of disease; 4. Review the current knowledge of cell biology and biochemistry and critically apply this to the explanation of human development from zygote to senescence; and 5. Critically reflect on current theories of genetic variation in humans in terms of human evolutionary theories and the human impact on various ecosystems.

**Class Contact:**Lab2.0 hrsLecture3.0 hrs

**Required Reading:**Johnson, M 2014, 7th edn, Human biology concepts and current issues, Pearson Education, England. Perry, J, Morton, D, and Perry, J 2012, 6th edn, Laboratory manual for non-majors biology, Cengage Learning, Belmont, CA.

**Assessment:**Practicum, Written Laboratory Report (1500 words), 20%. Assignment, Written Assignment (1500 words), 25%. Examination, Written Examination (2 hours), 50%. Laboratory Work, Participation in laboratory activities, 5%. Students must attend at least 80% of the laboratory sessions to be considered for a pass for this unit. The total combined assessment word equivalence is approximately 4,500 words.

## HHD4144 Independent Research 1

**Locations:**Online, City Queen.

**Prerequisites:**HHD3215 - Advanced Health Research

**Description:**This unit seeks to develop a student's capacity to conduct research, work in groups and self-manage projects. Students will be guided through the processes of developing a research project with specific emphasis on appropriate research design,

development of a research proposal and obtaining ethics approval. Students will work in groups on the research project. Students will also complete an individual workplace project whereby they will develop reflective work practices, self-management and project management skills. Students will be given the choice of completing inter-professional practice placement, or conducting a charity project in their local community or taking part in a student mentoring program.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Design and scope a research project as part of a group; 2. Distill and critically evaluate a research proposal as part of a group; 3. Compose an ethics application as part of a group; 4. Monitor self-reflective work practices; and 5. Implement and manage a work project.

**Class Contact:**Lecture3.0 hrsOnline3.0 hrsStudents will be required to attend 12 hours (4 x 3 hour lectures) of class time per semester either face to face or online in the first 4 weeks. An additional time of 24 hours will be spent in group meetings to develop their research project portfolios (Of this time 30mins per week, per group will be supervised). A further 84 hours will be spent on independent project work, this can be completed in burst mode depending on the option selected. Students are expected to contribute 120 hours towards the unit, this includes class time, group work (supervised and unsupervised), individual project work and study.

**Required Reading:**Required texts, please note some of these titles are available online from the library and do not need to be purchased Lebrun, J. L. (2011). (1st ed). Scientific writing 2.0: a reader and writer's guide New Jersey: World Scientific. Kerzner, H. (2013). (11th ed). Project management: a systems approach to planning, scheduling, and controlling Hoboken, New Jersey: John Wiley & Sons, Inc. Cargill, M. (2013). (2nd ed). Writing scientific research articles strategy and steps Hoboken, New Jersey: John Wiley & Sons, Inc.

**Assessment:**Project - Students will present the development of a self-managed project. The project will be assessed via reflections and written evidence highlighting progression, experiences and (if required) materials developed. (Equivalent of 3000 words). Portfolio - Students will be placed into groups of 4-6 and will be asked to choose a research topic which will need to be approved by the unit coordinator by week 3. A group research proposal and ethics application will be based on the chosen research topic must be included in the portfolio. Students will not have to carry out the research in this unit. The research will be carried out in HHD4244, Independent Research 2 (Equivalent 2500 words per student). Test - The test is completed online and is open book and is 30 minutes in duration (Equivalent 500 words). Project, reflections and written evidence highlighting progression, experiences and (if required) materials developed (3000 words), 40%. Portfolio, Submit a portfolio of your research project one per group, 50%. Test, Multiple choice test (30 minutes), 10%. The total word equivalence for the combined assessments is 6,000 words.

## HHD4186 Clinical Diagnosis and Management 5 (Rheumatology)

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**The aim of this unit is to develop the skills required to conduct a clinical examination of the musculoskeletal system to detect the presence of key rheumatologic diseases. The unit further develops students' knowledge and skills of clinical examination in the osteopathic context. The topic areas for this unit are clinical examination schemas for the main rheumatological and autoimmune conditions that will be encountered in osteopathic clinical practice and the key diagnostic procedures, tests and investigations used to diagnose pathology of the joints, bones and connective tissues.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Role play clinical examination of the neurological system 2. Develop and demonstrate the cognitive skills enabling the exercise of critical thinking and judgement in the context of the clinical presentation; 3. Demonstrate the application of knowledge of examination skills through their ability to critically review and appraise clinical findings; and 4. Select relevant investigative procedures to confirm or exclude a differential diagnosis.

**Class Contact:** Lab 1.0 hr Lecture 1.0 hr

**Required Reading:** Required texts Dorland, W. A. N., (2011) (31<sup>st</sup> ed.). Dorland's illustrated medical dictionary. Saunders. Kiatos, J. (2014). 2014 Clinical Diagnosis and Management 5 (Rheumatology) lecture manual. Osteopathy, College of Health and Biomedicine

**Assessment:** Practical sessions have a hurdle requirement of at least 90% attendance. All formative and assessment tasks are hurdle requirements. Examination, 15 minute practical examination (equivalent of 1500 words), 50%. Examination, 2 hour written exam (equivalent of 1500 words), 50%. Total combined word equivalence is approximately 3000 words for this six-credit point unit. The practical examination is equivalent to 1500 words and reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and the knowledge of theory and anatomy. .

## HHD4212 Plastic and Reconstructive Procedures

**Locations:** City Queen.

**Prerequisites:** HHD3115 - Wound Care for Dermal Practice

**Description:** In this unit students will begin to focus on a specific range of medical and therapeutic procedures with a view to specialisation of peri-operative support using clinical dermal therapy techniques. Topics include: procedures in reconstructive, plastic and cosmetic surgery; complications of reconstructive, plastic and cosmetic procedures; Surgical aseptic technique and the considerations and implications for wound repair before, during and after surgery such as co-morbidities and medications.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Investigate and critically review cosmetic and reconstructive procedures with regard to indications, benefit and risks; 2. Assess risk and prescribe management strategies to prevent infection and adverse wound healing outcomes pre, peri and post operatively; 3. Evaluate the impact of medications, diseases/disorders and other conditions arising from surgery that may impact wound repair after plastics procedures and present management strategies; and 4. Interrogate the role that the Dermal Clinician has in patient care pre and post operatively and justify dermal therapy treatment plans demonstrating evidence based practice.

**Class Contact:** Online 1.5 hrs Tutorial 1.5 hrs Online Thirty-six (36) hours for one semester comprising online lectures and tutorials and placement in an approved healthcare, plastic surgery, cosmetic surgery or dermal therapy practice.

**Required Reading:** This is an ebook available from the Victoria University Library Seimionow, M., & Eisenmann-Klein, M. (2010). Plastic and reconstructive surgery. London, UK: Springer.

**Assessment:** Hurdle Requirement: Students must complete a placement (minimum of 4 hours) with a plastic surgeon to observe plastics procedures related to this unit. Assignment, Written Assignment (2000 words), 35%. Examination, Written Examination (1.5 hours), 35%. Test, 6 Online Tests (each test 15 minute duration), 20%. Journal, Written Journal (750 Words), 10%. The above assessments have a total equivalent word count of 6,000 words.

## HHD4213 Dermal Clinical Practicum

**Locations:** City Queen, practicum hours will be completed at the King street campus.

**Prerequisites:** HHD2115 - Permanent Hair Removal HHD3112 - Light Based Hair Reduction HHD3115 - Wound Care for Dermal Practice HHD3116 - Lymph and Adipose Biology HHD3213 - Electrotherapy

**Description:** This unit integrates dermal therapies theory and practice and gives students the opportunity to enhance their understanding by applying their skills in the clinical setting. Students will be assisted in transitioning into professional clinical practice through engaging with community and industry sectors in external and internal placements in approved healthcare, plastic and cosmetic surgery practices or dermal therapy clinics. The unit reinforces aspects of aseptic procedures, history taking, principles of diagnosis, treatment protocols, the range of treatment skills covered in the course thus far, legal issues and interpersonal and professional communication skills as well as reflective and evidence based practices.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply theoretical knowledge gained from previous study in dermal therapies to clinical practice and cases that typically present within professional practice; 2. Communicate case material in a professional style sufficient to facilitate accurate, efficient and effective handover; 3. Work effectively within a team environment including mentoring junior students within the teaching clinic; 4. Perform all treatments and other activities within the dermal teaching clinic to the standard of a qualified clinician; and 5. Reflect on current clinical practices and apply evidence based practice to dermal clinical therapies.

**Class Contact:** Lecture 3.0 hrs On Campus Seventy-two (72) hours for one semester comprising twelve (12) hours of face-to-face tutorial/discussion groups and sixty (60) hours of supervised attendance at the Dermal Teaching Clinic and placement in an approved healthcare, plastic /cosmetic surgery practice or dermal therapy clinic. Online Seventy-two (72) hours for one semester comprising twelve (12) hours of online tutorials/discussion groups and sixty (60) hours supervised attendance at the Dermal Teaching Clinic and placement in an approved healthcare, plastic/cosmetic surgery practice or dermal therapy clinic. 1-2 weeks intensive placement may be arranged on campus per semester. Practical exams will be included in the 1-2 weeks on campus.

**Required Reading:** Duncan. P. (2010). Values, ethics and healthcare. London, UK: Sage.

**Assessment:** Hurdle requirement; Supervised placement comprising successful completion of 60 hours completed at the dermal teaching clinic and within an approved healthcare, plastic/cosmetic practice or dermal therapy clinic. Practicum, Practical Assessments (minimum 10), 50%. Journal, Reflective journal (10 entries min 200 words each), 50%.

## HHD4215 Advanced Laser and Light 2

**Locations:** City King St, City Queen.

**Prerequisites:** HHD2215 - Laser Fundamentals and Safety HHD3112 - Light Based Hair Reduction

**Description:** In this unit students will build on and consolidates knowledge and techniques covered in HBD2203 Laser Principles and Safety, HBD3101 Hair Reduction Procedures, and HBD4102 Advanced Laser 1 as well as sequencing as part of case management. Students will be monitored through the on-going evaluation of treatments in progress and final evaluation of completed treatments. Practical application of advanced dermal treatment techniques will be undertaken. Specific techniques to support clinical procedures will include Class 3b, Class 4 lasers and intense pulsed light (IPL).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Interpret codes of conduct in laser procedures as outlined in the Australian Standards (AS/NZS 4173:2004); 2. Triangulate the processes, including the physics, associated with laser and light based treatments for tattoo removal and advance skin tightening; 3. Exhibit abilities to perform tattoo removal and advanced skin treatments including but not limited to scar revision and skin treatment using intense pulsed light (IPL), Class 3B and Class 4 lasers; (IPL), class 3B and class 4 lasers; 4. Evaluate and design treatment plans for tattoo removal and advanced skin treatment in relation to different wavelengths and its relation to skin assessment tools like but not limited to Fitzpatrick photo skin typing, Glogau, Robertson skin classifications; 5. Interrogate risks and prescribe management strategies to prevent complication associated with light-based and laser treatments for tattoo removal and advanced skin treatment.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr Workshop 2.5 hrs Practicum and Dermal Teaching Clinic is conducted at City King Street Campus.

**Required Reading:** Weekly Reading material will be available on VU Collaborate and link to journal articles and clinical studies through E:Reserve (library).

**Assessment:** Test, Six (6) Online Tests (12 minutes duration each, 1000 words equivalent), 30%. Case Study, Case Study exhibiting practical abilities (3000 words), 30%. Examination, Written Examination (2 hours), 40%. To pass this unit, students must achieve an aggregate score of 50%, and pass the case study assessment. The case study assessment is a hurdle requirement that assesses a student's capabilities to perform the relevant modalities. An additional hurdle requirement is that students attend a minimum of 90% of clinic sessions to further demonstrate their practical skills and capabilities in a clinical setting. .

## HHD4244 Independent Research 2

**Locations:** City Queen.

**Prerequisites:** HHD4144 - Independent Research 1

**Description:** Students participate in conducting a research project with specific emphasis on data collection, the use of appropriate statistical analyses and report writing.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Collect data for a research project; 2. Analyse data from a research project; 3. Write a report on data collected and results found; and 4. Present those results in a conference type format.

**Class Contact:** Lecture 3.0 hrs Students will be required to attend a weekly group project meeting of 3 hours duration, this meeting will be partially supervised.

**Required Reading:** Thomas, S.A. (2004). How to Write Health Science Papers, Dissertations, and Theses Sydney: Churchill Livingstone

**Assessment:** Research Paper, Research report (4000 words), 70%. Presentation, Presentation of research findings (20 minutes duration), 30%.

## HHD5188 PBL (Obstetrics/Paediatrics/Psychiatry)

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** HHD5186 PBL (Obstetrics/Paediatrics/Psychiatry) students will develop specialised knowledge and skills in each of these areas in order to prepare them for professional practice in an increasingly diverse healthcare context. They will investigate common and specialised conditions in each medical area, relevant clinical tests and conventional medical management, musculo-skeletal implications and specific impact on osteopathic diagnosis and treatment. Students will devise

solutions (in terms of diagnosis and comprehensive osteopathic management) to a series of problem-based learning cases which require them to integrate knowledge and skills from previous and concurrent learning.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Elicit and interpret clinical signs and symptoms pertinent to conditions typically seen in Obstetrics/Paediatrics/Psychiatry; 2. Interpret clinical tests and special investigations commonly used in the diagnosis of conditions typically seen in Obstetrics/Paediatrics/Psychiatry and generate both a primary and differential diagnosis; 3. Critically review the medical management of various conditions in Obstetrics/Paediatrics/Psychiatry presenting in osteopathic practice and relate them to subsequent osteopathic management strategies; and 4. Recommend and defend comprehensive osteopathic management plans in relation to a series of holistic 'problem based cases' which reflect the integration of both prior and concurrent learning.

**Class Contact:** Lecture 1.0 hr Tutorial 3.0 hrs

**Required Reading:** There are no required texts for this unit

**Assessment:** All summative assessment tasks are a hurdle requirement. Other, Contribution to discussions and evidence of home preparatory work (Equivalent to 1500 words), 20%. Test, Six 30 minute online quizzes throughout semester based on cases (equivalent to 2500 words), 30%. Presentation, 30 minute group presentation recommending management approaches for a case (equivalent to 3000 words), 50%. The total word equivalence for combined assessment items is 7,000 words.

## HHD5287 PBL-Gerontology

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** HHD5287 PBL students will develop specialised knowledge and skills in the area of gerontology in order to prepare them for professional practice in an increasingly ageing healthcare context. They will consider the interface between the clinical presentations of common and more specialised gerontological disorders; their medical management and musculoskeletal implications; and subsequent impact on osteopathic management. The patient will be considered within the holistic framework of ageing, social and familial support and inputs from other health care providers. Students will devise solutions (in terms of diagnosis and comprehensive osteopathic management) to a series of problem-based learning cases which require them to integrate knowledge and skills from previous and concurrent learning.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Elicit and interpret clinical signs and symptoms pertinent to conditions typically seen in gerontology; 2. Interpret clinical tests and special investigations commonly used in the diagnosis of conditions typically seen in gerontology and generate both a primary and differential diagnosis; 3. Critically review the medical management of various conditions in gerontology typically presenting in osteopathic practice and relate them to subsequent osteopathic management strategies; and 4. Recommend and defend comprehensive management plans in relation to a series of holistic 'problem based cases' which reflect the integration of both prior and concurrent learning.

**Class Contact:** Lecture 1.0 hr Tutorial 3.0 hrs

**Required Reading:** There are no required texts as this is a problem based unit in which students are expected to develop the skills to identify appropriate sources of information.

**Assessment:** All summative assessment tasks are a hurdle requirement. Other,

Contribution to discussions and evidence of home preparatory work (Equivalent to 1500 words), 20%. Test, Six 30 minute online quizzes throughout semester based on cases (equivalent to 2500 words), 30%. Presentation, 30 minute group presentation recommending management approaches for a case (equivalent to 3000 words), 50%. The total word equivalence for combined assessment items is 7,000 words.

### HHL1171 Academic Skills

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HHL1171 Academic Skills is designed to support students in their academic transition to university and the osteopathic programme at Victoria University. This unit enables students to develop skills in engaging with scholarly literature, critical thinking, reflective practice, academic writing and delivering oral presentations within the broader context of foundation clinical sciences and osteopathic studies. A highlight of this unit is the opportunity for students to engage in Interprofessional-education (IPE) with other health professional students within the University and reflect on their decision to study osteopathy and compare to other health professions.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Locate and review scholarly literature relevant to contemporary theory and practice in clinical sciences and osteopathy; 2. Synthesise and report findings from a literature search in formats (oral and written) which adhere to academic conventions around transfer of knowledge; 3. Identify and analyse the requisite features of academic essays and replicate them in subsequent formative and summative assessment tasks; 4. Reflect on the nature of early osteopathic clinical experience and its role in the development of a professional identity; and 5. Reflect on their own professional role and the roles of other health professionals.

**Class Contact:**Twenty-four (24) hours for one semester comprising of weekly lectures (1 hour), 9 one-hour tutorials and 3 hours of online learning.

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation.

**Assessment:**All assessment components are hurdle requirements for successful completion of this unit Essay, Reflective essay (500 words), 40%. Essay, Research essay (500 words), 30%. Presentation, Group presentation (20 minutes, equivalent to 500 words each student), 30%. The total word equivalence of the combined assessment tasks equates to 1500 words for a six credit point unit.

### HHL4180 Introduction to Research Methods

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HHL4180 Introduction to Research Methods (6 credit points) is one of four research-related units within HMOP where students develop the communication and technical research skills to justify and interpret theoretical propositions, methodologies, conclusions and professional decisions to specialist and non-specialist audiences. They also learn to design, evaluate, implement, analyse and theorise about developments that contribute to the professional evidence-base. In this introductory unit students interrogate the notion of scientific methods; evaluate the characteristics of quantitative and qualitative research paradigms and review data sampling and collection. All of this content is discussed throughout the semester by appraising published research papers with a view to establishing critical analysis skills in the students.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Assess quantitative, qualitative and mixed methods research approaches in the context of osteopathic research; 2. Critically review examples of research methods commonly used to contribute to the evidence base in osteopathy and related health fields; 3. Identify ethical requirements in the conduct of research; 4. Critique a research paper and present the critique in an oral format for peer review; and

**Class Contact:**Tutorial 2.0 hrs

**Required Reading:**Unit coordinator will provide appropriate reading material throughout the semester.

**Assessment:**Assignment, Quantitative Journal article critique (750 words), 20%. Presentation, Oral presentation of a findings from journal article critique (in pairs 250 words), 20%. Assignment, Qualitative journal article evaluation (750 words), 20%. Examination, Final exam (1.5 hours - 1250 words), 40%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks.

### HHL4281 Statistical Methods & Analysis

**Locations:**City Flinders.

**Prerequisites:**HHL4180 - Introduction to Research Methods

**Description:**HHL4281 Statistical Methods and Analysis (6 credit points) aims to extend and consolidate introductory level knowledge and skills (and their application) in the field of quantitative research. Topics include revision of descriptive and inferential statistics, correlations and hypothesis testing, general linear model, power and effect, analysis of variance and covariance multivariate designs, nonparametric data analysis and selection of nonparametric tests, and practical use of the SPSS statistical computer package. Students will investigate the relevance of quantitative methods to a subsequent professional research project which is the focus of HHL5182 (12 credit points) and HHL5283 (12 credit points) in HMOP. Students will also develop a preliminary research proposal which will be further developed and implemented in HHL7901 (12 credit points) and HHL7902 (12 credit points).

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Critically review quantitative data analysis methods commonly used to contribute to the evidence-base in osteopathy and related health fields; 2. Discriminate the type and purpose of various statistical designs and evaluate their applicability to the investigation of specific research questions; 3. Exhibit requisite technical and inferential skills to optimise the use of a statistical computer package (SPSS) for data analysis; 4. Analyse data using parametric and non-parametric tests and correctly interpret the statistical output; and 5. Develop and defend a proposal for a research project according to requisite conventions.

**Class Contact:**PC Lab 2.0 hrs

**Required Reading:**Coakes, S.J. (2012). SPSS version 20.0 for Windows. Analysis without Anguish. John Wiley & Sons, Australia.

**Assessment:**Assignment, Written assignment (research proposal 750 words) with oral presentation, 25%. Test, One hour multiple choice quiz, 20%. Examination, 90 minute computer lab exam using SPSS, 55%. The total word equivalence of combined assessment tasks approximates to 3000 words.

### HHL7901 Research Project 1

**Locations:**City Flinders.

**Prerequisites:**HHL4281 - Statistical Methods & Analysis HHL4180 - Introduction to Research Methods

**Description:**The sequential units HHL7901 Research Project 1 (12 credit points) and

HHL 7902 Research Project 2 (12 credit points) provide students with the opportunity to plan and execute a substantial research based project or piece of scholarship that will contribute to the osteopathic evidence base. Students will apply research knowledge and skills acquired in the prior units HHL4180 Introduction to Research Methods and HHL4281 Statistical Methods and Analysis. In HHL7901, they will develop their critical appraisal skills, undertake a literature review which contextualises the research project, ensure that relevant ethical protocols have been met, and commence data collection and analysis where appropriate to the project.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Perform sensitive and specific advanced searches for research topic using numerous electronic databases;
2. Critically appraise literature in the field of osteopathy and health science relevant to their research project;
3. Independently progress the ethics protocols, data collection and analysis phases of research and justify the use of particular quantitative, qualitative or mixed methods;
4. Deduce, exhibit and reflect upon the collaborative skills required to be an effective member of a research team.

**Class Contact:** Tutorial 2.0 hrs

**Required Reading:** Reading materials will be provided by the unit coordinator in line with the student's project(s).

**Assessment:** 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks. Assignment, Advanced search strategy assignment (equivalent to 1000 words per student), Pass/Fail. Assignment, Journal article critique (equivalent to 2000 words per student), Pass/Fail. Presentation, Presentation on project and data analysis methods (equivalent to 1000 words per student), Pass/Fail. Report, Preliminary literature review relevant to research group topic (equivalent to 3000 words per student), Pass/Fail. The assessment for this unit is pass/fail rather than graded. The assessment tasks for this unit are preparatory work and 'milestone tasks' to support students in the development of the final products of their research (submitted in research project 2). The assessments in research project 2 are pieces of scholarship at AQF level 9 (presentation and project) and the time required extends beyond the one semester. It is not appropriate to grade draft pieces of work and the assessments in this unit are deemed a 'pass' if sufficient progress is made to ensure students will submit their final assessment pieces in a timely manner. The total word equivalence of combined assessment tasks approximates to 7,000 words in this AQF9 12 credit point unit.

## HHL7902 Research Project 2

**Locations:** City Flinders.

**Prerequisites:** HHL7901 - Research Project 1

**Description:** In HHL5283 students continue to assist with data analysis for a staff-led group research project. Working on one particular aspect of the research question, they will report their results and then prepare a discussion and conclusion section which will contribute to the overall research report. This discussion and conclusion section will contextualise the results within the current literature and predict their relevance to emerging osteopathic practice. Students will make a presentation of their aspect of the research project in a research seminar. Finally students will complete a reflective piece on the research experience, which should demonstrate a high standard of written communication skills and understanding of the research process

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Plan and execute the component tasks involved in investigating and reporting a research question in order to contribute to the professional evidence-base;
2. Synthesise and contextualise research findings and defend emerging conclusions and theorising;
3. Effectively communicate an aspect of the research project to their peers, Osteopathy staff and other interested parties from within the College of Health and Biomedicine in a Research Seminar; and
4. Deduce, exhibit and reflect upon the collaborative skills required to be an effective member of a research team.

**Class Contact:** Tutorial 2.0 hrs

**Required Reading:** Reading materials will be provided by the lecturer in line with the student's project(s).

**Assessment:** Project, Results and analysis (2500 words), 35%. Project, Discussion and conclusions (2500 words), 35%. Presentation, Oral presentation at the end of year research seminar (1000 words), 15%. Essay, Reflective piece on research experience (1000 words), 15%. The total word equivalence of combined assessment tasks approximates to 7000 words.

## HHM4281 Pharmacology 1

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** In this unit students will develop an understanding of the following: principles of quality use of medicines (QUM); classification and regulatory status of medicines; general pharmacology concepts; indications and contraindications, effectiveness and safety of selected classes of medicines; valid and reliable sources of information about selected medicines and their use, as well as relevant government policies and guidelines. Students will gain the ability to access, interpret and critically appraise evidence about different aspects of treatments and medicines in order to inform their clinical decision making.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Investigate and appraise the development, testing, approval, scheduling and subsidy processes for drugs used and sold in Australia;
2. Conceptually map the basic methods of drug action and of pharmacological concepts such as pharmacokinetics and pharmacodynamics;
3. Elicit and document a medicine's history;
4. Analyse the main classes and practical uses of drugs, herbals and supplements, commonly encountered in clinical practice; and
5. Critically apply pharmaceutical knowledge in advising patients about medication issues according to contemporary and emerging evidence.

**Class Contact:** Online 1.0 hr Tutorial 1.0 hr Workshop 2.0 hrs

**Required Reading:** Bullock, S., Manias, E. (2014) 7th ed. Fundamentals of Pharmacology Pearson Bryant, B. & Knights, K. (2012) 4th ed. Pharmacology for health professionals Mosby Australia

**Assessment:** Report, Critique of a selected journal paper (750 words), 25%. Case Study, Case study analysis and response (1000 words), 25%. Test, Student generated questionnaire (500 words), 25%. Journal, Reflective piece on the completed tasks and their relationship to future practice (750 words), 25%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks. Further, students develop a portfolio (4 assessment tasks combined) in this unit and tutorial activities are critical in the development of the portfolio. The portfolio of assessments includes one hurdle task: Assessment Item 4, Journal, Reflective piece on the completed tasks and their relationship to future

practice (750 words). This item is a hurdle requirement as it is essential students are able to reflect at this stage in their osteopathic program (close to graduation).

## HHM5182 Pharmacology 2

**Locations:**City Flinders.

**Prerequisites:**HHM4281 - Pharmacology 1

**Description:**This unit addresses drug types used to treat a variety of medical conditions which osteopaths may encounter in their clinical practice. These include drugs used in the treatment of skin and respiratory conditions; drugs used for treating hypertension and angina (adrenoreceptor blockers, anticoagulants and lipid-lowering drugs); and those with other vascular effects like 5-HT agonists and sympathomimetic. Newest approaches in pharmacological treatments of endocrine disorders (including diabetes mellitus) and neoplasms are all considered. Pharmacological treatments for central nervous disorders (like epilepsy and Parkinson's) and mental disorders include hypnotics, anxiolytics, antidepressants and other drugs used in CNS & psychiatric disorders. In addition to studying the therapeutic use of drugs, students will investigate recreational drugs and the effects of substance abuse.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Analyse and predict the actions, interactions and adverse effects of the major drugs commonly seen in osteopathic practice;
2. Articulate protocols for referrals to other health practitioners as appropriate and debate the potential for ethical issues in cases where medications may be causing health problems;
3. Conceptually map the actions, interactions and adverse effects of the drugs/supplements for the management of cardiac, gastrointestinal, respiratory and musculoskeletal conditions; and
4. Critically apply pharmaceutical knowledge in advising patients about medication issues according to contemporary and emerging evidence.

**Class Contact:**Online 1.0 hrTutorial1.0 hrWorkshop2.0 hrs

**Required Reading:**Bryant, B., & Knights, K. (2011). (3rd ed.). Pharmacology for health professionals. Elsevier. Bullock, S., Manias, E.(2014). (7th ed) Fundamentals of Pharmacology. Pearson

**Assessment:**Review, Short literature review (1500 words), 25%. Case Study, Case study analysis and response (750 words), 25%. Report, Appraisal of pharmaceutical therapy (750 words), 25%. Other, Reflective piece on the completed tasks and their relationship to future practice (1000 words), 25%. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The tutorial activities in this unit are interactive and students are able to seek feedback from the tutor on meeting the learning outcomes and planning for assessment tasks. Further, students develop a portfolio (4 assessment tasks combined) in this unit and tutorial activities are critical in the development of the portfolio. The portfolio of assessments includes one hurdle task: Assessment Item 4, Journal, Reflective piece on the completed tasks and their relationship to future practice (750 words). This item is a hurdle requirement as it is essential students are able to reflect at this stage in their osteopathic program (close to graduation).

## HHM6800 Research Thesis (Full-Time)

**Locations:**Footscray Park.

**Prerequisites:**Nil.

**Description:**This subject, the aim of which is to enable students to competently research an area of study utilising knowledge and skills gained in previous studies, consists of a project carried out by students on an individual basis. The project is expected to be an investigation of an approved topic, followed by the submission of a suitably formatted thesis in which the topic is introduced and formulated; the

investigation described in detail; results and conclusions from the study elaborated; and an extended discussion presented. Students may be required to undertake some lecture courses, as specified at the time of commencement.

**Credit Points:** 48

**Class Contact:**Independent research in addition to regular meetings with the student supervisors.

**Required Reading:**To be advised by supervisor.

**Assessment:**The thesis will normally be assessed by at least two expert examiners from an appropriate area of expertise.

## HHM6801 Research Thesis (Part-Time)

**Locations:**Footscray Park.

**Prerequisites:**Nil.

**Description:**This subject, the aim of which is to enable students to competently research an area of study utilising knowledge and skills gained in previous studies, consists of a project carried out by students on an individual basis. The project is expected to be an investigation of an approved topic, followed by the submission of a suitably formatted thesis in which the topic is introduced and formulated; the investigation described in detail; results and conclusions from the study elaborated; and an extended discussion presented. Students may be required to undertake some lecture courses, as specified at the time of commencement.

**Credit Points:** 24

**Class Contact:**Independent research in addition to regular meetings with the student supervisors.

**Required Reading:**To be advised by supervisor.

**Assessment:**The thesis will normally be assessed by at least two expert examiners from an appropriate area of expertise.

## HHN0021 Counselling Skills for Natural Medicine Practitioners

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**An introduction to the role of the counsellor and relationship between the client and practitioner. The following theories will be covered: Social Cognitive Theory, Self-efficacy Theory, Motivational Counselling Psychoanalytic, Family-Based Theory, Client-Centred Counselling. Ethical and legal issues of counselling.

**Credit Points:** 12

**Learning Outcomes:**At the completion of this unit, students will be able to: 1. Demonstrate good verbal communication skills in a seminar presentation. 2. Evaluate and justify the use of a specific counselling theory in nutrition counselling. 3. Investigate and implement skills in searching, sourcing and synthesising counselling information from relevant journal articles. 4. Interrogate ethical and legal issues in counselling nutrition clients.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hr

**Required Reading:**Bauer, K, Liou, D. & Sokolik, C (2012). 2nd ed. Nutrition Counselling and Education Skill Development. Belmont/Cengage Learning.

**Assessment:**Presentation, Presentation in seminar (15 min. with 5 min. for questions); equivalent to 1500 words, 35%. Assignment, Written assignment; 1500 words, 40%. Journal, Reflective Journal; equivalent to 750-1,000 words, 25%. Total word equivalent is 4,000 words (approximate).

## HHN1101 Introduction to Nutrition

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This introductory unit will provide students with the foundational knowledge needed to understand the nutritional requirements for adult human

health. This includes exploring how the body digests food, absorbs digestive end-products and metabolises nutrients to produce or store energy. Initially the unit focuses on the macronutrients: carbohydrates, protein and lipids and how they are digested, absorbed, transported and stored in the body, as well as how they are converted to energy and their roles in energy balance. Subsequently the unit explores micronutrients and examines their functions in the body, requirements, symptoms of micronutrient deficiencies, and food sources.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the principles of energy balance in the body, in relation to foods consumed, energy expended and energy stored;
2. Explain the differences between vitamins and minerals, and how bioavailability affects requirements of both;
3. Articulate the roles of selected vitamins and minerals in human health, their requirements for healthy functioning, and list the symptoms of deficiency conditions and excessive intakes;
4. List the food sources of selected vitamins and minerals;
5. Review the roles of the organs and accessory organs in the gastrointestinal tract; and
6. Articulate the roles of the macronutrients in producing, using and storing energy in the body.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Rolfes, S.R., Cameron-Smith, D., Walsh, A., Crowe, T., Whitney, E. 2013. 2nd Australian Edition. Understanding Nutrition. Australia: Cengage.

**Assessment:** Assignment, Challenge a diet myth - 500 words, 25%. Test, Mid-semester test in class (30 min), 25%. Examination, Final examination (2 hrs), 50%. Total word equivalence is 3000 words approximate.

### HHN1203 Inter-Professional Skills

**Locations:** Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:** Nil

**Description:** This unit provides students with an introduction to inter-professional skills required in nutrition and food science. The unit introduces food and nutrition industries, its components and organisation in Australia, the professionals associated with these industries as well as the basic composition of foods, food processing and food safety. The unit focuses on identifying and applying inter-professional skills to facilitate effective information exchange within and between professions, including verbal and non-verbal communication strategies, ethical codes of conduct and professionalism, conflict and conflict resolution, record keeping and reflective practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and describe professionalism, the various professionals operating within the food, nutrition and health industry, and how they relate to each other
2. Identify, understand and apply the principles of inter-professional skills and reflective practice;
3. Demonstrate an understanding of the roles and factors that contribute to effective teamwork; including individual responsibilities and potential sources of conflict and resolution strategies
4. Demonstrate an understanding of effective verbal and non-verbal communication skills; including communication with a lay and scientific audience
5. Demonstrate an understanding of codes of ethical and professional conduct that relate to food, nutrition and health professionals.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Additional material will be provided in the class/tutorial.

**Assessment:** Journal, Reflective Journal, 30%. Presentation, Group Presentation of an inter-professional case study (15mins), 30%. Examination, Final Exam (2 hours), 40%.

### HHN2001 Family Health and Nutrition Through the Lifespan

**Locations:** Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:** HPC1000 - Introduction to Human Nutrition and Food HPC1000 applies to HBAS students only.

**Description:** This unit will build on the foundational knowledge of the nutritional requirements for health and absorption of nutrients attained in HPC1000 Introduction to Human Nutrition and Food. This unit explores the recommended dietary intakes throughout the stages of the lifespan for maintenance of health for individuals and families, for example in pre-conception, pregnancy, lactation, infancy, toddler years, childhood, adolescence and aging. Through lectures and problem-based learning exercises in tutorials, students will examine nutritional issues related to conception, growth and development through to aging. Such nutrition-related issues range from developmental challenges through to social, behavioural and environmental influences on food behaviours. Upon completion of this unit, students will have the skills and knowledge to be able to understand the common nutrition challenges at different stages of life.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and elaborate on the dietary requirements to maintain proper growth, development and health across each stage of the lifespan;
2. Articulate the physical, biological, social, behavioural and environmental factors during pre-conception, pregnancy, infancy, childhood, adolescence, and aging;
3. Critically review and evaluate the literature on health across the lifespan, and justify their selection of scientific evidence to support nutrition solutions; and
4. Articulate the theoretical evidence associated with the Australian Guide for Healthy Eating and the practical application of this for families and across the lifespan.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Rolfes, S.R., Cameron-Smith, D., Walsh, A., Crowe, T. Whitney E. (2013) 2nd Australian Edition Understanding Nutrition Australia: Cengage.

**Assessment:** Literature Review, Selected nutrition topic (1000 words), 25%. Case Study, Team work, report (500 words), oral (15 minutes), 25%. Examination, Final examination (2.5 hrs), 50%.

### HHN2002 Nutritional Frontiers

**Locations:** Werribee, Footscray Park, Online, St Albans.

**Prerequisites:** HHN2402 - Diet & Disease

**Description:** This unit will study advances in the understanding of the role of nutrition in selected topics including cardiovascular, metabolic and reproductive health and nutri-genomics. Evidence-based research for and against the effectiveness of nutrition intervention therapies will be presented and discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate nutrition research in selected health topics;
2. Assess nutritional interventions conducted in clinical and experimental settings;
3. Discuss the properties of some micronutrients that influence cellular and physiological mechanisms; and
4. Explain how nutritional components can influence the development and progression of disease.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** There are no required texts. Students will be provided with an up-to-date reading list via the VU Collaborate system. Rolfes, S.R., Pinna, K. & Whitney, E. (2009). 9th ed. Understanding Normal and Clinical Nutrition Cengage Learning Gropper, SAS and Smith J.L. (2013). Advanced Nutrition and Human Metabolism. Cengage Learning

**Assessment:** Case Study, Includes short literature review on selected nutrition topic



(1200 words), 25%. Literature Review, Major literature review on selected nutrition topic (1800 words), 25%. Examination, Final Exam (2 hours, 2000 words), 50%. There are two assignments on research regarding potential nutritional interventions for treating disease. The 2 hour exam covers material from the lectures and tutorials. The total combined assessment word equivalence is approximately 5,000 words.

## HHN2301 Nutrition Through the Lifespan

**Locations:** St Albans.

**Prerequisites:** HHN1101 - Introduction to Nutrition

**Description:** HHN1101 Introduction to Nutrition focused on adult health and nutritional requirements and processes. This unit explores the recommended dietary intakes at other stages of the lifespan, for example in pregnancy, lactation, infancy, toddler years, childhood, adolescence and the senior years (over the age of 65 years). Through lectures and problem-based learning exercises in tutorials, students will examine nutritional issues related to conception, growth and development through to aging. Such nutrition-related issues range from developmental challenges through to social, behavioural and environmental influences on food behaviours. Upon completion of this unit, students will have the skills and knowledge to be able to creatively address common nutrition challenges at different stages of life.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and elaborate on the dietary requirements to maintain proper growth, development and health across each stage of the lifespan;
2. Articulate the physical, biological, social, behavioural and environmental factors associated with the onset of nutrition-related health conditions during pregnancy, infancy, childhood, adolescence, and the senior years;
3. Critically review and evaluate the literature on common nutrition-related health problems across the lifespan, and justify their selection of scientific evidence to support nutrition solutions; and
4. Propose and defend practical and relevant solutions to common nutrition issues across the lifespan in a variety of case study scenarios.

**Class Contact:** Thirty-six (36) hours for one semester comprising lectures, tutorials/workshops and online activities. In addition, it is recommended that students spend 3 hrs a week in out-of-class activities such as studying and reading.

**Required Reading:** Rolfes, S.R., Cameron-Smith, D., Walsh, A., Crowe, T. Whitney E. 2013. 2nd Australian Edition. Understanding Nutrition. Australia: Cengage.

**Assessment:** Students will select a current nutrition topic from a list of possible choices, and will critically review the scientific literature on the current nutrition practices related to that health condition. In tutorials, small teams will work together on case studies and will develop a practical and relevant solution for each case study, presenting and defending their solutions in a written paper (no more than 750 words) and 15 minute presentation scheduled in a tutorial. Literature Review, selected nutrition topic; 1000 words, 25%. Case Study, in tutorial in teams; 750 words total, 15%. Case Study, team-based; 15 minutes oral total, 10%. Examination, final examination; 2 hrs, 50%. Total word equivalence is approximately 4,000 words.

## HHN2401 Nutrition & Physical Activity Assessment

**Locations:** Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:** HPC1000 - Introduction to Human Nutrition and Food HPC1000 applies to HBAS students only.

**Description:** This unit provides an overview of two (2) core types of nutritional assessment: dietary and anthropometric. The theoretical component will involve critically assessing the strengths and limitations of various approaches, and their practical applications. Such applications include estimating food and nutrient intakes, physical activity levels, energy expenditure and various methods for assessing body

composition and size. Students will develop skills in these methods, learn to estimate measurement errors, and interpret and critique studies that have examined the dietary intakes and physical activity levels of various population sub-groups.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate and justify various methods of assessing the dietary intakes of population groups and individuals and consider the strengths and limitations of each type of assessment;
2. Conduct basic anthropometric measurements, minimising measurement errors and following standardized protocols for accuracy and reproducibility;
3. Articulate the strengths and limitations of selected anthropometric assessments and defend their validity and reliability when applied to different population sub-groups; and
4. Critique reference standards and recommendations for dietary intakes, physical activity, and body size and composition for various population sub-groups.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Links to relevant documents and resources will be available for students will be provided via VU Collaborate.

**Assessment:** Laboratory Work, Two (2) Lab Reports (500 words each), 25%. Assignment, Critique of published study (1000 words), 25%. Examination, Final Exam (2 hours), 50%.

## HHN2402 Diet & Disease

**Locations:** Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:** HPC1000 - Introduction to Human Nutrition and Food

**Description:** This unit will cover the aetiology and prevention of non-communicable diseases affecting the health of populations in developed nations. During this unit, students will have the opportunity to learn about human nutrition and its relationship to health and disease, particularly metabolic syndrome. The topics include, but are not limited to: obesity; diabetes; cardiovascular disease; cancer and mental health. Students will be able to summarise the key issues and role of nutrition in the prevention of non-communicable diseases.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the connections between diet and health and lifestyle associated diseases;
2. Describe the aetiology, prognosis and impact of chronic diseases on individuals and society;
3. Interpret, translate and critically review lifestyle factors that may assist in preventing chronic diseases; and
4. Interrogate selected nutritional problems from the perspective of both the individual and the wider community.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Murray, A.C. (2012) Diet, Exercise, and Chronic Disease. The Biological Basis of Prevention. CRC Press.

**Assessment:** Case Study, Case study on selected topic (1000 words), 25%. Test, Mid-semester Test (1 hour in class), 25%. Examination, Final Exam (2 hours), 50%. Students will be given individual case studies in tutorials, and will prepare written responses and solutions (1000 words). A mid-semester test in class will enable students to assess their learning as they progress through the unit.

## HHN3001 Nutritional Biochemistry

**Locations:** Werribee, Footscray Park, Online, St Albans.

**Prerequisites:** RBM2560 - Medical Biochemistry

**Description:** The aim of this unit is to build on the foundation of biochemical principles covered in RBM2560 Medical Biochemistry with an emphasis on human medical and nutritional applications of biochemistry. This unit covers many aspects of biochemistry

related to macronutrient (carbohydrates, fats and proteins) and alcohol metabolism in health and pathophysiology. An understanding of extracellular and intracellular receptor signalling will be developed. Discussion of compensatory mechanisms such as futile cycling and pro and anti-inflammatory responses and the regulation of these (including genetic to physiological) will be included. Practical components of the measurement of energy metabolism and how dietary manipulation alters energy metabolism will be covered. Measurement of inflammatory markers and gene expression will also be investigated, particularly as they relate to alterations in energy metabolism.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe various metabolic pathways of macronutrients and alcohol;
2. Evaluate and explain changes in physiological systems in health and pathophysiology;
3. Describe the role of inflammation in the regulation of metabolism;
4. Explain the measurement of and physiological consequences of alterations in gene expression and inflammation as they relate to metabolism; and
5. Explain the action of specific intra- and extra-cellular signalling cascades and how these have regulatory roles in metabolism.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Gropper, S.S. (2013) 6th ed Advanced nutrition and human metabolism Belmont, CA: Wadsworth/Cengage Learning

**Assessment:** Test, Three (3) Multiple Choice Topic Tests (60 mins), 30%.

Assignment, Reports on practicals and answers to workshop questions (2000 words), 30%. Examination, Final examination (2 hours), 40%. The total combined assessment word equivalence is approximately 5,000 words.

### HHN3501 Applied Research Methods in Nutrition

**Locations:** St Albans.

**Prerequisites:** nil

**Description:** This unit provides an introduction to the research process and provides practical training in research skills relevant to undertaking research in human nutrition. Students will explore the processes and steps involved throughout the research process, including planning a research project, developing methodology, analysing results and reporting of data. It also addresses research approaches, ethical considerations, information retrieval skills and methods of communicating research data for nutrition audiences. This unit will also introduce students to common statistical techniques and statistical analysis software packages. Topics include: surveys and experiments; tables and graphs; measures of location and dispersion; and the scientific method.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the research process including design, ethical issues and evidence-based practice;
2. Devise concise and measurable research questions to address a selected research focus;
3. Identify and defend a broad research strategy appropriate to the selected research focus;
4. Interpret and critique research results and conclusions; and
5. Develop an ethics proposal.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Peat, Barton & Eliot, 2008 Statistics Workbook for Evidence-based Health Care Wiley-Blackwell

**Assessment:** Students will complete data analysis work using a statistical software package, and will prepare a mock ethics application (using the VU Human Ethics form). Laboratory Work, Exercise in data analysis (~1000 words), 25%. Exercise, Mock ethics application (VU ethics form), 25%. Examination, Final exam (3 hrs), 50%. Total word equivalence is approximately 5,000 words.

### HHN3502 Community & Public Health Nutrition

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HHN2001 - Family Health and Nutrition Through the Lifespan HHN2402 - Diet & Disease HHN2401 - Nutrition & Physical Activity Assessment RBM2530 - Pathophysiology 1 RBM2540 - Pathophysiology 2 RBM3960 - Nutritional Frontiers Meeting requirements of the Dean's list for academic merit during first year of studying

**Description:** HHN3502 will focus on the public health implications of nutrition-related chronic disease in Australia. Students will examine health policy frameworks and national and state health systems and assess the relevance of these in addressing nutrition issues in Australia. The nutritional practices of various communities and populations within Australia will also be explored in order to establish causal links with health outcomes. Large and smaller scale nutrition interventions designed to promote community and public health will be investigated.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Propose and conceptually map the determinants of health in a diverse population or community and integrate available evidence related to nutritional status.
2. Predict the health impact of nutritional practices of client groups from varied social and cultural backgrounds and identify subsequent health service needs.
3. Interrogate the essential components of the Australian health system and argue the location and role of nutrition within the system.
4. Critically analyse the contribution of nutrition problems to the contemporary and emerging burden of chronic disease in Australia.
5. Critique national and state policies, strategies and interventions aimed at promoting nutritional health at different stages of the lifecycle.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Handbooks and case studies to be provided by the instructor.

**Assessment:** Case Study, Summative Case History (2500 words), 50%. Examination, Final Exam (Long Answer Questions x Eight (8), 3 hours), 50%. Total combined assessment word equivalence is approximately 5000 words.

### HHN3503 Introduction to Food Service

**Locations:** Footscray Nicholson, St Albans.

**Prerequisites:** HHN2402 - Diet & Disease HFS2001 - Properties of Food HFS2002 - Food Safety and Preservation HFS2004 - Food Quality Assurance

**Description:** This unit will provide students with the knowledge and skills required to work as a Menu Monitor/Nutrition Assistant in a food service operation in the health care industry including acute, residential aged care and community nutrition programs or other health care related commercial food service providers. Students will learn about foods allowed and not allowed for a range of special diets. They will develop skills in analysing recipes and menus for nutritional content using electronic software programs relevant to the health care industry and incorporating Australian data bases. Menu processing and management systems that accommodate menu variation will be explored. Students will be introduced to information technology systems used to manage menu orders, meal assembly and nutritional analysis.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Design to industry standards and critically review the types of menus utilised in health care sectors and identify their strengths and weaknesses;
2. Identify requisite menu modifications and food production skills associated with therapeutic diet modifications;
3. Analyse the nutritional value of recipes using current technology designed for the institutional health care sector; and
4. Evaluate and critique the process of menu management and processing in various contexts

including hospitals, residential aged care and other health care related commercial food service providers.

**Class Contact:**Lecture 2.0 hrs Tutorial 4.0 hrs Site visits may be made to the institutional kitchens at Footscray Nicholson campus and institutional food services

**Required Reading:**Links to relevant text will be provided by the unit coordinator.

**Assessment:**Test, Class test (60 minutes), 30%. Portfolio, Portfolio (1500 words), 70%.

### HHN3601 Nutrition Communication & Education

**Locations:**Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:**HHN2001 - Family Health and Nutrition Through the LifespanHHN2402 - Diet & DiseaseHHN2401 - Nutrition & Physical Activity AssessmentRBM3960 - Nutritional Frontiers

**Description:**Today's consumers are confused by an overwhelming amount of information about diets, nutrition and food. This unit will provide students with the communication skills and basic theory about education, learning and behaviour change, to enable them to design effective communication strategies for the general public/consumers. Non-print media strategies, such as videos and the internet, are emphasized in the context of health literacy and cultural diversity.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critique the communication strategies and nutrition messages delivered to the general public/consumers by the media, advertisers, the food industry, government and public health agencies.
2. Apply the principles of promoting health behaviour change, taking into considering barriers and enablers that may impact on the general public/consumers ability to change.
3. Evaluate and develop written and verbal health education materials which consider the cultural requirements, literacy levels and health literacy levels of the general public/consumer.
4. Demonstrate professional, technical, cultural and interpersonal knowledge and skills for successful collaboration with peers on the production of a key nutrition message for a contemporary and diverse audience.

**Class Contact:**Lecture 2.0 hrs Tutorial 3.0 hrs This unit will be delivered in burst mode with lectures and tutorials running for the first 7 weeks. Subsequent to lectures and tutorials, students will spend time in the preparation and presentation of supervised nutrition education learning activities. In addition, it is recommended that students spend three (3) hours a week in out-of-class learning activities.

**Required Reading:**Lecturer will provide links to relevant journal articles and text via VU Collaborate.

**Assessment:**Assignment, Part A (500 words), 10%. Assignment, Part B (1000 words), 20%. Presentation, Team presentation (30 mins) and individual written summary (1000 words)., 40%. Examination, Final exam (2 hours), 30%.

### HHN3602 Food Service Systems

**Locations:**Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:**HHN2001 - Family Health and Nutrition Through the LifespanHHN2402 - Diet & DiseaseHFS2001 - Properties of FoodHFS2002 - Food Safety and PreservationHFS2004 - Food Quality Assurance

**Description:**This unit will provide students with the knowledge and skills required to work as a Team Leader or Supervisor in a food service operation in the health care industry including acute, residential aged care and community nutrition programs such or other health care related commercial food service providers.. Students will explore food service systems including meal production, assembly and distribution systems used in health care food services and associated equipment and staffing patterns. Issues of quality management through regulatory compliance with respect

to food safety and accreditation standards within health care food service operations will be addressed. Reinforcing the constraints of the health care system, the significance of recurrent costs on budget expenditure by developing skills in recipe and menu costing will be investigated. Students will learn about supervision and resource management principles and practices (job descriptions, work flows, rostering, and communication skills) to prepare them for work in the health care industry.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically analyse production, meal assembly and distribution systems for strengths, weaknesses and limitations;
2. Conceptually map the systems, equipment and staffing associated with meal assembly and delivery systems used in hospitals, residential aged care and community nutrition programs and identify associated risks;
3. Calculate the cost of food associated with recipes and menus utilising appropriate software systems;
4. Compare quality and food safety systems including accreditation systems, regulations and guidelines relevant to each health care sector; and
5. Design sample work flows and rosters in a health care food service operation.

**Class Contact:**Lecture 2.0 hrs Tutorial 4.0 hrs Students will have five (5) observational and practical excursions to workplace locations (institutional kitchens in aged residential care facilities; hospital kitchens; or other health care related commercial food service providers).

**Required Reading:**Links to additional texts will be provided by the unit coordinator via VU Collaborate.

**Assessment:**Test, Class test (60 minutes), 30%. Portfolio, Portfolio (3000 words), 70%.

### HHN3603 Nutrition Project

**Locations:**Werribee, Footscray Park, St Albans.

**Prerequisites:**HHN2001 - Family Health and Nutrition Through the LifespanHHN2402 - Diet & DiseaseHHN2401 - Nutrition & Physical Activity AssessmentRBM3960 - Nutritional Frontiers

**Description:**This unit provides third year students with an opportunity to select and undertake either (a) a brief research project in an area of interest with members of the Food, Nutrition & Dietetics staff; or (b) a work-based placement in the field of nutrition. Both the research and work-based placements enable the student to undertake a structured work experience program as an integral part of their degree course. Gaining practical experience in their chosen field enables students to test interest and ability in these areas.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Appraise, interpret and reference scientific literature on a selected topic or hypothesis;
2. Construct a report of project experience in an appropriate and professional style according to specified conventions and accessible to specialist and non-specialist audiences;
3. Critically reflect on how their project experience has assisted their understanding of nutritional principles and knowledge;
4. Critique data and results, integrating findings with contemporary or emerging evidence or knowledge and interrogating its scientific and personal significance.

**Class Contact:**h consultation with the unit coordinator and a supervisor, students will work approximately six (6) hours per week in a laboratory or community setting to conduct a nutrition-related project or research.

**Required Reading:**The Lecturer will provide learning and teaching materials as required.

**Assessment:**Report, Scientific/Professional report (5,000 words), 90%. Practicum,

Supervisor assessment of lab skills or community engagement/work, 10%. Total combined assessment word equivalence is approximately 5,000 words.

### HHN3604 Food Service Challenges

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HFS2001 - Properties of Food HFS2002 - Food Safety and Preservation HFS2003 - Food Microbiology HFS2004 - Food Quality Assurance Completion of the Food Science minor

**Description:** This capstone unit provides third year students with an opportunity to select and undertake a work-based placement in the field of food services within the health care sector. This work-based placement provides the student with opportunity to undertake a structured work experience program as an integral part of their degree course that would enable them to develop their problem solving skills based on the overall knowledge gained through the course. Gaining practical experience in their chosen field enables students to test interest and ability in these areas and prepare them for team leader and supervisory roles within the health care food service industry.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Appraise and interpret literature on a selected topic; 2. Construct a report of project experience in an appropriate and professional style according to specified conventions and accessible to specialist and non-specialist audiences; 3. Critically reflect on how their project experience has assisted their understanding of nutritional principles and knowledge; and 4. Critique data and results, integrating findings with contemporary or emerging evidence or knowledge and interrogating its scientific and personal significance.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Plus sixty (60) hour placement.

**Required Reading:** As instructed by the lecturer/supervisor.

**Assessment:** Case Study, Professional report (4,000 words), 90%. Examination, Supervisor assessment of industry engagement/work including reflective journal (approximately 1,000 words), 10%. Total combined assessment word equivalence is approximately 5,000 words. Students will write a report (maximum of 4,000 words), following guidelines for format and content provided by the instructor.

### HHN3605 Nutrition Challenges

**Locations:** Footscray Nicholson, Werribee, Footscray Park, Online, St Albans.

**Prerequisites:** HHN2001 - Family Health and Nutrition Through the Lifespan HHN2402 - Diet & Disease HHN2401 - Nutrition & Physical Activity Assessment RBM3960 - Nutritional Frontiers

**Description:** The Nutrition Challenges Capstone involves a negotiated, authentic, project-based activity that responds to a local, national or global nutrition 'challenges' and closely relates to professional work in the nutrition field. Students will synthesise and apply their learning across the degree program, demonstrate holistically their development of graduate capabilities and successfully negotiate the transition to their next career stage.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map the research process including design, ethical issues and evidence-based practice and integrate and synthesise prior knowledge and learning from multiple and diverse topic areas to produce a coherent response to a contemporary nutrition challenge; 2. Devise concise and measurable research questions to address a selected research focus; 3. Identify and defend a broad research strategy appropriate to the selected research focus; 4. Exhibit investigative, reporting and presentation skills commensurate with graduate level

career-entry requirements; and 5. Articulate their development of Victoria University Graduate Capabilities and predict how these will inform their future professional practice in the field of nutrition.

**Class Contact:** Tutorial 2.0 hrs A total of 24 hours of tutorials plus thirty-six (36) hrs of independent work per semester. Students will generally be working independently to conduct the negotiated investigative project that constitutes the Nutrition Challenges capstone.

**Required Reading:** No required reading text. Links to reading material will be provided by the Lecturer.

**Assessment:** Test, project plan (1000 words), 20%. Presentation, Individual project presentation (30 minutes), 30%. Report, Written project report including summary/abstract and reflective section for inclusion in e-portfolio (3500 words), 50%.

### HHN5181 Nutrition for Primary Care

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** In this unit students will integrate fundamental knowledge of nutrition with their specialised osteopathic clinical assessment and management skills. The role of macronutrients and micronutrients in the body is considered and an optimal diet for Australians is described. Nutrition needs through the lifecycle are discussed focusing on specific nutrition related conditions that might be encountered in osteopathic clinical practice. The role of food in lifestyle diseases, and the nutritional management of these diseases is also addressed. The varied roles of dietitians and nutritionists and likely opportunities for inter-professional practice and referral are explored.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically evaluate the role of nutrients in general patterns of health and disease; 2. Conceptually map the nutrient composition of foods, the assimilation of these nutrients into the body and advocate the virtues of a balanced diet; 3. Access and appraise the evidence base linking nutrition, diet and musculo-skeletal fitness at various life stages; and 4. Predict the likely impact of nutritional status in specific clinical conditions relevant to osteopathic practice and make diet and nutrition referrals as appropriate.

**Class Contact:** Lecture 1.0 hr Tutorial 1.5 hrs

**Required Reading:** Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation.

**Assessment:** Review, Journal article (1000 words), 30%. Report, Clinical Case Summary and Referral (1000 words), 30%. Examination, One 1.5 hour written examination, 40%. The total words equivalent of combined assessment tasks is approximately 3500 words.

### HHO1170 Osteopathic Science 1

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** The aim of this unit is to introduce students to the underpinning concepts of osteopathic theory and practice. Students commence the development of their knowledge of osteopathic philosophy, practical skills of palpation of anatomical structures and, the examination and application of manual techniques for the upper limb, cervical spine and temporomandibular joint. This unit comprises three (3) modules with relating topic areas: Module 1: History & Principles of osteopathy - development of the conceptual framework of osteopathy and an understanding of osteopathic history and philosophy; Module 2: Palpation - development of palpatory

skills and awareness of normal and abnormal tissue characteristics. Emphasis is placed on palpatory skills, osteopathic soft tissue and articulatory techniques, surface anatomy and tissue awareness. The palpation component will augment and reinforce anatomy presented in the unit Anatomy 1 HHA1171; and Module 3: Examination and Technique - consideration of somatic dysfunction and the functioning of the individual as a whole. An introduction to osteopathic diagnosis. Basic soft tissue techniques applicable to the tissues of the musculoskeletal system. The use of levers to induce motion within these tissues including an appreciation of barrier principles. Contraindications to osteopathic care both absolute and relative.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Locate and palpate major anatomical structures and landmarks of the shoulder girdle, upper limb, head and neck;
2. Assess the musculoskeletal structures of the shoulder girdle, upper limb, head and neck;
3. Demonstrate soft tissue and articulatory techniques for the musculoskeletal system of the shoulder girdle, upper limb, head and neck; and
4. Articulate the basic concepts of osteopathy and relate osteopathic history and philosophy to contemporary clinical practice.

**Class Contact:** Sixty-six (66) hours for one semester comprising of weekly lectures and practical classes which cover the areas of Osteopathic History Principles, Palpation, as well as Examination and Techniques.

**Required Reading:** Chaitow, L. (2010). (3rd ed.). Palpation and assessment skills. New York: Churchill Livingstone. Field, D. (2001). (3rd ed.). Anatomy, palpation and surface markings. Baltimore, MD: Williams and Wilkins. Tucker, C., & Deoora, T. K. (1994). Fundamental osteopathic techniques. Melbourne, Australia: Research Publications. Hoppenfeld, S. (1976). Physical examination of the spine and extremities. Norwalk, CN: Appleton-Century Crofts. Greenman, P. (2011). (4th ed.). Principles of manual medicine. Baltimore, MD: Williams and Wilkins. Lumley, J. S. P. (2002). (3rd ed.). Surface anatomy. Edinburgh: Churchill Livingstone.

**Assessment:** Examination, History and Principles quizzes (2) (500 words equivalent each) (20% each), Pass/Fail. Practicum, Combined practical and oral examination (15 minutes – 1000 words equivalence) (50%), Pass/Fail. Assignment, Reflective practice written piece (2) (500 words equivalence per task) (15% each), Pass/Fail. Total combined assessment word equivalence is approximately 3000 words. The equivalence for the Practicum assessment has been determined by the Discipline of Osteopathic Medicine to be 15 minutes of practical assessment is equal to 1000 words at AQF5. This reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and knowledge of theory and anatomy. Participation in practical sessions is mandatory with at least 90% attendance required (hurdle requirement). All assessment tasks are hurdle requirements. A pass mark of 50% has been set for the History & Principles quizzes; the practicum and written tasks are graded as either pass or fail.

## HHO1271 Osteopathic Science 2

**Locations:** City Flinders.

**Prerequisites:** HHO1170 - Osteopathic Science 1HHA1171 - Anatomy 1

**Description:** This unit extends students' knowledge and skills of the underpinning concepts of osteopathic theory and practice. Students commence the development of their knowledge of osteopathic philosophy, practical skills of palpation of anatomical structures and, the examination and application of manual techniques for the thoracic spine, lumbar spine, ribs and the lower extremity. This unit comprises three (3) modules with relating topic areas: Module 1: History & Principles of osteopathy - extended development of the conceptual framework of osteopathy and an understanding of osteopathic history and philosophy; Module 2: Palpation - continue to reinforce and further develop palpatory skills, knowledge of surface

anatomy and awareness of normal and abnormal tissue characteristics. Emphasis is placed on palpatory skills for the application of osteopathic soft tissue and articulatory techniques. The palpation component will augment and reinforce anatomy presented in the units Anatomy 1 HHA1171 and Anatomy 2 HHA1272; and Module 3: Examination and Technique - consideration of somatic dysfunction and the functioning of the individual as a whole. An introduction to osteopathic diagnosis. Basic soft tissue techniques applicable to the tissues of the musculoskeletal system. The use of levers to induce motion within these tissues including an appreciation of barrier principles. Contraindications to osteopathic care both absolute and relative are also considered.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Locate and palpate major anatomical structures and landmarks of the thoracic spine, lumbar spine, ribs and the lower extremity;
2. Assess the musculoskeletal structures of the thoracic spine, lumbar spine, ribs and the lower extremity;
3. Demonstrate soft tissue and articulatory techniques for the musculoskeletal system of the thoracic spine, lumbar spine, ribs and the lower extremity; and
4. Articulate and integrate the basic concepts of osteopathy into their practical and clinical skills.

**Class Contact:** Sixty-six (66) hours for one semester comprising weekly lectures and practical classes.

**Required Reading:** Chaitow, L. (2010). 3rd ed. Palpation and assessment skills. New York: Churchill Livingstone. Greenman, P. (2011). 4th ed. Principles of manual medicine. Baltimore, MD: Williams and Wilkins. Hoppenfeld, S. (1976). Physical examination of the spine and extremities. Norwalk, CN: Appleton-Century Crofts. Lederman, E. (2005). 2nd ed. The science and practice of manual therapy New York: Churchill Livingstone. Lumley, J. S. P. (2002). 3rd ed. Anatomy Edinburgh: Churchill Livingstone. Tucker, C., & Deoora, T. K. (1994). Fundamental osteopathic techniques. Melbourne, Australia: Research Publications.

**Assessment:** Test, History and Principles Quizzes (2) (250 words equivalent each) (20%), Pass/Fail. Assignment, Written assignment (1500 words) (30%), Pass/Fail. Practicum, Oral/Practical End of Semester exam (total duration 15 minutes) (15 minutes – 1000 words equivalence) (50%), Pass/Fail. Practicum assessment has been determined by the Discipline of Osteopathic Medicine to be 15 minutes of practical assessment is equal to 1000 words at AQF5. This reflects the requirement of the student to draw on a range of skill sets including communication, psychomotor skills, interpersonal skills and knowledge of theory and anatomy. Participation in practical sessions is mandatory with at least 90% attendance required (hurdle requirement). All assessment tasks are hurdle requirements. A pass mark of 50% has been set for the History & Principles quizzes; the practicum is graded as either pass or fail.

## HHO2171 Osteopathic Science 3

**Locations:** City Flinders.

**Prerequisites:** HHO1271 - Osteopathic Science 2HHA1171 - Anatomy 1HHA1272 - Anatomy 2HHU1270 - Clinical Practicum 1HHD1271 - Clinical Diagnosis & Management 1

**Description:** The aim of this unit is extend students developing knowledge of osteopathic assessment, theory and practice. Manual therapy techniques are advanced to incorporate additional soft tissue, articulation and muscle energy techniques as well as the introduction of High Velocity Low Amplitude (HVLA) thrusting techniques to the spine and thorax. Advanced Orthopaedic assessment for the regions of the neck, thoracic, shoulder, elbow and wrist are also taught. Contraindications to treatment are emphasised within this unit and students start to explore the available evidence for osteopathic principles, somatic dysfunction, and

best practice. This unit comprises of three (3) modules: Module 1: Osteopathic examination and technique 1 focuses on further development of principles of examination of the cervical and thoracic spine and peripheral (upper extremity) regions. The unit focuses on the application of osteopathic and orthopaedic examination to these regions. This module also continues development of osteopathic skills including soft tissue, articulation, and muscle energy techniques and contraindications to the use of these osteopathic techniques. Module 2: This module introduces the student to the use of high-velocity thrust techniques applicable to the spinal region. This module also focuses on safe application of these techniques and knowledge of contraindications and interpretation of tests and protocols relating to patient safety. Module 3: This module furthers the students learning of the principles and practice of osteopathic medicine as distinct from allopathic and other complementary therapies. The module focuses on the evidence base underpinning osteopathic principles and somatic dysfunction and enables the student to apply basic critical analysis to this evidence.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply osteopathic and orthopaedic examination skills to the cervical, thoracic and upper extremity regions of the musculoskeletal system;
2. Analyse and apply the biomechanical and osteopathic principles underlying regional examination and their use in selection of HVLA thrust, articulation and muscle energy techniques;
3. Competently demonstrate with commentary and perform HVLA thrust techniques safely whilst taking into consideration both patient and operator comfort;
4. Defend technique selection and demonstrate appropriate and safe techniques to the cervical and thoracic spine and upper extremity including articulation, soft tissue and muscle energy techniques;
5. Identify and elaborate contraindications relating to these osteopathic techniques and apply basic clinical reasoning to determine when it is safe to use these techniques in clinical practice; and
6. Distinguish principles and practice of osteopathic medicine from allopathic and other complementary therapies by applying basic critical analysis skills to the evidence.

**Class Contact:** Lecture 1.0 hr Workshop 1.5 hrs Fifty-four (54) hours comprising of weekly lectures and practical workshops.

**Required Reading:** Gibbons, P., & Tehan, P. (2009). (3rd ed.). *Manipulation of the spine, thorax and pelvis: An osteopathic perspective*. Edinburgh: Churchill Livingstone. Magee, D. J. (2014). (6th ed.). *Orthopedic physical assessment*. W. B. Saunders Co. Lecture notes and research articles will be provided via VU Collaborate.

**Assessment:** Attendance of 90% at all practical workshops is mandatory and a hurdle requirement to pass this unit. All summative assessment items below are hurdle requirements for successful completion of this unit. The percentage of 50% and above constitutes a pass in the written examination; the practicum is graded as either pass or fail. Test, Short answer test (500 words) on safety relating to HVLA techniques (25%), Pass/Fail. Practicum, End of semester Practical exam (30 minutes) (50%), Pass/Fail. Test, Written test on theory of osteopathy (1000 words) (25%), Pass/Fail. Total combined assessment word equivalence is approximately 4000 words. Equivalence for the Practicum assessment reflects the requirement of the student to draw on a range of skill sets including communication, psycho-motor skills, interpersonal skills and knowledge of theory and anatomy.

## HHO2272 Osteopathic Science 4

**Locations:** City Flinders.

**Prerequisites:** HHO2171 - Osteopathic Science 3

**Description:** The aim of this unit is to build on students developing knowledge of osteopathic assessment, theory and practice. Manual therapy techniques are advanced to incorporate additional soft tissue, articulation and muscle energy

techniques as well as the introduction of High Velocity Low Amplitude (HVLA) thrusting techniques to the spine and thorax. Advanced Orthopaedic assessment for the regions of the neck, thoracic, shoulder, elbow and wrist are also taught. Contraindications to treatment are emphasised within this unit and students start to explore the available evidence for osteopathic principles with further development of their diagnostic skills through simulated cases. This unit comprises three (3) modules with the following topic areas: Module 1: Osteopathic examination and technique 2 focuses on further development of principles of examination of the lumbar spine and pelvis and peripheral (lower extremity) regions. The unit focuses on the application of osteopathic and orthopaedic examination to these regions. This module also continues development of osteopathic skills including soft tissue, articulation, and muscle energy techniques in these regions and contraindications to the use of these osteopathic techniques. Module 2: HVLA technique 2 module continues the students development of high-velocity thrust techniques applicable to the spinal region, ribs and pelvis. This module also focuses on safe application of these techniques and knowledge of contraindications and interpretation of tests and protocols relating to patient safety. Module 3: This module develops the conceptual framework of osteopathy and an understanding of current scientific and popular issues in osteopathy, including issues relevant to Australia.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply osteopathic and orthopaedic examination skills to the lumbar spine, pelvis and lower extremity regions of the musculoskeletal system;
2. Analyse and apply the biomechanical and osteopathic principles underlying regional examination and their use in selection of HVLA thrust, articulation and muscle energy techniques;
3. Competently demonstrate with commentary and perform HVLA thrust techniques to the spine, pelvis and rib cage safely whilst taking into consideration both patient and operator comfort;
4. Defend technique selection and demonstrate appropriate and safe techniques to the lumbar spine and pelvis and lower extremity including articulation, soft tissue and muscle energy techniques;
5. Identify and elaborate contraindications relating to these osteopathic techniques and apply basic clinical reasoning to determine when it is safe to use these techniques in clinical practice; and
6. Identify and analyse the conceptual framework of osteopathy, current scientific and popular issues in osteopathy, and the evidence base underpinning osteopathic concepts and management approaches

**Class Contact:** Lecture 1.0 hr Workshop 1.5 hrs Fifty-four (54) hours for one semester comprising of weekly lectures (24 hours) and practical workshops (36 hours).

**Required Reading:** Gibbons, P., & Tehan, P. (2009) (3rd ed.). *Manipulation of the spine, thorax and pelvis: An osteopathic perspective* Edinburgh: Churchill Livingstone. Magee, D. J. (2014). (6th ed.). *Orthopedic physical assessment* W. B. Saunders Co. Lecture notes and articles are available on VU Collaborate.

**Assessment:** 90% attendance is mandatory and a hurdle requirement. Passing all summative assessment items below is a hurdle requirement for successful completion of this unit. Practicum, End of semester practical exam (30 min per student) (75%), Pass/Fail. Test, 2 x 1 hour quizzes - History and Principles (500 words equivalence each) (25%), Pass/Fail. Total combined assessment word equivalence is approximately 4000 words. The equivalence for the Practicum assessment reflects the requirement of the student to draw on a range of skill sets including communication, psycho-motor skills, interpersonal skills and knowledge of theory and anatomy.

## HHO3174 Osteopathic Science 5

**Locations:** City Flinders.

**Prerequisites:** HHO2272 - Osteopathic Science 4 HHA2272 - Anatomy 4 HHD2273 -

### Clinical Diagnosis & Management 3

**Description:**The aim of this unit is to build on students' developing knowledge of common musculoskeletal conditions and the implications to clinical practice. The unit also continues to develop students' hands on osteopathic skills, clinical reasoning and diagnosis. This unit comprises three (3) modules with relating topic areas: Module 1: Osteopathic Diagnosis explores clinical reasoning in diagnosis and prognosis in osteopathic practice. The student will review clinical examination from the perspective of different osteopathic treatment models. Module 2: HVLA technique develops students' HVLA skills for application to the peripheral joints, as well as the junctional spinal regions, building on skills developed in year 2 of the course. Module 3: Common Conditions of the Musculoskeletal System explores common clinical conditions and presentations in osteopathic practice, including peripheral joint injuries and common orthopaedic complaints.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Analyse models of osteopathic diagnosis, treatment and prognosis;
2. Apply advanced assessment skills to assess regions of the musculoskeletal system for musculoskeletal pain and dysfunction;
3. Propose specific contraindications for individual osteopathic treatment techniques for specific patients and patient conditions;
4. Competently and safely perform, with commentary, HVLA techniques to the junctional spinal regions and peripheral joints, taking into consideration both patient and operator comfort; and
5. Investigate common regional conditions of the spine and periphery and discuss the relevance of these conditions to clinical practice.

**Class Contact:**Online 1.0 hrWorkshop 3.0 hrsForty-eight (48) hours for one semester comprising 1 hour online lecture and 2 x 1.5 hour practical workshops per week.

**Required Reading:**Lecture notes are provided prior to class on VU Collaborate for student access. DeStefano, L. (2017). (5th ed.). Principles of manual medicine. Philadelphia: Wolters Kluwer Gibbons, P., & Tehan, P. (2009). (3rd ed.). Manipulation of the spine, thorax and pelvis: An osteopathic perspective. Edinburgh: Churchill Livingstone Hartman, L (1997). (3rd ed.). Handbook of osteopathic technique. Chapman & Hall, Great Britain.

**Assessment:**Practicum, Objective Structured Clinical Examination (3 x 15 min stations), Pass/Fail. Formative Assessment task in class with direct feedback from staff 90% attendance at practical workshops is mandatory and a hurdle requirement for passing this unit. Practical sessions have a hurdle requirement of at least 90% attendance. The equivalence for the Practicum assessment reflects the requirement of the student to draw on a range of skill sets including communication, psycho-motor skills, interpersonal skills and knowledge of theory and anatomy.

### HHO3275 Osteopathic Science 6

**Locations:**City Flinders.

**Prerequisites:**HHO3174 - Osteopathic Science 5HHU3173 - Clinical Practicum 3

**Description:**The aim of this unit is to introduce the student to medical management of common musculoskeletal conditions and the implications to clinical practice. The unit also further develops clinical reasoning, diagnostic, and treatment skills in the context of clinical practice. This unit comprises of two (2) modules: Module 1: Introduction to Orthopaedics which will cover a range of basic orthopaedic conditions that commonly occur in practice. Module 2: Osteopathic Diagnosis & Treatment 2 will build on clinical reasoning skills and practical skills in diagnosis, prognosis and osteopathic management developed in HHO3174 Osteopathic Science 5.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain and apply theoretical knowledge of basic orthopaedics and incorporate this

knowledge into clinical decision making and patient management; 2. Explain and defend clinical decision making and approaches to osteopathic diagnosis, treatment and prognosis; and 3. Competently apply a range of osteopathic techniques, including articulation, soft tissue, HVLA and muscle energy, to a range of common musculoskeletal problems.

**Class Contact:**Lecture 1.0 hrSim (Simulation) 1.5 hrsThirty (30) hours for one semester comprising online lectures and practical workshops.

**Required Reading:**DeStefano, L. (2016). (5th ed.). Greenman's Principles of manual medicine Wolters-Kluwer Health. Gibbons, P., & Tehan, P. (2009). (3rd ed.). Manipulation of the spine, thorax and pelvis: An osteopathic perspective. Edinburgh: Churchill Livingstone Lecture notes and research articles are provided prior to class on VU Collaborate for student access.

**Assessment:**Practicum, Objective Structured Clinical Examination (30 minutes = 2500 words) as part of Clinical Entrance exam, Pass/Fail. Peer marked formative assessment task in week 5 & 12 using simulated patient scenarios. The equivalence for the Practicum assessment reflects the requirement of the student to draw on a range of skill sets including communication, psycho-motor skills, interpersonal skills and knowledge of theory and anatomy. 90% attendance at practical workshops is mandatory and a hurdle requirement for passing this unit.

### HHO4181 Osteopathic Science 7

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**Students will be introduced to functional assessment and indirect osteopathic manual techniques including counterstrain and functional techniques. Concepts and principles of rehabilitation for specific injuries encountered in osteopathic practice will be explored. Students will develop knowledge and skills in the assessment, treatment and rehabilitation of common injuries involving the ankle, calf, foot and knee including the principles and application of taping in the management of common injuries.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Implement and incorporate a broad range of indirect osteopathic techniques into the student's osteopathic practice with a focus to the trunk and lower limb;
2. Discuss and interrogate the rationale for the application of indirect osteopathic techniques and extrapolate their application to osteopathic practice;
3. Formulate and interpret exercise management programs to support the rehabilitation of patient complaints with a focus to the trunk and lower limb;
4. Explore the principles of rehabilitation programs and evaluate their role in preventative and rehabilitative care of the patient; and
5. Evaluate the literature and outcome measures applicable to indirect osteopathic techniques and rehabilitation and exercise management and reflect a role for this in the student's clinical practice.

**Class Contact:**Workshop 1.5 hrsThirty-six (36) hours for one semester comprising lectures, workshops and practical classes.

**Required Reading:**Jones, L. H., Kusunose, R. S., & Goering, E. K. (1995). (1st ed.). Jones strain-counterstrain. Jones Strain Counterstrain Incorporated. Brukner, K., & Khan, K. (2012). (4th ed.). Clinical sports medicine. McGraw Hill.

**Assessment:**There is a 30 minute practical oral which is a hurdle component and is ungraded (Pass/Fail). Other, Small group practical task & written response, 50%. Presentation, In class presentation, 50%. All assessment components must be satisfactorily completed in order to pass this unit. Assessments of approximately 3000 words.

## HHO4284 Osteopathic Science 8

**Locations:**City Flinders.

**Prerequisites:**HHO4181 - Osteopathic Science 7

**Description:**The aim of this unit is to build and extend the students osteopathic technical skills in the realm of exercise and rehabilitation and indirect osteopathic techniques. The students will work towards mastering palpation of tissue tensions representing the direction of ease. They will investigate and analyse the literature and other relevant resources to underpin their concept of exercise and rehabilitation and indirect osteopathic techniques to their practice. They will theorise and implement strategies for the management of discrete population groups whilst creating concepts to communicate their proposed management plan with these discrete population groups.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Investigate and implement a range of indirect techniques for osteopathic clinical practice;
2. Adapt the principles and procedures of rehabilitation and exercise and indirect osteopathic techniques for common conditions of the head, neck, thorax and upper limb;
3. Evaluate the application of rehabilitation, exercise and indirect osteopathic techniques as part of an overall strategy to patient management to all age groups: children, adults and the elderly;
4. Exhibit and advocate management plans including rehabilitation, exercise and indirect osteopathic techniques for surgical procedures; and
5. Compose a persuasive management plan that synthesises rehabilitation, exercise and indirect osteopathic techniques in a management plan with a focus to a defined population or a surgical procedure.

**Class Contact:**Workshop3.0 hrs

**Required Reading:**Johnston, W. L., & Friedman, H. D. (1994). 2nd Functional methods Indianapolis, IL: American Academy of Osteopathy Brukner, K., & Khan, K. (2012). 4th Clinical sports medicine. (4th ed.) McGraw Hill. Jones, L. H., Kusunose, R. S., & Goering, E. K. 1st Jones strain-counterstrain. Jones Strain Counterstrain Incorporated

**Assessment:**Assignment, 2000 words, 70%. Test, 20 minute test, 30%. There is a 30 minute practical oral which is a hurdle requirement and is ungraded (Pass/Fail). All assessment components need to be passed to gain an overall pass in this unit. Assessment equivalent word count of 3500 approx.

## HHO5183 Osteopathic Science 9

**Locations:**City Flinders.

**Prerequisites:**HHU4286 - Clinical Practicum 6HHO4284 - Osteopathic Science 8

**Description:**This unit aims to extend students knowledge and skills of osteopathic techniques and management strategies. This unit has three modules with the following topic areas. Module 1: Visceral osteopathy - osteopathic management of conditions with visceral involvement. Module 2: Ergonomics - introduction to principles and concepts of clinical ergonomics and ergonomic prescription in osteopathic practice. Module 3: Practice management - business skills and information required for day-to-day osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Extrapolate and justify existing osteopathic technique skills and principles to assess and manage common visceral conditions amenable to osteopathic treatment;
2. Investigate specific visceral techniques in the context of osteopathic practice and appraise their role in treatment planning and patient management;
3. Evaluate ergonomic issues affecting diverse patient groups including children, pregnant women and the elderly and negotiate appropriate ergonomic advice for patient management;
4. Articulate the relationship between common and

complex orthopaedic conditions, their medical management and subsequent implications for osteopathic assessment and treatment of the patient in surgical, pre-operative and post-operative contexts

**Class Contact:**Lecture3.0 hrsWorkshop1.5 hrs

**Required Reading:**Articles and book chapters as follows:Lossing, K. (2011). In: Chila AG, ed. Foundations For Osteopathic Medicine: 3rd edn Visceral Manipulation pp845-849 Lippincott William & Wilkins Muller, A. et al. (2014). Effectiveness of Osteopathic Manipulative Therapy for Managing Symptoms of Irritable Bowel Syndrome: A Systematic Review. 2014;114(6):470-479 J Am Osteopath Assoc.

**Assessment:**Assignment, Ergonomics assignment (1000 words), 33%. Assignment, Clinical orthopaedics assignment (1250 words), 33%. Examination, Fifteen (15) minute practical examination (equivalent to 1000 words), 34%. The practical assessment for this unit is a hurdle requirement. This practical assessment is a hurdle because practical skill development is fundamental to osteopathic practice and demonstrating practical skills at a pass level relates to technical competence and safety. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The workshops practical activities in this unit are interactive and students are able to seek feedback from the facilitator on meeting the learning outcomes and planning for assessment tasks.

## HHO5280 Osteopathic Science 10

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHO5183 - Osteopathic Science 9HHU5187 - Clinical Practicum 7

**Description:**The aim of this unit is to prepare students for their transition to autonomous and accountable osteopathic practice. Specialised professional knowledge and skills relating to both the discipline of osteopathy, lifelong learning and practice management are addressed. HHO5280 consolidates and extends prior theoretical and practical orthopaedic knowledge which is integrated with clinical skills relevant to the management of various presenting conditions (but particularly those related to orthopaedic surgery and rehabilitation). Students integrate fundamental knowledge of nutrition with their specialised osteopathic clinical assessment and management skills. Osteopathic philosophy and principles are reviewed and their evidence-base interrogated to support further development of manual techniques. Management skills and financial information required for day-to-day osteopathic practice are also considered.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate an expanded range of osteopathic technical skills, using direct and indirect manual techniques;
2. Interrogate osteopathic principles and their underlying philosophy; debate the nature, significance and application of evidence-based practice; and critically appraise the relationship between principles and evidence underpinning different osteopathic approaches to treatment;
3. Critically appraise and apply in various simulated situations those business management skills required to conduct a practice; and
4. Negotiate a personal concept of osteopathic practice in the context of the students career goals.
5. Critically review common modes of osteopathic practice and reflect on their place in the students career goals;
6. Identify strategies to sustain their professional and personal development as osteopathic practitioners.

**Class Contact:**Lecture2.0 hrsWorkshop2.0 hrs

**Required Reading:**Magee, D. (2014). 6th e Orthopedic Physical Assessment, 5e (Orthopedic Physical Assessment), Saunders Publishing, St Louis Wong, s (2009) Pocket Orthopaedics: Evidence-Based Survival Guide Spiralbound Jones & Bartlett Learning, Boston

**Assessment:**The assessment in this unit is pass/fail rather than graded. This unit is



designed as a final consolidating unit enabling students to develop additional skills and knowledge which will be applicable for osteopathic practice, therefore assessments are designed as activities to consolidate knowledge rather than distinguish levels of performance. A student fails if they do not achieve the minimum expected level of competence for a final year osteopathic student approaching graduation and entering independent osteopathic practice. Assignment, Practice Management (3500 words) 1. Reflection of career direction in 1 & 5 years; 2. Develop referral letters; 3. Evaluate an osteopathic business, Pass/Fail. Test, Two (2) History & Principles MCQ quizzes (equivalent to 1000 words each), Pass/Fail. Practicum, Further manual technique skill with critical reflection - twenty (20) minutes per student (equivalent of 2000 words), Pass/Fail. There is a twenty (20) minute practicum oral which is a hurdle requirement (students must achieve a pass grade in this assessment task). This practical assessment is a hurdle because practical skill development is fundamental to osteopathic practice and demonstrating practical skills at a pass level relates to technical competence and safety. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program. The workshops practical activities in this unit are interactive and students are able to seek feedback from the facilitator on meeting the learning outcomes and planning for assessment tasks.

### HHP1170 Cell Physiology

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**An introduction to the basic principles and concepts of human physiology. Concepts include homeostasis, cellular physiology, membrane and action potentials, hormonal and neural mechanisms of signal transduction, cell reproduction, cell differentiation and tissue formation. Case study based problems introduce students to clinical reasoning.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Identify the structures within human cells and relate the structure of cell components to their function; 2. Explain the establishment and alteration of the cell membrane potential and the hormonal and neural mechanisms of signal transduction; 3. Outline the processes of mitosis and meiosis; 4. Discuss the basic concepts of cells differentiation and tissue formation; and 5. Apply scientific and clinical reasoning to basic theoretical knowledge in cell physiology.

**Class Contact:**Lecture 1.0 hr Tutorial 1.0 hr

**Required Reading:**Silverthorn, D.U., (2012). Human Physiology an integrated approach. (6th ed.). Pearson. Guyton, A.C., & Hall, J.E. (2006). (11th ed.). Textbook of medical physiology. Philadelphia: Elsevier Science. Rhoades, A.R., & Bell, R.D. (3rd ed.). Medical Physiology, Principles for Clinical Medicine Wolters Kluwe/Lippincott Williams Wilkins

**Assessment:**Presentation, Concept's presentation (0.5 hour, 500 words), 40%. Examination, Final Written Examination (1 hour, 1000 words), 50%. Other, Five (5) online quizzes, 10%. Total combined assessment word equivalence is approximately 1500 words.

### HHP1272 Clinical Physiology 1

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHP1170 - Cell Physiology

**Description:**This unit extends the principles and concepts of basic human physiology introduced in HHP1170 Cell Physiology. Aspects of cellular and systems physiology are explained in the contexts of skeletal, smooth and cardiac muscle physiology, circulatory physiology, blood cells development and haemostasis. Unit content is

specifically related to clinically relevant presentations in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the key principles and concepts of human physiology in relation to skeletal and smooth muscle physiology; 2. Discuss the key principles and concepts of human physiology in relation to cardiac muscle and cardiovascular physiology; 3. Relate theoretical knowledge to clinical case presentations; and 4. Apply critical thinking in selected scientific enquiry and produce presentations using a conventional scientific format.

**Class Contact:**Thirty six (36) hours for one semester comprising lectures, tutorials and practical classes.

**Required Reading:**Silverthorn, D.U., (2013). Human Physiology an integrated approach. (6th ed.). Pearson. Rhoades, R.A., Bell, D.R., (2009). (3rd ed.). Medical Physiology; Principles for Clinical Medicine. Wolters Kluwe/Lippincott Williams & Wilkins Guyton, A. C., & Hall, J. E. (2006). (11th ed.). Textbook of medical physiology Philadelphia: Elsevier Science.

**Assessment:**Case Study, case study response (500 words), 40%. Examination, One 1.5 hours hour final examination (1000 words), 50%. Test, 5 (five) Online Quizzes, 10%.

### HHP2171 Clinical Physiology 2

**Locations:**City Flinders.

**Prerequisites:**HHP1272 - Clinical Physiology 1

**Description:**This unit extends the principles and concepts of basic human physiology introduced in HHP1272 Clinical Physiology 1. Aspects of cellular and systems physiology are explained in the contexts of respiratory and renal physiology. Development of critical thinking and research writing skills is continued. Unit content is specifically related to clinically relevant presentations in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Identify and illustrate the key principles and concepts of human physiology in relation to respiratory and renal physiology; 2. Apply theoretical knowledge of respiratory and renal physiology principles to explain clinical case presentations; and 3. Produce written presentations using a conventional scientific format.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**Silverthorn, D.U., (2012). Human Physiology. 6th ed. Pearson. Rhoades, R.A., Bell, D.R., (2009). (3rd edition). Medical Physiology; Principles for Clinical Medicine. Wolters Kluwe/Lippincott & Wilkins Guyton, A.C., & Hall, J.E. (2006). (11th ed.). Textbook of medical physiology Philadelphia: Elsevier Science.

**Assessment:**Case Study, Case Study Report (1000 words), 50%. Examination, One 1 hour final examination (1000 words), 50%. The total word equivalence for the combined assessments is approximately 2000 words.

### HHP2272 Clinical Physiology 3

**Locations:**City Flinders, St Albans.

**Prerequisites:**HHP2171 - Clinical Physiology 2

**Description:**This unit extends the principles and concepts of basic human physiology presented in HHP2171 Clinical Physiology 2. Aspects of cellular, systems physiology and biochemistry are explained in the contexts of endocrine and gastrointestinal physiology.. Critical thinking in human physiology is extended through the use of clinical case studies and the clinical case report. Material is specifically related to clinically relevant presentations in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Appraise the key principles and concepts of human physiology in relation to gastrointestinal physiology, metabolism and endocrinology; 2. Argue clinical cases related to metabolism, endocrine and gastrointestinal physiology; and 3. Produce written presentations using a conventional scientific format.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Silverthorn, D.E., (2012). 6th ed. Human Physiology an integrated approach Pearson Rhoades, R.A., Bell, D.R., (2009). 3rd ed. Medical Physiology; Principles for Clinical Medicine. Wolters Kluwer/Lippincott Williams & Wilkins Guyton, A.C., & Hall, J.E., (2006). 11th ed. Textbook of medical physiology Philadelphia: Elsevier Science.

**Assessment:** Case Study, Case Study response (500 words), 40%. Test, Online Quizzes, 10%. Examination, Final Written Exam (1.5 hours, 1500 words), 50%.

## HHP3274 Introduction to Rehabilitation

**Locations:** City Flinders.

**Prerequisites:** HHC3173 - Biomechanics 3HHA1171 - Anatomy 1HHA1272 - Anatomy 2

**Description:** This unit develops students' knowledge and skills in the broad area of rehabilitation principles for osteopathic practice. The unit covers evaluation, development and progression of key basic rehabilitation principles for upper and lower cross related symptoms, pregnancy and associated exercising habits, tendon injuries, hydrotherapy and taping applications, as well as assessment and rehabilitation principles for injuries to the spine. Students will also be introduced to liaising with third party providers.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit a range of technical skills in managing patients with upper and lower cross syndromes and select appropriate exercises and stretches, utilising a variety of equipment options; 2. Identify the features of various stages of rehabilitation, recommending appropriate adaptations according to different patient presentations; 3. Argue the principles, protocols and ethics of safe and effective rehabilitation management including management of pregnant patients; and 4. Communicate the benefits of different exercise modalities to both peers and patients and demonstrate effective exercises as required.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr

**Required Reading:** Brukner, P., & Khan, K. (2012). 4th Clinical sports medicine McGraw-Hill.

**Assessment:** Participation in tutorial and practical sessions with at least 90% attendance (hurdle requirement) except in extenuating circumstances. Test, Online 30 minutes (500 words), 20%. Practicum, 15 minute practical exam, 40%. Examination, 1-hour final written (1000 words), 40%. Total combined assessment word equivalence is approximately 2500 words. The equivalence for the Practicum assessment reflects the requirement for the student to draw on a range of skill sets including communication, psycho-motor skills, interpersonal skills and knowledge of theory and anatomy. .

## HHP6901 Research Thesis (Full Time)

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the

research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HHP6902 Research Thesis (Full Time)

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a

substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### HHP6911 Research Thesis (Part Time)

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HHP6912 Research Thesis (Part Time)

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the

School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## HHS3174 Understanding Pain

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**Understanding pain aims to build an integrated understanding of the neuroanatomy and neurophysiology of specific types of pain. The unit will explore the impact of pain and the psychological and social context of pain. The student will learn new skills in pain assessment including physical examination and outcome measures. The student will critically review the current evidence for manual therapies in managing chronic pain and apply this knowledge when utilising osteopathic manual therapies and patient education practices

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Relate the neuroanatomy and physiology to different types of pain presenting in clinical practice;
2. Evaluate the impact of pain and consider influencing factors within the patient's psychological and social context;
3. Conduct and interpret assessment of patients with specific types of pain, notably nociceptive/inflammatory pain, neuropathic pain and central sensitisation/amplification using clinical skills and outcomes measures;
4. Critically review and apply the current research evidence for the use of manual therapy and its effects in pain treatment; and
5. Plan osteopathic management aligning with patient's pain presentation and include published tools for patient education and practical exercises.

**Class Contact:**Online 1.0 hrWorkshop 1.5 hrs

**Required Reading:**No compulsory required text in this subject.

**Assessment:**Test, Three (3) Online Quizzes (750 words), 30%. Examination, Final written examination (1750 words), 70%. The formative (ungraded) assessments for this unit are; - Week 1 online quiz. 90% attendance is required at tutorial, practical and workshop classes in the osteopathic program (hurdle requirement). The practical workshops in this unit are interactive and students are able to seek feedback from the facilitator on meeting the learning outcomes and planning for assessment tasks. The practical classes are simulated patient scenarios. .

## HHS3275 Psychosocial Determinants of Health

**Locations:**City Flinders.

**Prerequisites:**HHS3174 - Understanding Pain

**Description:**The aim of this unit, Psychosocial Determinants of Health, is to build on students' knowledge of patient centred care in healthcare practice. Students are supported to further develop their clinical interviewing skills. In this unit students will consider the theory they have learnt in previous units and consider how illness is affected by socio demographic variables within the Australian healthcare context. The impact of patient compliance with treatment and readiness to change is considered. Students explore changes in individual healthcare practice and consider its relevance in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically reflect on the essential clinical interviewing skills used in osteopathic practice;
2. Investigate the relevance of gender, ethnicity and socioeconomic in patients presenting with pain in healthcare practice;
3. Analyse psychological and sociological issues relevant to behavioural health risks in patients' experience of pain;
4. Critically review and propose change management theory and strategies to improve patient wellbeing; and
5. Predict the long term benefits of interventions for health-compromising behaviours using available best evidence.

**Class Contact:**Lecture 1.0 hr/Tutorial 1.0 hr

**Required Reading:**Allen, F 2010 Health Psychology and Behaviour: in Australia McGraw-Hill Australia Pty Ltd

**Assessment:**Practicum, Health Risk Assessment of simulated patient (equivalent to 1250 words), 50%. Test, Four (4) Online Quizzes (equivalent to 500 words), 20%. Presentation, Group Presentation in tutorial (equivalent of 750 words per student), 30%. There are two (2) formative ungraded assessment tasks for this unit. The first is a practical assessment (OSCE station) held in the examination period. This is a hurdle requirement. The second is observation and evaluation of a medical interview identifying effective and ineffective interviewing skills held in week 5 of semester. The total word equivalence for combined assessment tasks in this six credit point unit is approximately 2500 words.

## HHS4182 Counselling Skills for Health Professionals

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**The aim of this unit is to review common techniques used in counselling and consider their relevance to osteopathic practice. Specific approaches for counselling osteopathic patients who experience a range of health issues will be explored. Outcome measures to assess chronic pain patients will be evaluated and their application to osteopathic practice and patient management will be debated.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Critically review the basic skills that are necessary for effective interpersonal communication in a therapeutic relationship;  
2. Conceptually map and interrogate major theoretical approaches to counselling;  
3. Propose and defend the use of specific counselling skills in both familiar and unfamiliar situations in professional practice;  
4. Predict the effects that psychological variables may have on pain symptomatology and pain management with reference to various theoretical models; and  
5. Exhibit strategies to assess and treat chronic pain symptoms and behaviours in osteopathic clinical practice and/or refer patients to other health professionals for counselling, support or practical assistance as appropriate.

**Class Contact:**Lecture 1.0 hr/Tutorial 1.0 hr

**Required Reading:**Corey, G. (2013). (9th ed.). Theory and practice of counselling and psychotherapy. California : Brooks/Cole.

**Assessment:**The formative and summative assessments are hurdle requirements. Assignment, Chronic pain assignment (2000 words), 60%. Presentation, Group presentation in tutorial (equivalent to 1000 words), 40%. The total word equivalence of assessment tasks is approximately 3000.

## HHS4285 Identifying Psychopathology in Clinical Practice

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**HHS4285 examines the theoretical basis and practical application of methods utilised to identify common psychopathologies experienced by Australians. The techniques utilised to identify psychopathologies will assist osteopathic students in determining when to refer patients to another health professional in the osteopathic clinical setting. Students will also consider the symptoms of psychopathology that are consistent with musculoskeletal conditions symptomatology in preparation for osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Describe the effects that psychological variables may have on chronic pain management and symptomatology;  
2. Identify symptoms that are consistent with

common psychopathologies;  
3. Demonstrate an understanding of the range of treatments available for psychopathology;  
4. Explain when and how a patient referral is required for specialist psychiatric or psychological treatment; and  
5. Describe interpersonal strategies that are helpful in the management of a patient with acute or chronic psychopathology.

**Class Contact:**Lecture 1.0 hr/Tutorial 1.0 hr

**Required Reading:**Oltmanns, T.E. & Emery, R.E. eds. (2007). (5th ed.). Abnormal psychology New Jersey/Pearson Education.

**Assessment:**Presentation, Group presentation (equivalent of 1500 words), 40%. Examination, Practical assessment with simulated patient (equivalent of 1500 words), 40%. Other, 10 online quizzes, 20%. The total word equivalence of assessment tasks for this unit is approximately 3000 words.

## HHU1270 Clinical Practicum 1

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**The aim of this unit is to introduce students' to effective communication skills and consider their application in taking a patients clinical history surrounding a specific complaint. Students are introduced to the concept of red flags in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Propose effective verbal and non-verbal communication skills in patient-centred care;
2. Role-play clinical history questioning for the presenting complaint; and
3. Review 'red flags' for a presenting complaint.

**Class Contact:**Lecture 1.0 hr

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation.

**Assessment:**Both summative assessments are hurdle requirements for this unit. Practicum, 15 minute practical assessment (equivalent to 1000 words), Pass/Fail. Report, Written report on communication (500 words), Pass/Fail. Total combined assessment word equivalence is approximately 1500 words.

## HHU2271 Clinical Practicum 2

**Locations:**City Flinders.

**Prerequisites:**HHU1270 - Clinical Practicum 1/HHO2171 - Osteopathic Science 3

**Description:**The aim of this unit is to build on students' clinical history taking skills by incorporating medical and systems history questioning. Students will have the opportunity to apply knowledge and skills developed in HHU1171 around effective communication in a simulated clinical setting.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Exhibit patient-centred communication skills in a simulated setting;
2. Role-play clinical history questioning for the presenting complaint, medical and systems history with peers; and
3. Apply knowledge of 'red flags' to the clinical history.

**Class Contact:**Lecture 1.0 hr

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation.

**Assessment:**Both summative assessments are hurdle requirements. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical

units. A student fails if they do not achieve the minimum expected level of competence for a second year osteopathic student. Test, 30 minute quiz (equivalent to 500 words), Pass/Fail. Practicum, Practical assessment in simulated setting (equivalent of 1500 words), Pass/Fail. Total combined assessment word equivalence is approximately 2000 words.

### HHU3173 Clinical Practicum 3

**Locations:**Werribee, City Flinders, St Albans.

**Prerequisites:**HHU2271 - Clinical Practicum 2HH02272 - Osteopathic Science 4

**Description:**The aim of this unit is to introduce students to the osteopathic clinical setting. Students will be able to contribute to the operations of the student led, patient centred, evidence informed osteopathic teaching clinics within the university and observe senior students treating members of the public.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Articulate the client-based clerical and clinical reception skills required to operate the student-led, on-campus clinic; 2. Assess patient-centred communication skills in the student-led, on-campus clinic; and 3. Collaborate with peers to maintain the clinical records.

**Class Contact:**A minimum of 60 contact hours, including a minimum of 30 clinical contact hours during semester 1. The remainder of hours is comprised of burst mode clinical hours during the summer break and professional development activities. Students may complete external placement hours in privately owned clinic or other supervised practice location.

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation. Students are expected to search literature and use it to inform their evidence informed management plan.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units. A student fails if they do not achieve the minimum expected level of competence for a third year osteopathic student. Portfolio, Clinic manual or folio reporting completion of negotiated hours, observations, clinical administration activities (equivalent to 4500 words), Pass/Fail. Report, 500 word reflective written report, Pass/Fail. The total combined assessment word equivalence is approximately 5,000 words. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. A demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade.

### HHU3274 Clinical Practicum 4

**Locations:**City Flinders.

**Prerequisites:**HHU3173 - Clinical Practicum 3HH03174 - Osteopathic Science 5

**Description:**The aim of this unit is to prepare students for their transition to treating practitioners within the student led osteopathic teaching clinics within the university.

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The major milestone for students overall osteopathic education occurs in this unit - the clinic entrance examination, which students are required to successfully complete in order to commence supervised patient treatments. At the completion of this unit students will be able to lead the clerical and reception operations of the student led clinic.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Manage the client-based clerical and clinical reception skills required to operate the student-led, on-campus clinic; 2. Exhibit patient-centred communication skills in a clinical setting; and 3. Collaborate with peers in the evidence informed/evidence based management of patient's in the clinical setting.

**Class Contact:**A minimum of 50 contact hours, including a minimum of 30 clinical contact hours during semester 2. The remainder of hours is comprised of burst mode clinical hours during the winter break and professional development activities.

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation. Students are expected to search the literature to inform their management plans of patients.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units. A student fails if they do not achieve the minimum expected level of competence for a third year osteopathic student. Portfolio, Clinic portfolio reporting completion of negotiated hours, observations, clinical activities (equivalent to 3500 words), Pass/Fail. Examination, 90 minute practical examination Objective Structured - Clinical Examination (OSCE) format (equivalent to 1500 words), Pass/Fail. The total combined assessment word equivalence is approximately 5000 words. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. A demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade.

### HHU4185 Clinical Practicum 5

**Locations:**Werribee, City Flinders, St Albans.

**Prerequisites:**Nil.

**Description:**The aim of this unit is to introduce students to osteopathic practice through clinical placement in the student led osteopathic teaching clinic. Students will lead consultations with patients with support from clinical educators and third year students. This unit provides students with the opportunity to implement their specialised body of knowledge of musculoskeletal conditions and management strategies within the clinical setting.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Reflect on the patient-centered communication skills in the clinical setting 2. Manage a range of patients in the student-led, on-campus clinic; 3. Advise junior colleagues in the information collection, recording and delivery of treatment; and

4. Diagnose and prognose common musculoskeletal complaints.

**Class Contact:**Lecture 1.0 hrA minimum of one hundred (100) contact hours, including a minimum of 60 clinical contact hours during semester 1. The remainder of hours is comprised of burst mode clinical hours during the summer break and professional development activities. Students may complete part of their clinical hours at external placement sites, namely privately owned osteopathic clinics.

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation. Students are expected to search the literature to inform their management plans of patients.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units and preparation for osteopathic practice. A student fails if they do not achieve the minimum expected level of competence for a fourth year osteopathic student. Portfolio, Clinic portfolio reporting completion of hours, patient consultations, clinical activities, clinical record assessment (equivalent to 3000 words), Pass/Fail. Practicum, 15 minute practical assessment (equivalent to 1500 words), Pass/Fail. Presentation, Patient case study (equivalent to 1500 words), Pass/Fail. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. The demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade.

### HHU4286 Clinical Practicum 6

**Locations:**Werribee, City Flinders, St Albans.

**Prerequisites:**HHU4185 - Clinical Practicum 5

**Description:**The aim of this unit is to build on students experience of osteopathic practice achieved in HHU4185 through continual clinical placement in the student led, patient centred, evidence informed osteopathic teaching clinic. Students will continue to lead consultations with patients with support from clinical educators and third year students. This unit provides additional opportunities for students implement their specialised body of knowledge of musculoskeletal conditions and management strategies within the clinical setting. In this unit students take a more formal mentoring role of third year students including the junior students in aspects of the patient treatment and management.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Adapt patient-centred communication skills to meet the needs of diverse patient populations;  
2. Plan and execute patient management strategies in the student-led, on-campus clinic;  
3. Reconstruct the diagnosis and prognosis in response to changes in patient presentation; and  
4. Quantify patient outcomes.

**Class Contact:**A minimum of 80 contact hours, including a minimum of 60 clinical contact hours during semester 2. The remainder of hours is comprised of burst mode clinical hours during the winter break and professional development activities. Students may complete external placement hours in privately owned clinic or other

supervised practice location.

**Required Reading:**Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation. Students are expected to search the literature to inform their management plans of patients.

**Assessment:**Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units and preparation for osteopathic practice. A student fails if they do not achieve the minimum expected level of competence for a fourth year osteopathic student. Portfolio, Clinic portfolio reporting completion of hours, patient consultations, clinical activities, clinical record assessment (equivalent to 3500 words), Pass/Fail. Practicum, 15 minute Practical assessment in clinical setting (equivalent of 2000 words), Pass/Fail. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. The demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade.

### HHU5187 Clinical Practicum 7

**Locations:**Werribee, City Flinders, St Albans.

**Prerequisites:**HHU4286 - Clinical Practicum 6

**Description:**The aim of this unit is to build on students experience of osteopathic practice achieved in HHU4185 and HHU4286 through continual clinical placement in the student led osteopathic teaching clinic. Students increase from one session of clinical placement to two sessions per week in this unit which provides greater opportunity to implement their advanced knowledge and practical skills of management of musculoskeletal conditions. This unit provides students with opportunity to lead the operational aspects of the clinic (reception and customer service) which is a reflection of the nature of osteopathic practice students will encounter after graduation. A key priority in this unit is preparing students for their clinic exit examination held in the middle of the year.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Appraise their own patient-centred communication skills and that of their peers;
2. Exemplify evidence informed patient management strategies in the student-led, on-campus clinic;
3. Argue a patient-centred management plan and prognosis that sets short, medium and long term goals and takes into account all aspects of the patient's profile including lifestyle factors;
4. Evaluate patient outcomes using a range of outcome measures; and
5. Commentate on the skills to manage the student-led, patient centred, evidence informed on-campus clinic and external clinics.

**Class Contact:**Lecture 1.0 hrA minimum of 190 contact hours, including a minimum of 120 clinical contact hours during semester 1. The remainder of hours is comprised of burst mode clinical hours during the summer break and professional development activities. Students may complete external placement hours in privately owned clinic or other supervised clinical location.

**Required Reading:**Reading material will be negotiated in consultation with the unit

coordinator and will be appropriate to the topic under investigation. Students are expected to search the literature to inform their management plans of patients.

**Assessment:** Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units and preparation for osteopathic practice. A student fails if they do not achieve the minimum expected level of competence for a fourth year osteopathic student. Examination, 120 minute Practical assessment (Clinic exit exam) - equivalent to 2000 words, Pass/Fail. Portfolio, Clinical portfolio reporting completion of hours and patient treatments, clinical activities, clinical records assessment (equivalent to 3000 words), Pass/Fail. Practicum, 20 minutes of practical assessment (3 x mini-clinical examination) - equivalent to 500 words, Pass/Fail. Portfolio, One evidence piece for portfolio (equivalent of 1500 words), Pass/Fail. The total word equivalence of the combined assessment tasks equates to 7000 words. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. The demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade.

### HHU5288 Clinical Practicum 8

**Locations:** Werribee, City Flinders, St Albans.

**Prerequisites:** HHU5187 - Clinical Practicum 7

**Description:** The aim of this unit is to consolidate the students experience of osteopathic practice achieved in HHU4185, HHU4286 and HHU5187 through continual clinical placement in the student led, patient centred, evidence informed osteopathic teaching clinic. This unit is designed as a final clinical experience opportunity for students in the student led osteopathic clinic. A key priority in this unit is preparing students for graduation and entry into the osteopathic workforce, which is likely to be independent private practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate their own patient-centred communication skills and that of their peers;
2. Critically reflect on their patient management strategies;
3. Defend patient-centred, evidence informed management plans that take into account all aspects of the patient's problem and lifestyle;
4. Implement primary patient care responsibilities;
5. Critique on the skills to manage the patient centred, student led, on-campus clinic and external clinics; and
6. Scope the requirements to establish themselves as a professional in the Australian health system

**Class Contact:** A minimum of 150 contact hours. Students may complete external placement hours, namely in privately owned clinic or other supervised clinical location.

**Required Reading:** Reading material will be negotiated in consultation with the unit coordinator and will be appropriate to the topic under investigation. Students are expected to search the literature to inform their management plans of patients.

**Assessment:** Participation in practical sessions with at least 90% attendance unless

well-documented acceptable reasons are provided (hurdle requirement). This unit is clinical placement and students need to ensure they meet hour requirements for the unit. All summative assessments are hurdle requirements as they directly correlate to the nature of osteopathic practice. The assessment for this unit is not graded due to the professionalism nature of the learning outcomes and teaching and learning strategies. The focus of clinical practicum units is on developing competency in the clinical domain of osteopathy, which students develop at varying rates across the program. The assessments in this unit are designed to ensure students are deemed safe to continue their progression to subsequent clinical units and preparation for osteopathic practice. A student fails if they do not achieve the minimum expected level of competence for a fifth year osteopathic student. Portfolio, Clinic portfolio reporting completion of hours, patient consultations, clinical activities, clinical record assessment (equivalent to 3000 words), Pass/Fail. Practicum, 20 minutes of practical assessment (4 x mini-clinical examination) - equivalent to 500 words, Pass/Fail. Portfolio, Graduate capability portfolio with evidence pieces (equivalent to 1500 words), Pass/Fail. Examination, 2 hour MCQ paper on safety for clinical practice (equivalent to 2000 words), Pass/Fail. The total word equivalence of the combined assessment tasks equates to 7000 words. Whilst professionalism is not formally assessed within this unit, students are expected to maintain a level of professionalism in all their clinical activities. A demerit point system applies in all clinical units. The demerit point system has been introduced to record incidences of unprofessional behaviour in the clinical setting and applies in all clinical units. Attainment of more than 20 demerit points within the one semester will result in a fail grade. .

### HHX4181 Diagnostic Imaging 1

**Locations:** City Flinders.

**Prerequisites:** Nil.

**Description:** The aim of this unit is to build on students' general knowledge of radiographic imaging developed in HHD3275 Anatomy 6 through an in-depth consideration of the radiological appearance of congenital anomalies and normal variants, primary and secondary bone tumours, traumatic injuries, scoliosis, infections and arthritides. Students will review the processes of reviewing radiographs and implement these when reviewing films where pathology is present and consider the application of these skills in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Review anatomical and physiological changes resulting from pathological processes in the musculoskeletal system;
2. Relate pathological features on diagnostic images to differential diagnoses and propose most likely diagnosis;
3. Report the likely radiological features present in primary and secondary bone tumours, scoliosis, traumatic fractures, arthritides and infections; and
4. Articulate common congenital anomalies and normal variants found in radiographic images.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr

**Required Reading:** Yochum, T.R., & Rowe, L.R., (2005). (3rd.). Yochum and Rowe's essentials of skeletal radiology. Baltimore, MD. Lippincott, Williams & Wilkins.

**Assessment:** Practicum, 15 minute practical assessment (equivalent to 1500 words), 50%. Examination, 1.5 hour written (equivalent to 1500 words), 50%. Total word equivalence is approximately 3000 words for this six credit point unit at AQF level 8.

### HHX4282 Diagnostic Imaging 2

**Locations:** City Flinders.

**Prerequisites:** HHX4181 - Diagnostic Imaging 1 HHD4186 - Clinical Diagnosis and Management 5 (Rheumatology) HHY4185 - Pathology 5 (Rheumatology)

**Description:** The aim of this unit is to build on students' knowledge of; processes of



diagnostic imaging developed in HHD3275 Anatomy 6 and radiological appearance of congenital anomalies and normal variants, traumatic injuries, scoliosis, infections and arthritides acquired in HHX4181 Diagnostic Imaging 1. Students will extend their developing knowledge of radiographic imaging by examining the radiological appearance of metabolic, vascular and endocrine diseases. Alternative approaches to imaging are also introduced in this unit, including ultrasound, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) as these are also encountered in osteopathic practice.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Compare different diagnostic imaging technologies and decipher when a technology is most suitable for individual patient presentations;
2. Report the likely radiological features present in metabolic, vascular and endocrine diseases and propose differential diagnoses to these conditions; and
3. Review the process of referral for various diagnostic imaging technologies in the context of osteopathic practice.

**Class Contact:** Lab 1.0 hr Lecture 1.0 hr

**Required Reading:** Yochum, T. R., & Rowe, L. R., (2005). (3rd ed.). Yochum and Rowe's essentials of skeletal radiology. Baltimore, MD. Lippincott, Williams & Wilkins.

**Assessment:** Practicum, 15 minute practical examination (1500 words), 50%. Examination, 1.5 hour written (equivalent of 1500 words), 50%. Total word equivalence is approximately 3000 words for this six credit point unit at AQF level 8.

## HHY1271 Pathology 1

**Locations:** City Flinders.

**Prerequisites:** HHA1171 - Anatomy 1 HHP1170 - Cell Physiology

**Description:** The aim of this unit is to introduce students to concepts of pathology and microbiology, which are fundamental underpinnings for subsequent units of study relating to disease processes in the body. The unit content consists of two (2) modules with related topic areas: Module 1 Introduction to Pathology: Cell injury; acute and chronic inflammation; mechanisms of tissue repair; immunology; abnormalities of blood supply including ischemia, thrombosis, disseminated intravascular coagulation, circulatory failure and atherosclerosis; infection; neoplasia and oedema. Module 2 Introduction to Microbiology: Microbial structure, categories of infective agents, normal flora, the major pathogens, transmission of infection, sterilization and disinfection, host and microbe interactions.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate pathological processes of disease;
2. Review the organisation and functions of the immune system;
3. Determine the classification, characteristics and behaviour of micro-organisms; and
4. Summarise epidemiological concepts relating to osteopathic practice.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Required texts Dorland, W. A. N. (2011). (32nd ed.). Dorland's illustrated medical dictionary. Saunders. Kiatos, J. (2014). HHY1271 Pathology 1 manual. Melbourne, Australia: Victoria University, School of Biomedical and Health Sciences, Osteopathy Unit. Kumar, V., Abbas, A. K., & Fausto, N. Aster J., (2014). (9th ed.). Robbins & Cotran pathologic basis of disease. Saunders.

**Assessment:** Both summative assessments are hurdle requirements Examination, 45 minute Written Test (equivalent of 500 words), 30%. Examination, 2 hour written examination (equivalent of 1000 words), 70%. Total combined assessment word equivalence is approximately 1500 words. It should be noted that the 2 hour exam

is in reality equivalent to a 1-1.5 hour exam; the students are given more time to complete the assessment in order to reduce their stress levels.

## HHY2172 Pathology 2

**Locations:** City Flinders.

**Prerequisites:** HHD1271 - Clinical Diagnosis & Management 1 HHY1271 - Pathology 1 HHA1272 - Anatomy 2

**Description:** The aim of this unit is to extend and refine students' broad knowledge of pathology gained in HHY1271 Pathology 1 by developing a more specialised understanding of pathological conditions affecting the haematological, cardiovascular, genitourinary and renal systems. These will include those conditions that commonly present to osteopathic practice or may contraindicate osteopathic treatment. Students will integrate their knowledge of these pathologies with osteopathic principles and consider their presentation in osteopathic practice. Preventative advice and strategies will be identified for patients and populations at risk.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the pathological processes and describe their manifestations in the haematological, cardiovascular, genitourinary and renal systems;
2. Discuss the causes or risk factors associated with common and serious haematological, cardiovascular, genitourinary and renal diseases and describe how those causes or risk factors are determined;
3. Analyse the clinical presentations of common and serious haematological, cardiovascular, genitourinary and renal diseases, including those diseases notifiable in Australia;
4. Integrate the allopathic and evidence-based medical approaches to diagnosis, prognosis and principles of management for disorders of the haematological, cardiovascular, genitourinary and renal systems; and
5. Articulate preventative health advice about common and serious haematological, cardiovascular, genitourinary and renal diseases.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** As no texts appropriate to the content of this unit are currently available, suitable reading material will be provided by the unit coordinator.

**Assessment:** Both summative assessment tasks are hurdle requirements Examination, 1.5 hour written examination (equivalent of 1500 words), 70%. Report, Review of diagnostic testing (500 words), 30%. Total combined assessment word equivalence is approximately 2000 words.

## HHY2273 Pathology 3

**Locations:** City Flinders.

**Prerequisites:** HHY2172 - Pathology 2 HHD2172 - Clinical Diagnosis & Management 2 HHA2171 - Anatomy 3 HHP2171 - Clinical Physiology 2

**Description:** The aim of this unit is to further extend students' knowledge of pathology gained in HHY1271 Pathology 1 and HHY2172 Pathology 2 by developing a more specialised understanding of pathological conditions affecting the gastrointestinal, respiratory and endocrine systems. The focus will be on those conditions that may present in osteopathic practice or contraindicate osteopathic treatment. Students will integrate their knowledge of these pathologies with osteopathic principles and consider their presentation in osteopathic practice. Preventative advice and strategies will be identified for patients and populations at risk.

**Credit Points:** 6

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the pathological processes and describe their manifestations in the gastrointestinal, respiratory and endocrine systems;
2. Discuss the causes or risk factors associated with common and serious gastrointestinal, respiratory and

endocrine diseases, and describe how those causes or risk factors are determined;

3. Analyse the clinical presentations of common and serious gastrointestinal, respiratory and endocrine diseases, including those diseases notifiable in Australia;
4. Integrate the allopathic and evidence-based medical approaches to diagnosis, prognosis and principles of management for disorders of the gastrointestinal, respiratory and endocrine systems; and
5. Articulate preventative health advice about common and serious gastrointestinal, respiratory and endocrine diseases.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**As no texts appropriate to the content of this unit are currently available, suitable reading material will be provided by the unit coordinator.

**Assessment:**Both summative assessments are hurdle requirements Report, Review of diagnostic testing (500 words), 30%. Examination, 1.5 hour written examination (equivalent of 1500 words), 70%. Total combined assessment word equivalence is approximately 2000 words.

### HHY3274 Pathology 4 (Neuropathology)

**Locations:**City Flinders.

**Prerequisites:**HHY2273 - Pathology 3

**Description:**The aim of this unit is to build on students developing knowledge of pathology gained in HHY1271, HHY2172 and HHY2273 by developing an in depth understanding of pathological conditions affecting the nervous system and consider their presentation to osteopathic practice. Major topic areas include: intracranial space occupying lesions; primary tumours of the CNS; cerebrovascular disease; CNS infections; demyelinating diseases of the CNS: multiple sclerosis; degenerative conditions of the CNS: Alzheimer's disease; Parkinson's disease; motor neuron disease; epilepsy; peripheral neuropathy polyneuropathy; myasthenia gravis; fibromyalgia.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Commentate on the aetiology, pathological stages, clinical picture, complications, and diagnosis of neurological diseases affecting the CNS and PNS;
2. Critically reflect on treatment and management of CNS and PNS diseases;
3. Inquire the impact of these treatments on osteopathic treatment and management; and
4. Commentate on the epidemiological profile of CNS and PNS diseases within the Australian healthcare context.

**Class Contact:**Lecture 1.0 hr Tutorial 1.0 hr

**Required Reading:**Kiatos, J. (2013). HHY3274 Pathology 4 unit manual. Victoria University, School of Biomedical and Health Sciences, Osteopathy Unit. Kumar, V., Abbas, A.K., Fausto, N., & Aster, J. (2014). (8th ed.). Robbins and Cotran's pathological basis of disease. Elsevier Science.

**Assessment:**All assessments are hurdle requirements. Test, 45 minute mid semester Written Test (equivalent of 500 words), 30%. Examination, 2-hour written examination (equivalent of 2000 words), 70%. Total combined assessment word equivalent is approximately 2500 words.

### HHY4185 Pathology 5 (Rheumatology)

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**The aim of this unit is to build on students developing knowledge of pathology gained in HHY1271, HHY2172, HHY2273, HHY3274 by developing an in depth understanding of pathological conditions affecting the musculoskeletal system and critically reviewing them in the context of osteopathic practice. Major topic areas include: bone fractures and their healing; osteomyelitis; osteoporosis; osteomalacia; Paget's disease; fibrous dysplasia; osteoarthritis; hypertrophic

osteoarthritis; degenerative disease of the intervertebral disc; acute I/V disc herniation; rheumatoid disease; ankylosing spondylitis; Reiter's disease; psoriatic arthritis; enteropathic arthritis; gout; CPPD deposition disease; systemic lupus erythematosus; progressive systemic sclerosis; polymyositis; dermatomyositis; polymyalgia rheumatica; mixed connective tissue disease. Common and life-threatening diseases will be highlighted.

**Credit Points:** 6

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate in depth understanding of the complex pathogenesis and variable clinical expression of common rheumatological conditions and autoimmune diseases;
2. Critically reflect on how osteopathic manual techniques can be used to impact the pathological processes encountered in rheumatological and auto-immune diseases;
3. Apply acquired knowledge and skills to a range of self-directed weekly questions which are designed to interrogate the students understanding of concepts ranging from pathogenesis to clinical expression; and
4. Synthesise and combine the information learnt in this unit with that taught in CD&M5 (Rheumatology) to reflect the complex reality of osteopathic practice.

**Class Contact:**Lecture 1.0 hr Tutorial 1.0 hr

**Required Reading:**Required texts Kiatos J. (2014). 2014 HHY4185 PATHOLOGY 5 (RHEUMATOLOGY) lecture and tutorial manual. Osteopathy unit, College of Health and Biomedicine Kumar, V., Abbas, A. K., & Fausto, N. (2014). (7th ed.). Robbins and Cotran's pathological basis of disease Elsevier Science. Newman Dorland, W. A. (2003). (31st ed.). Dorland's illustrated medical dictionary W. B. Saunders Co.

**Assessment:**Both summative assessments are hurdle requirements. Test, 45-minute mid semester test (equivalent of 500 words), 30%. Examination, 2-hour written examination (equivalent of 2000 words), 70%. Total combined word equivalence is approximately 2500 words.

### HIP3001 Interprofessional Practice

**Locations:**Werribee, Footscray Park, St Albans.

**Prerequisites:**Pre-requisites as follows: - Bachelor of Nursing (HNB): HNB2106, HNB2207, RBM2202, HNB2206, HNB2205. - Bachelor of Midwifery/Bachelor of Nursing (HBMA): HMB3101, HMB3102, HNB2205, HNB3102. - Bachelor of Paramedicine (HBPD): HFB2223

**Description:**This unit of study both integrates the capabilities that students have developed earlier in their courses and prepares students for practice in an interprofessional setting. It is based on the principle that "Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care" (CAIPE, 2002). It focuses on developing five (5) interprofessional capabilities: interprofessional teamwork, interprofessional communication, navigating interprofessional conflict, professional roles and identities, and critical reflection on interprofessional practice. The unit does this in three phases: the first (Expose) raises key issues in interprofessional practice using a scenario-based learning approach, the second (Immerse) uses simulation to explore interprofessional practice in the classroom and the third (Experience) involves students in working for ten days as interprofessional practitioners in the Victoria University Interprofessional Clinic (VUIC) on the Werribee Campus. The focus throughout is on students becoming effective interprofessional practitioners and how they can put this knowledge into action in a clinical setting.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Practice effectively as an adaptable, capable and ethical member of an interprofessional team, using their understanding of themselves and of other professional roles to achieve holistic client health goals;
2. Communicate

effectively with clients and with other professionals in an interprofessional team setting to critically evaluate priorities and articulate key issues in solving complex health problems; 3. Advise clients and colleagues of their own professional role and the roles of other professionals in the context of interprofessional practice; 4. Predict and manage interprofessional disagreement and conflict by respecting and valuing the diversity of complementary professional roles; 5. Critically reflect upon their own performance and that of their team members, informed by theoretical perspectives of interprofessional practice.

**Class Contact:** Workshop 1.0 hr Plus Four (4) hour Lectures; Seventy-four (74) hours in total at the designated workplace (VU Interprofessional Clinic), and Thirty (30) hours of independent study (including online).

**Required Reading:** Hammick M, Freeth D, Copperman J, Goodson D. 2009. Being interprofessional. Cambridge: Polity Press World Health Organization. 2010. Framework for action on interprofessional education & collaborative practice. Geneva: WHO.

**Assessment:** Other, Tutor-moderated self- and peer-assessment (Expose and Immerse, approx. 1000 words), 20%. Other, Tutor-moderated self- and peer-assessment (Experience, approx. 1000 words), 30%. Report, Reflective report informed by theory (Experience, approx. 1000 words), 20%. Performance, Supervisor grade based on observation and self, peer and client assessment (Experience, approx. 1000 words), 30%.

### HIP4001 Interprofessional Practice

**Locations:** Werribee, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** This unit of study both integrates the capabilities that students have developed earlier in their courses and prepares students for practice in an interprofessional setting. It is based on the principle that "Interprofessional education occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care" (CAIPE, 2002). Interprofessional Practice focuses on developing five interprofessional capabilities: interprofessional teamwork, interprofessional communication, navigating interprofessional conflict, professional roles and identities, and critical reflection on interprofessional practice. The unit does this in three phases: the first (Expose) raises key issues in interprofessional practice using a scenario-based learning approach, the second (Immerse) uses simulation to explore interprofessional practice in the classroom and the third (Experience) involves students in working for ten days as interprofessional practitioners in the Victoria University Interprofessional Clinic (VUIC) on the Werribee Campus. The focus throughout is on students becoming effective interprofessional practitioners and how they can put this knowledge into practice in a clinical setting.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Practice effectively as a member of an interprofessional team providing client-centred care and critically appraise the effectiveness of their own contributions; 2. Adapt their oral, written, graphical and non-verbal communication strategies to the needs of clients and other professionals; 3. Informed by theory, analyse student's own professional role and the roles of other professionals in the context of interprofessional practice; 4. Critically reflect on the strategies used by the interprofessional team to manage interprofessional disagreement and conflict; 5. Improve their own performance and that of their interprofessional team by critical reflection and reference to theoretical perspectives of interprofessional practice.

**Class Contact:** One hundred and twenty (120) hours per semester, comprising of four (4) hour lectures, twelve (12) hours of workshops and seventy-four (74) hours of work integrated learning (VU Interprofessional Clinic), including thirty (30) hours of

independent study (including online).

**Required Reading:** Hammick M, Freeth D, Copperman J, Goodson D. 2009. Being interprofessional. Cambridge: Polity Press World Health Organization. 2010. Framework for action on interprofessional education & collaborative practice. Geneva: WHO.

**Assessment:** Other, Tutor-moderated self- and peer-assessment (Expose and Immerse, approx. 1500 words), 20%. Other, Tutor-moderated self- and peer-assessment (Experience, approx. 1500 words), 30%. Report, Reflective report informed by theory (Experience, approx. 4000 words), 20%. Performance, Supervisor grade based on observation and self, peer and client assessment (Experience, approx. 500 words), 30%.

### HMB1101 Foundations in Midwifery

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit introduces students to foundational midwifery knowledge and skills for conducting a comprehensive health assessment of the woman during the childbearing period. Students will study physiological and psychosocial changes during pregnancy and childbirth. Evidence-based knowledge will be applied to the midwives' role in providing midwifery care, health promotion and health counselling during pre-conception, pregnancy, labour and birth. Opportunity to practice skills such as health history taking, functional health and vital sign assessment, abdominal palpation, occupational health and safety, procedural hand washing and aseptic technique will be provided within a simulated environment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Demonstrate beginning physical health and psychosocial assessment within a simulated environment. 2. Discuss ethical and legal issues associated with the conduct of health assessment. 3. Perform skills related to assessment (i.e. vital signs and abdominal palpation) whilst integrating principles of occupational health and safety. 4. Source and apply evidence-based knowledge to health assessment and midwifery care throughout pre-conception, pregnancy, labour and birth. 5. Articulate the principles of woman-centred care as it pertains to midwifery care. 6. Compare midwifery models of care with traditional models of maternity care. 7. Demonstrate documentation for health profiles/histories of the pregnant woman. 8. Demonstrate numeracy skills required for the safe practice of medication administration.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Marshall, J. E., & Raynor, Maureen D. (Eds.). (2014) (16th ed.). Myles textbook for midwives Oxford: Churchill Livingstone Johnson, R., & Taylor, W. (2010) (3rd ed). Skills for midwifery practice Oxford: Churchill Livingstone Fairman, S., Tracy, S. K., Thorogood, C. & Pincombe, J. (2015) (3rd ed). Midwifery: Preparation for practice Chatswood, NSW: Churchill Livingstone/Elsevier Stables, D. & Rankin, J. (Eds.). (2010) (3rd ed). Physiology in childbearing: With anatomy and related biosciences Edinburgh: Baillière Tindall Weber, J. R., & Kelley, J. H. (2014) (5th ed). Health assessment in nursing Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins Lewis, P., Foley, D., Weber, J., & Kelley, J. (2014) (2nd ed). Health assessment in nursing North Ryde, N.S.W.: Lippincott Williams & Wilkins

**Assessment:** Test, Skills Test (25 minutes), 50%. Essay, Essay (1500 words), 30%. Examination, Final Examination (3 hours, 2000 words), 20%. Hurdle requirement: Mathematics Mastery Test - All students are required to achieve 100% in the mathematics mastery test. Accuracy in medication administration is an absolute requirement for safe midwifery practice.

## HMB1102 Midwifery Practice 1

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**The student will be expected to complete 160 hours of clinical midwifery practice under supervision in a maternity care setting. Supervised practice will include application of principles of communication skills; reflection in and of action; journal writing. Students will apply theoretical principles, evidenced-based knowledge and midwifery practice skills learned in the related theoretical unit and, under supervision, assess the woman and her baby. Students will be introduced to the concept of continuity of care in midwifery practice. The 'Continuity of Care' program is a fundamental component of the Bachelor of Midwifery course enabling students to meet with and provide care or women under supervision throughout the childbearing period. As part of minimum practice requirements of the Australian Nursing & Midwifery Accreditation Council students will be required to meet and follow through 20 women over the three-year program. The aims and requirements of the program will be presented. The central concepts of the Continuity of Care program are to care for women using a woman-centred approach and being exposed to the benefits of continuity of care for women during their pregnancy, birth and the early weeks after birth. The student will be required to recruit and participate in Continuity of Care experiences with 5 women from pregnancy to the early weeks after birth. This process will begin in semester one and continue into semester 2. During the Continuity of Care program the student will apply an evidence-based approach to their care of women.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Undertake clinical midwifery practice under supervision in a maternity care setting;
2. Demonstrate qualities of woman-centred midwifery practice using theoretical understandings gained in the unit Foundations in Midwifery;
3. Demonstrate developing midwifery practice skills necessary to provide woman-centred midwifery practice;
4. Under supervision assess the woman and her baby at various stages of pregnancy, labour and birth;
5. Recognise the importance of woman-centred care in the social context in the provision of maternity services;
6. Demonstrate the ability to undertake beginning level health documentation in midwifery;
7. Assess, collect and record data for health profiles/histories of women during childbearing;
8. Make contact with a minimum of 5 women (in the clinical venue) expecting to give birth later in the year for the purpose of the "Continuity of Care" program;
9. Discuss models of maternity care and service provision in Australia; and
10. Apply evidence-based knowledge to midwifery practice to inform professional experiences in a maternity care setting with consideration to: assessing the woman and her baby at various stages of her pregnancy, and labour and birthing experiences; and developing practice skills integral to provision of woman-centred care.

**Class Contact:**Lab2.0 hrsTutorial2.0 hrsWorkshop4.0 hrsOne hundred and sixty (160) hours for one semester of supervised clinical practice in a maternity setting, and 12 hours lectures and up to 30 hours supervised Continuity of Care experiences.

**Required Reading:**Johnson, R. & Taylor, W. (2010). 3rd Skills for midwifery practice, Oxford: Churchill Livingstone

**Assessment:**Journal, 3 reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMC) (2006) National Competency Standards for the Midwife.

## HMB1203 Supporting Women Becoming Mothers

**Locations:**St Abans.

**Prerequisites:**HMB1101 - Foundations in MidwiferyRBM1121 - Anatomy &

Physiology 1

**Description:**This unit will explore the concept of pain and the role of the midwife in being with woman experiencing pain at any time during the childbearing continuum. Emphasis will be placed upon contemporary research evidence to determine appropriate pain strategies to employ when working with women experiencing pain. The understanding and application of evidence-based knowledge will be utilised related to midwifery practice. The unit will also provide the foundational knowledge required by midwifery students to effectively care for a woman and baby during the postpartum period. The unit will examine the role of the midwife as a primary carer during this time, including the physiological and psychological adaptation to becoming a mother. Nutrition of the baby emphasising lactation will also be examined. Students will be provided with the opportunity to explore procedural aspects of the midwife's role when caring for a woman and her baby during the postpartum period. The unit will include: Factors influencing the pain process: philosophical, psychosocial, physiological, environmental, spiritual and cultural; Exploration of pain theory, working with pain, recognition of pain as a normal component of labour, sources of pain, pain assessment and expression of pain; The process of loss and grief; Pain management options and strategies; After Birth With Woman And Baby; Adaptation to extrauterine life; Lactation, breastfeeding practices and support, attachment & bonding; Development of the family unit; Discharge planning; Assessment of mother & baby; Midwifery care requirements during labour, birth and the postpartum period; Showers, bathing, perineal care, mouth & hand washing; Oxygenation and oxygen administration; Cardiopulmonary resuscitation; Neonatal resuscitation; Examination of the newborn; Hygiene of the newborn; Safety of the newborn; Drug calculations and the principles of administration of oral and parenteral therapeutic substances; Skin integrity and wound care; Peri-operative midwifery care; Domiciliary and home based care; 'No Lift' policy; Use of technology in the clinical setting; Introduction to CTG and basic interpretation; Fluid balance; and Urinalysis. Note: The information in this descriptor is the level of detail required by the course external accreditation agency ANMAC (refer to their midwifery course accreditation guidelines, 2010).

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the role of the midwife in being with woman across the childbearing continuum as a normal life event, with consideration to professional advocacy, responsibility, and accountability;
2. Develop an awareness of the journey with woman during childbearing;
3. Demonstrate principles and practices of midwifery care with woman and her baby during the postpartum period;
4. Demonstrate the principles and practices being with woman in feeding her baby with emphasis on lactation;
5. Provide fundamental midwifery care for women during an episode of illness/hospitalisation;
6. Utilise interpersonal and professional communication skills including verbal, written, and electronic information management skills in the practise of midwifery care;
7. Perform midwifery practice skills in a simulated laboratory and clinical environment;
8. Integrate the practice of occupational health and safety requirements of the health care industry and the midwifery profession;
9. Explore the philosophical, physiological, psychosocial, spiritual, cultural and environmental factors influencing the pain experience;
10. Discuss the role of the midwife in being with woman to work with the normal pain associated with childbirth;
11. Apply and demonstrate the principles of safe administration of the therapeutic substances in midwifery;
12. Apply evidence-based knowledge to midwifery practice with consideration to: recognising birth as a normal life event for women and their families; providing care across women's labour, birth and postpartum experiences; and, safely administering therapeutic substances;

13. Discuss the theoretical concepts applied to pain assessment relevant to midwifery practice during birthing; 14. Discuss the pharmacological and non-pharmacological methods utilised to assist working with woman to cope with pain; and 15. Complete a drug calculation mastery test.

**Class Contact:** Lab 9.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Seventy (70) hours for one semester comprising lectures, tutorials and laboratory sessions.

**Required Reading:** Baston, H. & Durward, H. (2010). (2nd ed). Examination of the newborn, a practical guide, Routledge: London. Bick, D., Macarthur, C. & Winter, H. (2009). (2nd ed). Postnatal care: Evidence and guidelines for management, Churchill Livingstone: Sydney. Fraser, D.M. & Cooper, M.A. (eds). (2009). (15th ed). Myles textbook for midwives, Churchill Livingstone: Edinburgh. Jordan, S. (2010). (2nd ed). Pharmacology for midwives: The evidence for safe practice, Palgrave: Hampshire. Yerby, M. (2000). Pain in childbearing: key issues in management, Bailliere Tindall: Edinburgh. - Marshall, J. E., & Raynor, Maureen D. (Eds.). (2014) 16th Myles textbook for midwives Oxford: Churchill Livingstone These reference texts are midwifery-specific and approved by the external accreditation agency ANMAC as the latest editions.

**Assessment:** Examination, 3 hour, 60%. Essay, 1500 words, 40%. Hurdle requirement: Drug calculation mastery test (100% needed for pass).

## HMB1204 Midwifery Practice 2

**Locations:** St Abans.

**Prerequisites:** HMB1101 - Foundations in Midwifery HMB1102 - Midwifery Practice 1

**Description:** This unit provides students with midwifery practice opportunities in a clinical venue. Utilising experience from the clinical placement in Midwifery Practice 1, midwifery students will be expected to extend their practice repertoire in providing midwifery care to women and families under the supervision of a clinical teacher/preceptor. Students will be expected to provide care for with woman and her baby during pregnancy, during labour and birth and the postpartum period using knowledge gained in previous units. Students maintain contact with women with whom they have made initial relationships as part of the Continuity of Care program. The understanding and application of evidence-based knowledge will be utilised related to midwifery practice. Supervised midwifery practice will include: Interviewing and history taking techniques; Reflection in and on action; Journal writing; Application of principles of communication; Assessment of the woman and her baby; Working with the woman giving birth; Working with the woman to give nourishment to her baby; Working with the woman to care for herself and her baby before and after birth; and Documentation of midwifery actions using 'with woman' attitudes and responses. Note: The descriptor information is the level of detail required that has been approved by the external accreditation agency ANMAC as per their course requirement guidelines (2010).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to:

- Participate under supervision in 'being with woman' when attending the clinical facility for pregnancy care;
- Demonstrate qualities of woman-centred midwifery practice using theoretical understandings gained in the subjects Foundations in Midwifery and Supporting Women Becoming Mothers;
- Describe working with the woman in childbearing using the theoretical understandings gained in the midwifery and anatomy and physiology subjects;

- Demonstrate developing skills necessary to provide women-centred midwifery practice;
- Recognise the importance of being with the woman and her social context in the provision of maternity services;
- Demonstrate beginning midwifery practice skills in health assessment of the woman and her baby at various stages of pregnancy;
- Demonstrate the ability to undertake beginning level health documentation in midwifery;
- Apply theoretical concepts of pain and pain theory when working in partnership with women birthing in health care settings;
- Demonstrate effective communication, counselling and pastoral expertise when working with the woman and her family;
- Undertake a comprehensive assessment of the woman birthing and her baby in terms of the birthing process;
- Employ a woman-centred approach to midwifery care supported by assessment and evidence based practice;
- Respect the rights, values and cultural beliefs of the woman and her family expressed during the birthing process by creating a culturally appropriate environment with the woman and her partner;
- Demonstrate knowledge and implementation of a variety of non-pharmacological and pharmacological pain relief in midwifery;
- Employ reflective practice when working with the woman and her baby;
- Provide optimum care of the birthing family in collaboration with other members of the health care team;
- Discuss the need for reflective practice for the implementation of evidence informed care;
- Apply evidence-based knowledge to midwifery practice with consideration to health assessment, working with women in pain, and communicating and counselling women and their families;
- Discuss the relative merits of different choices in infant nutrition; and
- Provide assistance to the woman to gain understandings about breastfeeding, including offering support to develop skills and identify resources.

**Class Contact:** One hundred and sixty (160) hours for one semester of supervised clinical practice in a maternity setting and a maximum of thirty (30) hours supervised Continuity of Care experiences.

**Required Reading:** Johnson, R. & Taylor, W. (2006). (2nd ed). Skills for midwifery practice, Churchill Livingstone: Edinburgh.

**Assessment:** Journal, 3 Reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Report, Continuity of Care report (1000 words), Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMAC) (2006) National Competency Standards for the Midwife. Clinical Performance Appraisal linked to Learning Outcomes 1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19 and Graduate Capabilities 1, 3, 4 & 5. Reflective journals linked to Learning Outcomes 1-6, 8-11, 14, 15, 16, 19 and Graduate Capabilities 1, 2, 3 & 5.

## HMB2105 Working as a Professional 1

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** The aim of this unit is to assist students to develop an understanding of ethical and legal dimensions of practice with the opportunity to examine theory,

principles and moral arguments related to professional practice and health care issues. It will also examine the way health services are structured at State and Federal levels. In addition, funding initiatives and mechanisms that impact on the midwifery care and women's wellbeing including the dichotomy between "main stream" and "alternative" health care choices will be explored. Finally the unit will also focus on the role of the midwife, ethical and legal aspects of the role, midwifery knowledge development and midwives' scope of practice. These aims will be addressed in three learning modules. Module 1 will include the following content: Defining the role of the midwife in contemporary practice including models of midwifery care; Exploring the desirable attributes of a midwife; Exploring the philosophical basis underpinning the role of the midwife in contemporary midwifery practice; Explore the Art of Midwifery: Midwife's role in collaborative practice. Module 2 introduces the student to core legal and ethical principles required for beginning professional practice within the Australian Health Care system and covers the following topics: Introduction to Australian Law; Working within the Law; Legal Concepts; Professional Regulation; The regulation of drugs; Life and Death Issues; Professional practice and the ethical perspective. Professional indemnity insurance; and Victorian legislation: Mental Health Act 1986, Human Tissue Act 1982, Age of Majority Act 1982, Medical Treatment Act 1988, Guardianship and Administration Act 2008, Mental Health (Amendment) Act 1995, Health Services Act 1988, Freedom of Information Act 1982, Privacy Act 2000 (Cth), Public Record Act 2008, Drugs, Poisons & Controlled Substances Act 2009, Drugs, Poisons & Controlled Substances Regulations 2006, Health Professionals Registration Act 2005 and the Coroners Act 2008. Module 3 introduces the student to: The interrelations between Commonwealth, state and private sector roles in health care; Health insurance and the funding of health services including funding, DRGs and Casemix; Pressures on the Pharmaceutical Benefits Scheme; The organisation of Health care services; Reforms of the Health Service.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the role of the midwife in contemporary midwifery practice;
2. Discuss the philosophical basis underpinning the role of the midwife in contemporary midwifery practice;
3. Discuss legislation and common law relevant to professional midwifery practice;
4. Discuss health law as an essential aspect of professional midwifery practice;
5. Discuss the regulation of nursing and midwifery in Australia with particular reference to Victorian statutory laws;
6. Distinguish between civil and criminal law and discuss how each may apply to professional midwifery practice;
7. Explain what evidence is necessary to prove negligence in health care contexts;
8. Discuss the legal requirements to maintain patient/client confidentiality;
9. Value the importance of an ethical code of practice as foundational to midwifery practice;
10. Apply ethical frameworks to issues that arise in professional midwifery practice;
11. Examine the moral arguments for maintaining or breaching confidentiality in professional midwifery practice;
12. Discuss meaning/s of the concept of advocacy as this is presented in professional midwifery practice;
13. Explore the differences and similarities of ethical and legal frameworks and their implications on the midwife's professional relationship with woman, her family and health care providers;
14. Demonstrate an understanding of the role of State and Federal governments within the Australian Maternity Health Care context;
15. Discuss the significance for midwifery care of public and private sector funding mechanisms;
16. Discuss growing pressures on the Pharmaceutical Benefits Scheme and their implications for midwifery care;
17. Discuss medical pluralism and how this may impact on midwifery care.

**Class Contact:** Tutorial 2.0 hrs Sixty (60) hours for one semester comprising lectures

and tutorials.

**Required Reading:** Forrester, K. & Griffiths, D. (2010). (3rd ed). Essentials of law for health professionals, Harcourt: Sydney. Johnstone, M.J. (2008). (5th ed). Bioethics: A nursing perspective, Harcourt: Sydney. Jones, S.R. (2000). (2nd ed.). Ethics in midwifery, Mosby: Sydney.

**Assessment:** Essay, Written Essay (2,500 words), 70%. Presentation, Group Presentation, 30%.

## HMB2106 Complex Pregnancy and Birth 1

**Locations:** St Abans.

**Prerequisites:** HMB 1101 - Foundations in Midwifery HMB 1203 - Supporting Women Becoming Mothers RBM 1121 - Anatomy & Physiology 1 RBM 1222 - Anatomy & Physiology 2

**Description:** This unit introduces students to the care of women experiencing health problems during pregnancy with exploration of the physical and psychological outcomes of disease processes on the mother and/or baby. Emphasis is given to the collaborative role of the midwife, referral mechanisms, use of medical technology and intervention, and the implications for being with the woman, her baby, and the midwife. The unit will also examine mental health issues precipitated by or coinciding with childbearing with particular emphasis on the implications with woman and families experiencing them and the role of the midwife in assessment and referral. The unit explores the understanding and application of evidence-based knowledge related to midwifery practice. Pregnancy problems: anaemia; blood disorders including thalassemia and rhesus isoimmunisation; infections; fetal assessment; early pregnancy bleeding and loss; intrauterine growth restriction; fetal death in utero; antepartum haemorrhage; variations in blood pressure; diabetes; surgical and medical conditions. Care and assessment during pregnancy, labour and birth and after birth: conduct vaginal examination; episiotomy and perineal care; epidural infusions and care; venepuncture; intravenous cannulation; intravenous therapies; IV antibiotics; blood sugar monitoring. Mental health issues: psychopathology of pregnancy and childbirth; motherhood and mental illness; assessment and management; midwifery role; referral and collaboration. Note: The descriptor information is the level of detail required that has been approved by the external accreditation agency ANMAC as per their course requirement guidelines (2010).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Utilise knowledge from anatomy and physiology applicable to being with women experiencing complicated pregnancies;
2. Examine specific medical and obstetric conditions that affect childbearing;
3. Evaluate the implications of obstetric interventions with the woman related to midwifery practice and critical review of current evidence;
4. Critically examine the use of technology in midwifery and obstetric practice with reference to competing birthing perspectives located in the literature;
5. Perform midwifery practice skills in a simulated laboratory and clinical environment;
6. Demonstrate midwifery practice skills in the management of maternity care emergencies;
7. Interpret the role of the midwife as a member of a collaborative health-care team;
8. Apply evidence-based knowledge to midwifery practice with consideration to: challenges in pregnancy; midwifery care strategies during women's labour and birth experiences and the postpartum period; and, mental health issues.
9. Explore community resources available with the woman for support in the community;
10. Demonstrate mental health assessment of a woman using a family-centred approach;
11. Complete a drug calculations mastery test;
12. Identify woman-centred midwifery care strategies for being with the woman to facilitate choice and partnership when complications in childbearing

occur.

**Class Contact:** Lab 7.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Workshop 4.0 hrs Seventy (70) hours for one semester including lectures, tutorials and laboratory sessions.

**Required Reading:** Fraser, D.M. & Cooper, M.A. (eds). (2009). (15th ed). Myles textbook for midwives, Churchill Livingstone: Edinburgh. Guage, S, & Henderson, C. (2005). (3rd ed). CTG made easy, Churchill Livingstone: Edinburgh. Johnson, R, & Taylor, W. (2006). (2nd ed). Skills for midwifery practice, Churchill Livingstone: Sydney. World Health Organization. (2003). Managing complications in pregnancy and childbirth. A guide for midwives and doctors, WHO: Geneva. The references are midwifery-specific texts and the most recent editions as approved by the external accreditation agency ANMAC.

**Assessment:** Examination, Written Examination (3 hours), 60%. Essay, Written Essay (1500 words), 40%. Hurdle requirement: Drug calculation mastery test (100% needed for pass).

### HMB2107 Midwifery Practice 3

**Locations:** St Abans.

**Prerequisites:** HMB1101 - Foundations in Midwifery HMB1102 - Midwifery Practice 1 HMB1203 - Supporting Women Becoming Mothers HMB1204 - Midwifery Practice 2

**Description:** This practice unit complements the theoretical unit "Complex Pregnancy and Birth 1" and will focus on students developing their knowledge and skills relating to the care of women who experience complex pregnancy, labour and birth, and postpartum period. Emphasis is given to the recognition of problems and the collaborative and referral role of the midwife. Whilst recognising the role of other healthcare practitioners, midwifery care will be central. Students will be involved in providing midwifery care and support of women experiencing obstetrical intervention and the use of medical technology. The unit also allows students to combine the understandings and skills gained earlier to expand their scope of care practices of women and their babies. This includes the understanding and application of evidence-based knowledge to midwifery practice. Students maintain contact with women with whom they have made initial relationships as part of the Continuity of Care program. Supervised midwifery practice will include: Assessment of the woman and her baby; Assisting the woman to give birth; Assisting the woman to give nourishment to her baby; Assisting the woman to care for herself and her baby before and after birth; and Documentation of midwifery actions, the woman's attitudes and responses. Note: This level of information is required and approved by the external accreditation agency ANMAC for successful midwifery course approval.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate woman-centred midwifery care strategies to facilitate choice and partnership when complications in childbearing occur;
2. Apply appropriate knowledge in the care of women experiencing childbearing complexities;
3. Develop plans of care together with the women experiencing childbearing complexities;
4. Discuss specific conditions that affect pregnancy, labour and birth and the first weeks after birth;
5. Evaluate the implications of obstetric interventions in maternity care using an evidence-based approach;
6. Critique the use of technology in maternity care;
7. Demonstrate skills in the use of technology in midwifery and obstetric practice;
8. Demonstrate the ability to manage maternity care emergencies;
9. Demonstrate the ability to practice within a multidisciplinary team;
10. Demonstrate skills in principles of primary level counselling applied to childbearing;
11. Facilitate women's access to appropriate community resources; and
12. Apply evidence-based knowledge to midwifery practice.

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**Class Contact:** One hundred and sixty (160) hours for one semester of supervised clinical practice in a maternity setting and up to of sixty (60) hours supervised Continuity of Care experiences.

**Required Reading:** Johnson, R., & Taylor, W. (2011), (3rd ed) Skills for midwifery practice, Churchill Livingstone: Edinburgh. This text is midwifery-specific and approved as the most recent edition by the external accreditation agency ANMAC.

**Assessment:** Journal, Three (3) Reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Report, Continuity of Care report (1000 words), Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMAC) (2010) National Competency Standards for the Midwife.

### HMB2201 Complex Midwifery 1

**Locations:** St Abans.

**Prerequisites:** RBM2101 - Pathophysiology & Quality Use of Medicines 1

**Description:** The aim of this unit is to introduce students to evidence based care of the woman experiencing health problems or conditions in pregnancy, labour and birth, illustrating their relationship to midwifery practice. Emphasis is given to the collaborative role of the midwife, referral mechanisms, medication management, use of medical technology and intervention and the implications for the woman and her baby. Topics that will be covered include genetic and developmental abnormalities, antepartum bleeding and infection, and conditions that may pre-exist or present during pregnancy. Students will also develop skills in foetal surveillance and assessment.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply pathophysiological knowledge to women experiencing complications during pregnancy, labour and birth.
2. Compare and contrast the use of medications and technology in midwifery and obstetric practice.
3. Perform midwifery practice skills such as vaginal examination, management of induction of labour, episiotomy and perineal care, epidural infusions and care, venepuncture, management of intravenous therapy and foetal surveillance and assessment in a laboratory or simulated environment.
4. Demonstrate accuracy in drug calculations.
5. Apply knowledge of woman-centred midwifery care during complex pregnancy, labour and birth.

**Class Contact:** Sixty (60) hours per semester comprising of a range of teaching methods and includes 24 hours of lectures, 16 hours of tutorials, 17 hours of laboratory sessions and simulation, and 3 hours of self-directed learning.

**Required Reading:** To be advised by lecturer.

**Assessment:** Test, Skill assessment (30 minutes), 15%. Assignment, Written assessment (1500 words), 35%. Examination, Written assessment (3 hours), 50%. To pass this unit, students must achieve an aggregate score of 50% and pass the final written examination and drug calculations test (hurdle). The written examination assesses critical knowledge which further informs practice and underpins subsequent units. Accuracy in medication administration is an absolute requirement for safe midwifery practice.

### HMB2202 Midwifery Professional Practice 1

**Locations:** St Abans.

**Prerequisites:** RBM2101 - Pathophysiology & Quality Use of Medicines 1

**Description:** This professional practice unit complements the theoretical unit 'Complex Midwifery 1'. The unit will focus on students developing knowledge and skills related to the care of women who experience complexity during pregnancy, labour, birth, and/or the postpartum period. Students will be involved in providing midwifery care and support of women experiencing obstetric intervention and the use of medical technology. Emphasis is given to the identification of complications and the

collaborative role of the midwife. Students will recruit two (2) women for the Continuity of Care program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate woman-centred midwifery care strategies to facilitate choice and partnership when complications in childbearing occur.
2. Draw upon contemporary evidence related to specific conditions that affect pregnancy, labour and the postpartum period.
3. Employ and evaluate the use of obstetric interventions and technologies utilised in maternity care, including maternity emergencies.
4. Exhibit therapeutic communication skills.
5. Facilitate women's access to appropriate community resources.
6. Provide evidence of recruitment of two women as part of the Continuity of Care program.

**Class Contact:** Placement 8.0 hrs This professional practice unit involves one hundred and sixty (160) hours of supervised clinical practice in an external maternity setting.

**Required Reading:** To be advised by lecturer.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Report, Continuity of Care Report, Yes/No. To gain an overall pass in this unit, students must achieve a 'competent' grading in the final Professional Practice Performance Appraisal, recruit two (2) women for the Continuity of Care program and complete the Continuity of Care report. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HMB2208 Quality Use of Medicines for Midwifery 1

**Locations:** St Abans.

**Prerequisites:** HMB2106 - Complex Pregnancy and Birth TRBM2123 - Pathophysiology in Midwifery

**Description:** This unit introduces students to the general principles of pharmacology as they relate to midwifery. The unit aims to assist the students to attain knowledge and understanding of the general principles of pharmacology and pharmacokinetics; the ways in which individuals respond to medication; principles and guidelines for storage, checking, administration and documentation of medications; the legal and ethical principles of drug administration; quality use of medications including safety and efficacy issues; medication use across the lifespan and polypharmacy; socio-cultural factors influencing drug therapy; adverse drug reactions and interactions; the role of midwives in education and medication therapeutic intervention; and exemplars of commonly-used drug groups.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the general principles of pharmacology as they relate to midwifery practice;
2. Discuss legislation and ethical considerations pertaining to the drug administration responsibilities of the midwife in midwifery practice;
3. Explain the principles of pharmacological interventions in the care of the childbearing woman;
4. Discuss safety and efficacy issues of medications pertaining to childbearing women;
5. Apply evidence-based knowledge to midwifery practice with consideration to: The role of the midwife in medication administration; and, identifying practice issues with medication administration;
6. Discuss the relationship of conventional drug therapy to non-pharmacological and complementary therapies in the care of individuals; and
7. Complete a drug calculations mastery test.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Sixty (60) hours for one semester, consisting of lectures and tutorials.

**Required Reading:** Bryant, B., & Knights, K. (2014) (4th ed). *Pharmacology for Health Professionals* Mosby: Elsevier This reference is the latest edition as approved

by the external accreditation agency ANMAC.

**Assessment:** Essay, Essay (1500 words), 40%. Examination, Final Examination (2 hours), 60%. Hurdle requirement: Drug calculation mastery test (100% needed for pass) linked to Learning Outcome 7.

### HMB2209 Diversity in Midwifery Practice

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit assists students to acquire an understanding of how social and cultural contexts impact on women and their health during childbearing in Australia. Students will be assisted to gain an understanding of how their own values, beliefs and prejudices are shaped by gender, race, social circumstance and culture. In gaining this understanding, students are encouraged to reflect on how such beliefs might determine the relationships they form with women who are 'other' from themselves. The focus will be on cultural safety and sensitivity. This will include issues such as aboriginality, ethnicity, spiritual differences and female genital mutilation. Social inequity will also be explored in the areas of poverty, physical abuse, sexual abuse, rape, homelessness and chemical dependency. This unit will also provide students with an opportunity to debate socio-political aspects of working with women in the context of the Australian health care system. Broad concepts and frameworks utilised in the unit will present students with the potential to formulate individualised care strategies to apply in maternity care, including an understanding and the application of evidence-based knowledge to midwifery practice. In addition, the unit also provides students with theoretical concepts they can apply in health care provision when working with women across the life span as explored in, and linked to, the content of the unit 'Women's Health'.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the challenges presented when working with women who are from diverse backgrounds;
2. Discuss the impact that social inequities, as identified in contemporary evidence, have on women during their childbearing experiences;
3. Discuss social justice issues impacting on women's health in Australia;
4. Demonstrate practice that reflects cultural safety and sensitivity when working with women;
5. Discuss specific issues impacting on the health of Aboriginal women and their babies;
6. Discuss the politics of women's health with reference to contemporary issues as identified in current debate using an evidence-based approach;
7. Apply evidence-based knowledge to midwifery practice; and
8. Examine the woman's experiences as a recipient of health and maternity care, paying particular attention to socio-economic and cultural difference.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Sixty (60) hours for one semester including lectures and tutorials.

**Required Reading:** Rogers-Clarke, C. & Smith, A. (1998), *Women's health: a primary health care approach*, MacLennan & Petty Sydney. Schott, J. & Henley, A. (1996). *Culture, religion and childbearing in a multiracial society*, Butterworth Heinemann: Oxford. Additional readings will be provided during lectures and tutorials.

**Assessment:** Essay, Written Essay (2000 words), 60%. Presentation, Oral Presentation (40 minutes), 30%. Other, On-line participation in discussion groups, 10%.

### HMB2210 Women's Health

**Locations:** St Abans.

**Prerequisites:** RBM2123 - Pathophysiology in Midwifery

**Description:** This unit will build on women's health assessment and health promotion skills previously developed within the role of the midwife working with women



during childbearing. This unit, through the introduction of the broader health context, explores the primary and collaborative role of the midwife working with women who experience common women's health problems and their responses to these experiences. Students will be introduced to the physical and psychological aspects associated with selected women's health problems. The focus will be on fostering a positive self-image in women through facilitating participation in informed decision making and taking responsibility for self-care and optimising wellness. The understanding and application of evidence-based knowledge will be utilised related to midwifery practice in women's health. Content that will be explored includes: puberty, controlling fertility/contraception, sexually transmitted diseases and infections (non HIV), menstrual disorders, eating disorders and body image, pelvic pain, endometriosis, infertility and IVF, HIV & AIDS, breast health, continence, the pelvic floor, menopause, chronic illness, health in the workplace, working in the home, mental health and addictive disorders. This theoretical unit informs the women's health practice unit, Midwifery Practice 4.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the essential components to be considered when performing a comprehensive women's health assessment;
2. Discuss the principles of primary health care in the promotion of health and wellness with diverse groups of women experiencing treatment for a range of women's health problems;
3. Discuss the common health problems women may experience throughout various life stages;
4. Recognise the physical and psychological aspects associated with selected women's health problems using an evidence-based approach;
5. Apply evidence-based knowledge to midwifery practice;
6. Identify the range of responses women may experience when confronted with a body altering health problem;
7. Explore strategies to promote women's participation in informed decision making and taking responsibility for self-care; and
8. Recognise the need for reflective practice and the implementation of evidence informed care in practice.

**Class Contact:** Lab 4.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Seventy (70) hours for one semester including lectures, tutorials and laboratory sessions.

**Required Reading:** Mazza, D. (2011). 2nd Women's health in general practice. Sydney: Elsevier.

**Assessment:** Examination, Written Examination (3 hours), 60%. Essay, Written Essay (2000 words), 40%.

## HMB2211 Midwifery Practice 4

**Locations:** St Abars.

**Prerequisites:** HMB 2107 - Midwifery Practice 3

**Description:** This practice unit will focus on student's developing their knowledge and skills relating to midwives working in partnership with women experiencing breast and other women's reproductive health concerns. Students will be assisted to work in partnership with women experiencing diagnostic and/or therapeutic procedures within the context of reproductive health, including cancer and urinary conditions, whilst undertaking responsibility for woman-centred care in a variety of healthcare settings, including acute care environments. Student's learning will focus on the role of the midwife as a provider of primary and collaborative care of women across the reproductive health lifespan with an emphasis on skill development in women's health assessment, promoting wellness, discharge planning, woman-centred care planning, delivery and evaluation. Specifically the following will be explored: undertaking a comprehensive women's health assessment; guidelines for practice and skill development; primary care midwife promoting women's wellness; strategies for promoting breast awareness and mammography screening (Mammocheck Program); regular cervical screening; healthy diet, regular weight-bearing exercise,

pelvic floor exercises; midwife providing woman-centered collaborative care; physical and psychological pre and post-operative considerations; care of the woman experiencing diagnostic & therapeutic procedures for reproductive, breast and urinary conditions, to be taken into consideration when planning care of these women. The understanding and application of evidence-based knowledge will be utilised in midwifery practice in women's health care.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the role of the midwife working in partnership as the provider of primary and collaborative care of women throughout the reproductive health lifespan;
2. Demonstrate skill in undertaking a women's health assessment in an acute healthcare setting;
3. Demonstrate midwifery practice skill in promoting wellness, healthy lifestyle messages and routine screening programs of women in their care;
4. Apply knowledge of women's physical and psychological health in women experiencing reproductive and breast health concerns;
5. Discuss specific reproductive health concerns of women including urinary conditions;
6. Develop a plan of woman-centred care for women experiencing diagnostic and/or therapeutic procedures;
7. Demonstrate midwifery practice skill in the delivery of woman-centred care of women experiencing diagnostic and/or therapeutic procedures;
8. Apply knowledge of discharge planning in partnership with women experiencing short in-patient and day procedures related to reproductive and breast health concerns;
9. Apply knowledge of specific reproductive and breast health concerns in evaluating woman-centred care outcomes;
10. Employ reflective practice and implement evidence-informed care;
11. Apply evidence-based knowledge to midwifery practice in exploring issues and challenges women experience with their health across the lifespan;
12. Explore community resources available to support women with specific reproductive or breast health concerns;
13. Demonstrate the ability to practice within a multidisciplinary team;
14. Document the ongoing relationship with women as part of Continuity of Care experiences in a way that reflects their own involvement and actions and the rationale for these, as well as the women's actions and attitudes and responses to midwifery actions.

**Class Contact:** One hundred and twenty (120) hours for one semester of supervised clinical practice in a maternity setting and up to eighty (80) hours supervised Continuity of Care experiences.

**Required Reading:** Johnson, R. & Taylor, W. (2011), (3rd ed) Skills for midwifery practice, Churchill Livingstone: Edinburgh. This 'midwifery specific' text is the most recent edition approved by the external accreditation agency ANMAC.

**Assessment:** Journal, Three (3) Reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Report, Continuity of Care (1000 words), Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMAC) (2010) National Competency Standards for the Midwife.

## HMB3101 Complex Midwifery 2

**Locations:** St Abars.

**Prerequisites:** HMB 2201 - Complex Midwifery 1 HMB 2202 - Midwifery Professional Practice 1 RBM 2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** The unit of study builds on the content of 'HMB 2201 Complex Midwifery 1' and introduces students to the more complex health problems that women may experience during pregnancy, labour, birth and the postpartum period. Emphasis is given to the collaborative role of the midwife, referral mechanisms, medication management, use of technology and intervention, and the implications of these for the woman, her baby and midwifery care. Specifically the content will cover unexpected complications during labour and birth, including in-coordinate uterine action, the intervention cascade, foetal distress and birth asphyxia, primary

postpartum haemorrhage, shoulder dystocia, and recognising the acutely deteriorating woman.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply pathophysiological knowledge to women experiencing complications during pregnancy, labour, birth and the postpartum period.
2. Analyse specific medical and obstetric conditions that affect labour, birth and the postpartum period.
3. Critically examine the use of medications and technology (ultrasound, cardiotocography) and obstetric procedures (epidural analgesia, forceps, ventouse and caesarean birth) in midwifery and obstetric practice.
4. Explain the assessment and management of maternal health complications in the first week of the postpartum period including infection, secondary postpartum haemorrhage, haematomas and deep vein thrombosis.
5. Articulate knowledge of medication administration, haemodynamic monitoring, perineal suturing, and the assessment and management of maternity emergencies.

**Class Contact:** Sixty (60) hours per semester comprising of a range of teaching methods and includes 24 hours of lectures, 16 hours of tutorials, 14 hours of laboratory sessions and simulation, 6 hours of self-directed learning.

**Required Reading:** To be advised by lecturer.

**Assessment:** Assignment, Written assessment (1000 words), 30%. Examination, Written examination (2 hours), 50%. Test, Written test (online) (30 mins), 20%. To pass this unit, students must achieve an aggregate score of 50% and pass the final written examination. The written examination assesses critical knowledge which further informs practice and underpins subsequent units.

## HMB3102 Midwifery Professional Practice 2

**Locations:** St Abans.

**Prerequisites:** HMB 2201 - Complex Midwifery 1 HMB 2202 - Midwifery Professional Practice 1 RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This professional practice unit complements the theoretical unit 'HMB3101 Complex Midwifery 2'. Utilising experience from 'HMB2202 Midwifery Professional Practice 1', students will be expected to extend their practice repertoire in providing evidence based midwifery care to women and families under the supervision of a clinical educator/preceptor. Students will be expected to provide care for the woman and her baby during pregnancy, labour and birth and the postpartum period. Students will recruit a further three (3) women as part of the Continuity of Care program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate skills to provide women-centred midwifery practice;
2. Perform a comprehensive assessment of the woman during pregnancy, labour, birth, and in the post-partum period;
3. Perform a comprehensive assessment of the newborn;
4. Provide woman-centred education and assistance about infant nutrition choices, including community resources; and
5. Provide evidence of recruitment of three (3) women as part of the Continuity of Care program.

**Class Contact:** Placement 8.0 hrs In this professional practice unit, students will have one hundred and sixty (160) hours of supervised clinical practice in an external maternity setting.

**Required Reading:** To be advised by lecturer.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Report, Continuity of Care Report, Yes/No. To gain an overall pass in this unit, students must achieve a 'competent' grading in the Final Professional Practice Performance Appraisal, recruit three (3) women as part of the Continuity of Care program and

complete the Continuity of Care Report. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

## HMB3112 Quality Use of Medicines for Midwifery 2

**Locations:** St Abans.

**Prerequisites:** HMB 2106 - Complex Pregnancy and Birth 1 RBM2123 -

Pathophysiology in Midwifery HMB 2208 - Quality Use of Medicines for Midwifery 1

**Description:** This unit builds on the content of "Quality Use of Medicines for Midwifery 1" and introduces students to the use of medication in pregnancy, labour, postpartum with a focus on lactating women and neonates. The unit aims to assist the students to attain knowledge of the effect of common medications and illicit substances on pregnancy and the developing fetus. Students will study medications used in labour and drug therapies' effect on lactation and the newborn. The unit will also present contemporary issues surrounding the legislation and the responsibilities of midwives in prescribing medication.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe drugs commonly prescribed during pregnancy and labour and articulate their effects on the woman and the developing fetus.
2. Analyse pharmacodynamics and pharmacokinetics of medications as it pertains to lactation and the neonate.
3. Debate the benefits and dilemmas of medication use during the childbearing continuum for women with a mental health condition and women using illicit substances.
4. Evaluate the use of drugs in neonates, including vaccination and their adverse effects on term and premature babies.
5. Appraise the professional issues related to midwifery in relation to prescribing medication.
6. Demonstrate numeracy skills required for the safe practice of medication administration.

**Class Contact:** Lecture 2.0 hrs Tutorial 1.0 hr Sixty (60) hours for one semester including lectures and tutorials.

**Required Reading:** Downie, G., Mackenzie, J. & Williams, A. (2008). (4th ed). Pharmacology and medicines management for nurses. Churchill Livingstone: Edinburgh. Jordan, S. (2010). (2nd ed). Pharmacology for midwives: the evidence base for safe practice, Palgrave: Basingstoke, UK. The references are approved as the latest editions by the external accreditation agency ANMAC.

**Assessment:** Test, Topic Test (1 hour), 20%. Essay, Essay (1500 words), 30%. Examination, Final Written Examination (3 hours), 50%. Hurdle requirement: Drug calculation test (100% needed for pass). Accuracy in medication administration is an absolute requirement for safe midwifery practice.

## HMB3113 Complex Pregnancy and Birth 2

**Locations:** St Abans.

**Prerequisites:** HMB 2106 - Complex Pregnancy and Birth 1 RBM2123 - Pathophysiology in Midwifery

**Description:** This unit builds on the content of "Complex Pregnancy And Birth 1" and introduces students to the more complex health problems that women may experience during labour, birth and the postpartum period. Students will be assisted to develop their existing knowledge and skills by working with women and other members of the healthcare team when problems arise during labour, birth and the first weeks after birth. Emphasis is given to the collaborative role of the midwife, referral mechanisms, use of medical technology and intervention, and the implications of these for the woman, her baby and the midwife. The understanding and application of evidence-based knowledge will be utilised related to midwifery practice. Specifically the content covered will include: Unexpected problems during labour and birth such as inco-ordinate uterine action, the intervention cascade, cord

presentation and prolapse, fetal distress, primary postpartum haemorrhage, shoulder dystocia, maternal shock and collapse; Collaborative and referral role of the midwife; Maternal health problems in first weeks after birth such as breastfeeding problems, pyrexia, secondary postpartum haemorrhage, haematomas and post-caesarean section extra care; Medical technology and procedures such as ultrasound, cardiocography, epidural analgesia, forceps & ventouse, caesarean birth and care and assisting with obstetrical interventions; Central venous pressure (CVP) monitoring; Magnesium sulphate infusion; Intravenous infusion pumps; Dynamap and blood pressure monitoring; Advanced CTG skills; Perineal suturing; Resuscitation and care of the sick woman. Note: The level of information in the descriptor is that which is required by the external accreditation agency ANMAC for successful approval of the course.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply knowledge from anatomy and physiology in the care of women experiencing a complex labour and birth and/or postpartum period;
2. Use an evidence-based approach to examine specific medical and obstetric conditions that affect labour, birth and the postpartum period;
3. Examine perinatal mental health issues and the implications for mothers, families and caregivers with reference to contemporary evidence;
4. Evaluate the implications of obstetric interventions for the women and midwifery practice;
5. Critically examine the use of technology in midwifery and obstetric practice;
6. Perform midwifery practice skills in a simulated laboratory and clinical environment;
7. Demonstrate skills in the management of maternity care emergencies;
8. Apply evidence-based knowledge to midwifery practice related to complex health issues women may experience in their maternity care;
9. Interpret the role of the midwife as a member of a collaborative health-care team; and
10. Explore community resources available to provide support for women in the community.

**Class Contact:** Lab 7.0 hrs Lecture 2.0 hrs Tutorial 1.0 hr Seventy (70) hours for one semester including lectures, tutorials and laboratory sessions.

**Required Reading:** Enkin, M., Keise, M., Neilson, J., Duley, L., Hodnett, E. & Hofmeyr, J. (2000). *A guide to effective care in pregnancy and childbirth*, Oxford University Press: Oxford. Fraser, D.M. & Cooper, M.A. (eds). (2009). (15th ed). *Myles textbook for midwives*, Churchill Livingstone: Edinburgh. Guage, S. & Henderson, C. (2005). (3rd ed). *CTG made easy*, Churchill Livingstone: Edinburgh. Johnson, R. & Taylor, W. (2006). (2nd ed). *Skills for midwifery practice*, Churchill Livingstone: Edinburgh. World Health Organisation. (2003). *Managing complications in pregnancy and childbirth. A guide for midwives and doctors*, WHO: Geneva. These midwifery-specific texts are the most recent editions as approved by the external accreditation agency ANMAC.

**Assessment:** Examination, 3 hour written exam, 60%. Essay, 1500 words, 40%. Examination linked to Learning Outcomes 1-10; and Graduate Capabilities 1-6. Essay linked to Learning Outcomes 1-5 and 8-10; and Graduate Capabilities 1-5.

## HMB3114 Midwifery Practice 5

**Locations:** St Abans.

**Prerequisites:** HMB2107 - Midwifery Practice 3

**Description:** This practice unit complements the units Complex Pregnancy and Birth 1 & 2 and will focus on students developing their knowledge and skills relating to women who experience complex pregnancy, labour, birth and the postpartum period. Emphasis is given to the recognition of problems and the collaborative and referral role of the midwife. Whilst recognising the role of other healthcare practitioners, midwifery care will be central. Students will be involved in providing midwifery care and support to women experiencing obstetrical intervention and the

use of medical technology. This unit provides students with further midwifery practice opportunities in a clinical venue. This practice subject will assist students to build on skills obtained in previous semesters in working with women experiencing childbearing and application of evidence-based knowledge to midwifery practice. Students maintain partnerships with women with whom they have made initial relationships as part of the Continuity of Care program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate emerging confidence and competence in midwifery practice;
2. Recognise own attitudes, beliefs and values when working with childbearing women within a diverse cultural context;
3. Value the journey of being with women through childbearing;
4. Employ strategies to work with women in making the transition to parenthood which is viewed as an experience of growth and change;
5. Integrate the knowledge and midwifery practice skills acquired from preceding units which inform the current stage of practice as a midwife;
6. Apply evidence-based knowledge to midwifery practice related to developing practice when working with childbearing women;
7. Critically reflect on self and practice as a midwife;
8. Implement evidence-informed care when working with women.

**Class Contact:** One hundred and sixty (160) hours for one semester of supervised clinical practice in a maternity setting and up to eighty (80) hours supervised Continuity of Care experiences.

**Required Reading:** Johnson, R. & Taylor, W. (2011), (3rd ed) *Skills for midwifery practice*, Churchill Livingstone: Edinburgh. This midwifery-specific text is the latest edition as approved by the external accreditation agency ANMAC.

**Assessment:** Journal, 3 Reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Report, Continuity of Care report 1000 words, Pass/Fail. Practice assessment is based on the Nursing & Midwifery Board of Australia (2010) National Competency Standards for the Midwife. .

## HMB3115 Working as a Professional 2

**Locations:** St Abans.

**Prerequisites:** HMB2105 - Working as a Professional 1

**Description:** This unit builds on the content of 'Working as a Professional 1' and introduces students to advanced professional practice issues in the current midwifery climate. It will examine in detail the theoretical concepts underpinning the practice of the following: episiotomy and perineal repair; advanced examination of the newborn; antenatal screening investigations and associated referral mechanisms for women; requesting and interpreting relevant laboratory tests; the options for independent midwifery practice; management of conflict in the workplace and preparation for the graduate midwife role. Opportunities may be provided to experience a range of the above topics in the clinical maternity setting.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss and critique the role of the midwife in contemporary advanced midwifery practice with reference to current evidence;
2. Identify advanced professional midwifery practice issues in the current climate of maternity care;
3. Describe the procedure involved in performing an episiotomy;
4. Describe the procedure of perineal repair;
5. Demonstrate an advanced examination of the newborn in the simulated environment;
6. Recognise when to conduct antenatal screening investigations;
7. Describe which antenatal tests and investigations are needed in specific situations or conditions;
8. Discuss the interpretations of the results of such investigations; and
9. Apply the principles of conflict management to a scenario in the simulated environment.

**Class Contact:** Lab 4.0 hrs Tutorial 2.0 hrs Workshop 4.0 hrs Fifty (50) hours for one

semester including lectures, tutorials and laboratory sessions.

**Required Reading:** Baston, H. & Duward, H. (2010). (2nd ed). Examination of the newborn, a practical guide, Routledge: London. Edwards, G. (2004). Adverse outcomes in maternity care. Books for Midwives: Edinburgh.

**Assessment:** Report, Written Report (2500 words), 60%. Essay, Written Essay (1500 words), 40%.

### HMB3201 Complications of the Newborn

**Locations:** St Abans.

**Prerequisites:** HMB3101 - Complex Midwifery 2HMB3102 - Midwifery Professional Practice 2

**Description:** This unit will provide students with foundational knowledge to care for the newborn with complications, using a family centred approach. Students will examine the circumstances which can lead to the newborn being admitted to a level two nursery, and related ethico-legal issues. The application of assessment, technology, medication, interprofessional practice and management of care for the unstable newborn will also be practised and examined.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse the development of the foetus during the second half of pregnancy.
2. Investigate the circumstances that may necessitate admission of a newborn to a level two nursery, and explore its' impact upon the family.
3. Examine the role of the midwife in the level two nursery within the context of interprofessional practice, including assessment and management of the newborn and potential emergencies.
4. Debate the ethico-legal issues for newborns with special needs, and the family's need for privacy, dignity, respect, and their right to make informed decisions.
5. Provide safe and effective care of the newborn and their family in a level two Nursery.
6. Demonstrate accuracy in paediatric drug calculations.

**Class Contact:** A total of seventy-six (76) hours, including: 1) Thirty-six hours (36) inclusive of 24 hours of lectures, 8 hours of tutorials, 4 hours of laboratory and simulation sessions; and hours of self-directed learning. In addition, students will have forty hours (40) of placement in a Level Two Special Care Nursery.

**Required Reading:** To be advised by lecturer.

**Assessment:** Assignment, Written assessment (1500 words), 30%. Examination, Written examination (2 hours), 50%. Test, Written topic test, 20%. To gain an overall pass in this unit, students must achieve an aggregate score of 50% and pass the maths test (hurdle). Accuracy in medication administration is an absolute requirement for this vulnerable cohort. Students must complete forty (40) professional practice hours in a Level Two nursery.

### HMB3216 Working with Evidence in Midwifery Practice

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit introduces students to the fundamental knowledge of the research process. It aims to provide a broad range of research designs and methodologies that are currently utilised by midwife researchers and to validate and refine existing midwifery knowledge in order to improve midwifery practice. It also presents the skills that are needed to understand and appraise a systematic review and meta-analysis, and how to appraise and use research in midwifery practice. Topics covered include the following: Significance of research in midwifery; Links between midwifery education, theory and practice; Approaches to research process: qualitative and quantitative designs including mixed and triangulation methods; Classification and characteristics of exploratory, descriptive and explanatory studies; Steps in the research process: identification of problem statement, literature review,

theoretical framework, sampling, data collection and analysis using descriptive and inferential statistics; Ethics and research; Disseminating and applying midwifery research; Evaluating research reports; Appraising a systematic review of the literature; Utilise basic statistics for appraisal of systematic reviews, including statistical significance, chance, probability, confidence intervals, odds ratios, numbers needed to treat and pitfalls in analysis; and Appraising the professional application of a systematic review and meta analysis to an aspect of professional midwifery practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the research process in relation to midwifery practice;
2. Critically examine the relationship between midwifery research and improvement in health care outcomes;
3. Discuss research designs and methodologies;
4. Critically evaluate a piece of midwifery research;
5. Recognise the ethical implications of research;
6. Develop a beginning knowledge in research proposal relevant to midwifery practice;
7. Access and appraise research papers and systematic review;
8. Develop the ability to appraise a systematic review of the literature on an aspect of midwifery practice; and
9. Recognise how to utilise research to inform midwifery practice.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Fifty (50) hours for one semester comprising lectures and tutorials.

**Required Reading:** Rees, C. (2010). (3rd ed). Introduction to research for midwives, Books for Midwives: Edinburgh. Roberts, K. & Taylor, B. (2002). (2nd ed). Nursing Research Processes- an Australian perspective, Thomson: Australia.

**Assessment:** Examination, 3 hour written exam, 50%. Essay, 2000 words, 50%.

### HMB3217 Complications of the Newborn

**Locations:** St Abans.

**Prerequisites:** HMB3113 - Complex Pregnancy and Birth 2HMB3114 - Midwifery Practice 5

**Description:** This unit will assist students to acquire foundational knowledge of the care of babies with complications. Students will have the opportunity to study the circumstances that commonly result in a baby being admitted to a Level Two Nursery. The issues confronting the infant and family during this period will be examined. Students will explore the role of the midwife in providing a family centred approach whilst integrating ethico-legal issues involved in care of the baby with complications. Evidence-based knowledge will be integrated with assessment and care procedures pertaining to oxygenation, elimination, nutrition, immunity and temperature regulation. Note: The detailed information in this descriptor is that required by the external accreditation agency ANMAC as per their course accreditation guidelines (2010).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the development of a baby during the second half of pregnancy;
2. Discuss the circumstances that may necessitate admission of a baby to a level two nursery;
3. Evaluate the level two nursery environment and its impact upon the baby and family;
4. Discuss the role of the midwife within the context of the level two nursery multidisciplinary team;
5. Demonstrate the knowledge and clinical decision making process required to care for a sick newborn within the context of family-centred care;
6. Apply evidence-based knowledge to midwifery practice related to: care of the sick newborn and his/her family; and, strategies and care when resuscitating the newborn baby;
7. Defend the family's need for privacy, dignity and respect, as well as their right to be informed and to make decision regarding care of their baby;
8. Value reflective practice in the implementation

evidence informed care for the baby and family; 9. Debate the ethico-legal issues, which arise in the care of babies with special needs; and 10. Demonstrate a drug calculations mastery.

**Class Contact:** Lab 6.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Seventy (70) hours for one semester including lectures, tutorials and laboratory sessions.

**Required Reading:** Gardner, S. L., Carter, B. S. Enzman-Hines, M., Hernandez, J. A. (2015). 8th ed. Merenstein & Gardner's Handbook of Neonatal Intensive Care St Louis: Mosby Elsevier This midwifery-specific text is approved as the most recent edition by the external accreditation agency ANMAC.

**Assessment:** Examination, 3 hour written exam, 60%. Essay, 1500 words, 40%. Test, Drug calculation test (30 minutes), 0%. The drug calculation test is a hurdle requirement. Accuracy in medication administration is an absolute requirement for safe midwifery practice. .

## HMB3218 Midwifery Practice 6

**Locations:** St Abans.

**Prerequisites:** HMB3113 - Complex Pregnancy and Birth 2HMB3114 - Midwifery Practice 5

**Description:** This unit will assist students to acquire foundational knowledge and skills of the care of babies with complications. Supervised practice in a Level Two Nursery will enable students to apply evidence based knowledge and integrate ethico-legal principles to care for babies using a family centred approach. Students will be provided the opportunity to collaborate with a multidisciplinary team and practice skills including administration of gastric feeds, management of IV therapy, assessment of fluid balance & electrolytes, collect specimen collections, and monitoring phototherapy. Note: The information in this descriptor is the approved level required by the external accreditation agency ANMAC.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Discuss the circumstances that necessitate admission of a baby to a Level Two Nursery; 2. Evaluate the environment of the nursery and implement strategies to promote the wellbeing of the baby and family; 3. Articulate the role of the midwife within the context of the level two nursery and collaborate with the multidisciplinary health team; 4. Utilise a clinical decision making process to apply the necessary knowledge and understanding required to meet the needs of the baby and family in the nursery; 5. Apply evidence-informed strategies for maintaining the families' need for privacy, dignity and respect, as well as their right to be informed and to make decision regarding care of their baby; 6. Demonstrate reflective practice and implement evidence based care for babies and their families; 7. Perform skills associated with the baby's nutrition, elimination and thermoregulation and management of oxygen therapy, intravenous therapy and phototherapy using universal precautions; 8. Demonstrate competence in neonatal resuscitation; 9. Defend the family's need for privacy, dignity and respect, as well as their right to be informed and to make decision regarding care of their baby; 10. Provide evidence of recruitment of one newborn as part of the Continuity of Care program.

**Class Contact:** One hundred and twenty (120) hours for one semester of supervised clinical practice in a maternity setting and up to sixty (60) hours supervised Continuity of Care experiences.

**Required Reading:** Johnson, R. & Taylor, W. (2016) 4th Skills for Midwifery Practice Oxford: Churchill Livingstone These midwifery-specific texts are the most recent editions approved by the external accreditation agency ANMAC.

**Assessment:** Practicum, Clinical Performance Appraisal, Pass/Fail. Journal, Three (3) Reflective journals, Pass/Fail. Report, Report of a follow-through of a sick neonate

1000 words, Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMAC) (2006) National Competency Standards for the Midwife.

## HMB3219 Midwifery Practice 7: Consolidation

**Locations:** St Abans.

**Prerequisites:** HMB2209 - Diversity in Midwifery Practice HMB2210 - Women's Health HMB2211 - Midwifery Practice 4 HMB3112 - Quality Use of Medicines for Midwifery 2HMB3113 - Complex Pregnancy and Birth 2HMB3114 - Midwifery Practice 5 HMB3115 - Working as a Professional 2 This is the final unit of the Bachelor of Midwifery that brings theoretical and clinical knowledge together, reflected in the prerequisites as approved by the external accreditation agency ANMAC.

**Description:** This practice unit enables students to practise woman-centred midwifery care under supervision and in preparation for transition to practice as a graduate midwife at the beginning level. Students will be expected to apply theoretical principles, evidence-based knowledge and midwifery practice skills learned in related units and previous clinical practicum, with an increasing level of complexity and independence leading to competence as a graduate midwife.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Integrate evidence based knowledge and skills to ensure safe and confident midwifery practice; 2. Apply legal and ethical principles to the midwifery care requirements of the childbearing woman; 3. Exhibit therapeutic communication skills in the midwifery practice context; 4. Demonstrate knowledge and skills when caring for the woman and/or neonate experiencing a critical or deteriorating condition; 5. Collaborate effectively with other healthcare professionals in providing care to the woman with complex needs; 6. Complete the Continuity of Care program.

**Class Contact:** One hundred and sixty hours (160) hours for one semester of supervised practice in a maternity setting and up to sixty (60) hours supervised Continuity of Care experiences.

**Required Reading:** Marshall, J. E., & Raynor, M. D. (2014) (16th ed). Myles textbook for midwives. Churchill Livingstone: Edinburgh. Johnson, R. & Taylor, W. (2016). (4th ed.). Skills for midwifery practice. Churchill Livingstone: Edinburgh. These midwifery-specific texts are the most recent editions as approved by the external accreditation agency ANMAC.

**Assessment:** Journal, Three (3) Reflective journals, Pass/Fail. Practicum, Clinical Performance Appraisal, Pass/Fail. Report, Continuity of Care (1000 words), Pass/Fail. Practice assessment is based on the Australian Nursing & Midwifery Council (ANMAC) (2006) National Competency Standards for the Midwife.

## HMB4101 Supporting Maternal and Newborn Wellbeing

**Locations:** St Abans.

**Prerequisites:** HMB3201 - Complications of the Newborn

**Description:** The aim of this unit is to develop student's knowledge and skills in the promotion of maternal mental health and wellbeing. The unit will comprise of two modules. Module 1 will explore the psychosocial factors and psychiatric conditions that may impact on the woman's pregnancy, childbirth and transition to motherhood. Module 2 will focus on the midwives' role in supporting mothers with a health condition to establish and maintain lactation with consideration of prescribed medication, complementary therapy and/or illicit substances, to promote maternal-infant attachment and wellness. The role of immunisation and medications to protect the mother and foetus during pregnancy, childbirth and lactation will also be

explored.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Examine a range of psychosocial and mental health problems that may impact on women during the perinatal period;
2. Critically examine therapeutic models and strategies to promote maternal mental health and wellbeing on women during the perinatal period;
3. Critically review the impact of pharmaceuticals and complimentary therapy on pregnancy, childbirth, lactation and the newborn;
4. Discuss drugs of abuse and their effects on pregnancy, breastfeeding and the newborn; and
5. Analyse the impact of immunisation and medications for protecting the foetus during pregnancy, childbirth and lactation.

**Class Contact:** Sixty (60) hours per semester comprising of a range of teaching methods including 18 hours of lectures, 6 hours of seminar, 16 hours of tutorials, 8 hours of laboratory classes or simulation, and sessions and 12 hours of self-directed learning.

**Required Reading:** To be confirmed.

**Assessment:** Assignment, Written assessment (1000) words, 25%. Examination, Written examination (2 hours), 50%. Test, Written topic test (1 hour), 25%.

### HMB4102 Midwifery Professional Practice 3

**Locations:** St Albans.

**Prerequisites:** HMB3201 - Complications of the Newborn HMB3102 - Midwifery Professional Practice 2

**Description:** This professional practice unit complements the theoretical unit 'HMB4101 Supporting Maternal and Newborn Wellbeing' and links to learning in the workplace. Utilising experience from the professional practice maternity placements in 'HMB2202 Midwifery Professional Practice 1' and 'HMB3102 Midwifery Professional Practice 2', students will be expected to extend their practice repertoire in providing midwifery care to women and families under the supervision of a clinical educator/preceptor. This practice unit will focus on students developing their knowledge and skills relating to women who experience complex pregnancy, labour, birth and the postpartum period. Emphasis is given to the recognition of problems and the collaborative and referral role of the midwife. Whilst recognising the role of other healthcare practitioners, midwifery care will be central. Students will be involved in providing midwifery care and support to women experiencing obstetric intervention and the use of medical technology. This unit provides students with further midwifery practice opportunities in a clinical venue. This practice subject will assist students to build on skills obtained in previous semesters in working with women experiencing childbearing. Students will recruit a further three (3) women for the Continuity of Care program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Integrate evidence based knowledge and skills to ensure safe and confident midwifery practice.
2. Employ effective strategies in guiding women to make the transition to parenthood.
3. Demonstrate therapeutic communication skills in the midwifery practice context.
4. Provide culturally sensitive midwifery care to the childbearing woman.
5. Recruit three (3) women for the Continuity of Care program.

**Class Contact:** Placement 8.0 hrs In this professional practice unit, students will have one hundred and sixty (160) hours of supervised clinical practice in an external maternity setting.

**Required Reading:** To be confirmed.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Report,

Continuity of Care Report (1000 words), Yes/No. To gain an overall pass in this unit, students must achieve a 'competent' grading in the Final Professional Practice Performance Appraisal and submit the Continuity of Care Report. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HMB4104 Professional Studies 2

**Locations:** St Albans.

**Prerequisites:** HMB3201 - Complications of the Newborn HMB3102 - Nursing Professional Practice 2 HNB3229 - Nursing Professional Practice 3 - Mental Health HNB3227 - Mental Health and Nursing HNB2205 - Nursing and Acute Care 2

**Description:** This unit builds on the content of 'HNB1103 Professional Studies 1' to further develop students as health professionals with a focus on transitioning from a student to a graduate nurse-midwife role. The unit comprises two modules: Module 1 addresses professional issues in applying for graduate positions and registration with the Nursing and Midwifery Board of Australia (NMBA). Contemporary professional issues will be examined, for example, conflict resolution and professional communication. Module 2 introduces students to advanced midwifery practice, knowledge and skills, such as discharge examination of the newborn; antenatal screening and associated referral mechanisms. Options for independent midwifery practice will also be discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Prepare for the graduate year application process, including preparation of curriculum vitae, and application letter, interview, and the registration process.
2. Further examine the roles and scope of practice of healthcare professionals and the use of effective communication and collaboration to provide quality client care.
3. Critique contemporary professional issues, including the role of the midwife and the nurse in advanced practice settings.
4. Demonstrate an advanced examination of the newborn in the simulated environment.
5. Utilise advanced assessment skills in the use of antenatal screening.

**Class Contact:** Fifty (50) hours per semester, comprising of 16 hours of lectures, 16 hours of tutorial classes, 8 hours of simulation, and 10 hours of self-directed learning.

**Required Reading:** To be confirmed.

**Assessment:** Presentation, Group Interview (30 mins), 20%. Assignment, Written assessment (2000 words), 50%. Examination, Test (one hour), 30%.

### HMB4201 Midwifery Professional Practice 4

**Locations:** St Albans.

**Prerequisites:** HMB4101 - Supporting Maternal and Newborn Wellbeing HMB4102 - Midwifery Professional Practice 3 HMB4104 - Professional Studies 2

**Description:** This capstone professional practice unit prepares students for transition to practice as a graduate midwife. Students will be expected to apply theoretical principles, evidence-based knowledge and midwifery practice skills, at an increased level of complexity and independence. Students will also be expected to complete the Continuity of Care program.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Integrate evidence based knowledge and skills to ensure safe and confident midwifery practice.
2. Apply legal and ethical principles to the midwifery care requirements of the childbearing woman.
3. Exhibit therapeutic communication skills in the midwifery practice context.
4. Demonstrate knowledge and skills when caring for the woman and/or neonate experiencing a critical or deteriorating condition.
5. Collaborate effectively with other healthcare professionals in

providing care to the woman with complex needs. 6. Complete the Continuity of Care program.

**Class Contact:** This is a professional practice unit in which students have two hundred and forty (240) hours of supervised professional practice in a maternity setting.

**Required Reading:** To be confirmed.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Report, Continuity of Care Report, Yes/No. Students must attain the grade 'competent' in their final Professional Practice Performance Appraisal and complete the Continuity of Care report. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HMB8900 Medical and Biological Sciences (Full-Time)

**Locations:** Werribee, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations; 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals; 6. intellectual independence, initiative and creativity in new situations and/or for further learning; 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:** Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

### HMB8901 Medical and Biological Sciences (Part-Time)

**Locations:** Werribee, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations;. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals;. 6. intellectual independence, initiative and creativity in new situations and/or for further learning; 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:**Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

## HMG7100 Foundations of Public Health

**Locations:**St Abars.

**Prerequisites:**Nil.

**Description:**This unit is designed to introduce students to the main theories, principles and values of public health illustrated by selected major topics in nutrition and in active living from a global perspective. It investigates policy, systematic and multi-discipline public health approaches as a global and local effort to address contemporary health challenges. The origins and evolution of public health and major global achievements in public health and their impact on health of populations are explored. The role and interface of political, cultural, social, behavioural and environmental determinants of health of populations informs critique and discussion throughout the unit.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically appraise local, national and global health disparities, identify their determinants and propose strategies to address them based on a contemporary evidence-base;
2. Deconstruct the philosophy underpinning public health action and how it has evolved;
3. Conceptually map and interrogate theories and frameworks used in developing and evaluating health policies in the global arena;
4. Apply multidiscipline public health approaches to review evidence and produce policy recommendations particularly related to the disciplines of global nutrition and active living; and
5. Identify and debate global threats to, and opportunities for, public health and well-being in various authentic and simulated contexts.

**Class Contact:**Tutorial3.0 hrs

**Required Reading:**Tuchinsky, T. & Varavikova, E. (2014) 3rd The New Public Health San Diego, Elsevier, Academic Press Parker, R. & Sommer, M. (2011) 1st Routledge Handbook in Global Public Health New York, Routledge

**Assessment:**ICT (Wiki, Web sites), Contribution to a wiki on concepts in public health (1000 words), 20%. Test, Quizzes x 2 (1000 words equivalent), 20%. Report, Critical analysis on social determinants of health (1000 words), 20%. Assignment, Policy issue paper (2000 words), 40%. The total word equivalence of combined assessment tasks is approximately 5,000 - 6,000 words.

## HMG7110 Epidemiology

**Locations:**St Abars.

**Prerequisites:**Nil.

**Description:**This unit examines the epidemiological approaches that are used to understand the health of populations and to inform disease control measures, with a focus on global nutrition and active living. Students learn the principles and concepts of descriptive epidemiology used to study the distribution of disease in a population. They also develop skills in analytical epidemiology to investigate the determinants and effects of disease and other health conditions.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Conceptually map the scope and purpose of epidemiology (particularly in the context of global nutrition and active living) and argue its potential and limitations;
2. Access, critique and apply health information from a variety of sources to inform evidence-based responses to public health problem solving scenarios;
3. Distinguish and evaluate different types of study design;
4. Identify problems in the interpretation and application of epidemiological data and propose solutions; and
5. Report and critique the findings of epidemiological studies in a format accessible to both technical and lay audiences.

**Class Contact:**The degree program will be offered in burst seminar mode, supported by on-line learning modules. If students can show cause why they are unable to attend burst sessions then on line learning modules covering the same content as the burst seminars will be available to them. Students can expect the course contact hours to equate to 3 hours per unit, per week across a 12 week semester. These hours will comprise a combination of lecture, seminar and tutorial type activities - on line and/or in burst mode. Students should also expect to spend an equal amount of time in self-directed study.

**Required Reading:**Webb, P. (2011) 2nd ed. Essential Epidemiology: An Introduction for Students and Health Professionals Cambridge University Press

**Assessment:**Test, Quizzes throughout unit (3 x 30 minutes), 20%. Assignment, Written assignment (2000 words), 30%. Examination, Final Exam (2 hours), 50%. Total word equivalence of combined assessment tasks is approximately 5000-6000 words approximate.

## HMG7120 Global Challenge - Non-Communicable Disease

**Locations:**St Abars.

**Prerequisites:**Nil.

**Description:**Non-communicable diseases are emerging as a major challenge to global health and development. In this unit students will investigate and critique responses to the non-communicable disease epidemic through public health interventions. Trends in non-communicable diseases and their impact globally, including in low and middle-income countries will be analysed. The determinants of non-communicable diseases and the challenges faced in researching and controlling these conditions will be viewed through the lens of nutrition and active living. The consequences of non-communicable diseases on the health and wellbeing of individuals and communities and their effect on national economic growth and development is examined.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically review the epidemiology and burden of non-communicable diseases in the global context and predict their impact on the health and well-being of various populations;
2. Conceptually map and commentate on the evolution of the global non-communicable disease epidemic considering political, social and economic influences;
3. Investigate the causal pathways to non-communicable diseases, particularly relating to nutrition and physical activity; and
4. Survey and evaluate public health strategies to control non-communicable diseases and interrogate the evidence-base required to implement policy.

**Class Contact:**Lecture2.0 hrsTutorial1.0 hr

**Required Reading:**Stuckler, D. & Siegel, K. (2011) 1st Sick Societies: Responding to the Global Challenge of Chronic Disease Oxford, Oxford University Press

**Assessment:**Annotated Bibliography, Evolution of global non-communicable disease epidemic (1000 words), 20%. Essay, Evolution of global non-communicable disease epidemic (2500 words), 40%. Assignment, Report on public health policy to control non-communicable disease (2500 words), 40%. Total word equivalence of combined assessment tasks is approximately 6,000 words.



## HMG7130 Nutrition for Global Health

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This unit provides an overview of current and emerging global nutrition challenges from a biological, social, economic and policy perspective. Focusing on low and middle income countries the unit explores issues of maternal and child under-nutrition and the growing global momentum to address these with evidence-based interventions delivered to scale. The double-burden of nutrition related diseases as a result of changing food consumption and physical activity levels is increasingly becoming a major public health concern globally with an increase in non-communicable diseases in low and middle income countries. Building on the unit Global Challenge: Non-Communicable Disease, this unit explores specific issues around the double burden of nutrition-related communicable and non-communicable disease and recent advances in efforts to tackle this globally.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discriminate the different forms of under and over nutrition and using a lifecycle approach predict which population groups are most vulnerable and why;
2. Assess the risks to health in terms of mortality and morbidity and the economic and social burden of under and over nutrition;
3. Investigate and interrogate the distribution and epidemiology of under and over nutrition globally;
4. Critically apply conceptual frameworks to analyse the causes of under and over nutrition in specified populations;
5. Argue the benefits to development of investing in nutrition and propose cost effective interventions; and
6. Conceptually map global and national policies and initiatives designed specifically to combat under and over nutrition and evaluate the challenges of implementing these to scale.

**Class Contact:**Tutorial3.0 hrs

**Required Reading:**Stein,N. (Ed) (2014) 1st Public Health Nutrition: Principles and Practice in Community and Global Health Burlington, Jones and Bartlett Learning

**Assessment:**Test, Online quizzes during the course of unit (1000 words approx.), 20%. Essay, Essay on a specific global nutrition problem (2500 words), 40%. Case Study, Case study on nutrition problem in a specific population. (2500 words), 40%. Total word equivalence of combined assessment tasks is approximately 6000 words.

## HMG7200 Public Health in Practice

**Locations:**St Abans.

**Prerequisites:**HMG7100 - Foundations of Public Health

**Description:**This unit explores how public health theories, principles and values have informed the practice of public health with a focus on program planning for health promotion. The origins and purpose of health promotion and the theories which inform health promotion practice are examined along with the potential of health promotion to positively influence the determinants of health and reduce health inequalities. Students will gain skills in a range of practical approaches and methods for promoting health. Students will use a project management cycle to assess needs, set priorities for action and plan and manage interventions that promote health in populations. Theoretical aspects of the unit will be reinforced through their application to local, national and global issues in nutrition and active living.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Define and critically evaluate the key theories and concepts which inform health promotion and locate these within contemporary debates in the field;
2. Interrogate a range of approaches and methods for promoting health and exemplify how they are used in health promotion programs;
3. Critically appraise models of health behaviour and behaviour change;
4. Apply the project management cycle

to design a health promotion intervention for a specific community and elucidate theory and evidence to corroborate the selection of strategies and identification of outcomes; and

5. Identify and apply appropriate methods and interpret evidence to inform program evaluation and management.

**Class Contact:**Workshop3.0 hrs

**Required Reading:**Liamputtong, P., Fanany, R., & Verrinder, G. (2012) 1st Health, Illness and Wellbeing: Perspectives and social determinants. South Melbourne, Vic: Oxford University Press

**Assessment:**Review, Critical review of health promotion theory (1000 words), 20%. Project, Development of a health promotion Project Plan (4000 words), 50%. Presentation, Three (3) minutes scripted health promotion video related to health promotion project (1000 words equivalent), 30% . .

## HMG7210 Biostatistics

**Locations:**St Abans.

**Prerequisites:**HMG7110 - Epidemiology

**Description:**This unit introduces students to the fundamental concepts of biostatistics and fundamental statistical methods used in public health research. Focusing on global nutrition and active living students learn how to apply statistical methods to research questions, how to use statistical software to perform a range of statistical analyses and how to appraise statistical methods described and applied in the public health literature.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Elaborate fundamental concepts in biostatistics in public health emphasizing the disciplines of nutrition and active living;
2. Appraise the commonly used methods of analysis of data and exhibit specialised skills in handling data sets;
3. Apply appropriate statistical methods to the design of a public health research study;
4. Perform basic statistical analyses and present findings in a clear, concise and logical manner accessible to specialist and non-specialist audiences; and
5. Critically evaluate statistical methods described and applied in global nutrition and active living literature in order to substantiate their potential contribution to the broader public health evidence-base.

**Class Contact:**Lecture3.0 hrs

**Required Reading:**Gerstman, B.B., (2008) 1st Basic Biostatistics: Statistics for Public Health Practice Jones and Bartlett Publishers, Sunbury, MA

**Assessment:**Test, Quizzes throughout unit (1500 word equivalent), 20%. Assignment, Written assignment (2000 words), 30%. Examination, Final Exam (2 hours), 50%. Total word equivalence of combined assessment tasks is approximately 6000 words.

## HMG7220 Culture and Society in Public Health

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This unit examines the contribution of the social sciences to understanding and improving public health. The influence of culture and society on beliefs, attitudes and behaviours around health and how these shape disease risk and health outcomes is critically appraised. Students will explore the complex relationships between gender, culture and health inequalities. The efficacy of policies and strategies to address such inequalities will be evaluated. Concepts of cultural competence and its relevance to public health practice and cross cultural communication models are examined to facilitate enhanced professional practice when working with diverse communities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate theoretical frameworks which explain the influence of society and culture on health and access to health care and defend their application in known and unknown scenarios; 2. Critically appraise efforts to address health inequalities through public health policies and programs, taking into account sociological and anthropological perspectives; 3. Apply concepts of cultural competence and health promotion to address health inequalities in specific populations; and 4. Substantiate the need and means to communicate effectively across social groups in diverse cultures.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** Liampittong, P., Fanany, R., & Verrinder, G. (2012) 1st Health, Illness and Wellbeing: Perspectives and Social Determinants. South Melbourne, Vic: Oxford University Press

**Assessment:** Other, Blogs on issues currently in media (1500 words), 20%. Case Study, Case study on specific health inequality (2500 words), 40%. Essay, Essay on cultural competence (2500 words), 40%. The total word equivalence of combined assessment tasks is 6500-7000 words approximate.

### HMG7230 Global Food Systems and Food Security

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** Food security is defined by the World Health Organization as "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life". This unit introduces students to global food systems and the challenges of ensuring food security for all in a world of climate change, globalization, shifting demographics and new technologies. The different nature of food insecurity in high, middle and low income countries will be explored focusing on the relationships between food security, health, nutrition and social stability. In rural communities in low income countries food insecurity is still a problem despite proximity to agricultural land. This unit will investigate food security assessment methodologies and how these are used in conjunction with nutrition assessment as part of a community needs assessment. Sustainable agriculture and food security interventions that address identified needs and aim to reduce levels of under nutrition in the community will be covered. The role of women in food security is integral to the unit.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critique and apply conceptual frameworks to discuss the political, economic, social and environmental influences on food security in a global context; 2. Assess the vulnerability and resilience of food systems to change in contemporary and emerging scenarios; 3. Interrogate and discriminate issues of food insecurity in different populations; 4. Interpret information on the food security situation in a specific community or population group in order to deduce its impact on health and nutrition and propose appropriate interventions; and 5. Interrogate the evidence-base on effective food security interventions that aim to reduce maternal and child under-nutrition and justify their application in a complex problem-solving scenario.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** McDonald, B. (2010) Food Security Polity Press, Cambridge

**Assessment:** Other, Blog on challenges to global food systems (1500 words), 30%. Essay, Essay on the role of gender in food security. (2000 words), 30%. Report, Written report on food security assessment and intervention in a specified community (2500), 40%. Total word equivalence of combined assessment tasks is approximately 6000 to 7000 words.

### HMG7310 Nutrition Assessment and Program Management

**Locations:** St Albans.

**Prerequisites:** HMG7100 - Foundations of Public Health HMG7130 - Nutrition for Global Health HMG7200 - Public Health in Practice

**Description:** This unit covers assessment of the nutritional status of individuals and populations using anthropometric, clinical, dietary and biochemical methods. The use and limitations of each of these methods is critically appraised both in terms of their measurement at the individual level and their application at the population level. With a focus on low and middle income countries various nutrition assessment methodologies are then applied to designing large, population-based interventions as a tool for early warning, needs assessment, program planning and program evaluation. Students will have the opportunity to consider apply the principles and frameworks for program planning and management in response to existing and emerging specific nutrition problems in low and middle income contexts. The design, development, implementation and evaluation of evidence-based community-level nutrition programs is also addressed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Appraise the utility of standard methodologies for measuring the nutritional status of an individual and justify their use in specific contexts; 2. Interpret data on the nutrition status of a population as a basis for design, implementation and evaluation of subsequent nutrition interventions; 3. Design a large population-based nutrition assessment that considers the proposed outcomes of such an assessment and acknowledges the existing evidence base; 4. Formulate nutrition priorities through the collection, analysis and interpretation of information on a community or population group; 5. Design a community nutrition program using theory and evidence to guide selection of strategies and identification of outcomes; 6. Critique and substantiate mechanisms to monitor and evaluate programs for efficacy and quality; and 7. Write and defend a project proposal according to specified conventions to address an identified health issue in a particular community.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** SMART (2006) 1 Measuring Mortality, Nutritional Status, and Food Security in Crisis Situations SMART

**Assessment:** Report, Written report on the methodology, analysis and interpretation of a nutrition survey for a population group (2500 words), 40%. Project, Written grant proposal for a community nutrition project (2500 words), 40%. Presentation, Present and defend a grant proposal for a community nutrition project (1500 words), 20%. Total word equivalence of combined assessment tasks is approximately 6000 to 7000 words.

### HMG7320 Migration and Health

**Locations:** St Albans.

**Prerequisites:** HMG7100 - Foundations of Public Health HMG7200 - Public Health in Practice HMG7220 - Culture and Society in Public Health

**Description:** Today's globalised world is marked by record levels of displacement and migration. Migrant communities face a range of health problems dependent on the type of migration and the demographic profile of the migrant population. This unit examines public health topics in specific migrant populations including refugees, the internally displaced, asylum seekers and immigrants. Using a social determinants of health framework students explore the ways that health within migrant populations is influenced by social, political, economic, and cultural factors. The affect of migration on public health and public health systems is investigated. Strategies to address health issues in migrant populations are critiqued. The role of nutrition and active living in the health of migrant populations is analysed in particular.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Assess trends in global migration and debate their implications for public health;
2. Diagnose the range of health problems experienced by specific migrant populations;
3. Critically evaluate and apply conceptual frameworks to analyse the determinants of health in specific migrant populations;
4. Propose and justify strategies to address the health issues of migrant populations and evaluate the challenges inherent in their implementation; and
5. Advocate the role of nutrition and active living in public health for specific migrant populations.

**Class Contact:** Lecture 3.0 hrs

**Required Reading:** Schenker, M.B., Caseneda, X. & Rodriguez-Lainz (editors) (2014) *Migration and Health; A research Methods Handbook* University of California Press

**Assessment:** Other, Blog on current news and issues affecting migrant populations and extrapolate how this relates to health and health outcomes (1000 words), 20%. Assignment, Written assignment on migration and health topic of interest (2000 words), 30%. Case Study, Case study on a specific migrant population (2000 words), 30%. Presentation, Presentation on case study (10 mins) (equivalent 1000 words), 20%. Total word equivalence of combined assessment tasks is approximately 6000 words.

### HMG7400 Professional Project

**Locations:** Industry.

**Prerequisites:** HMG7950 - Research Methods in Public Health

**Description:** This unit is designed to be taken by students who want to consolidate their public health training via an advanced professional work placement. Students are required to enter into a Learning in the Workplace and Community (LiWC) contract relating to a public health project in nutrition or active living in an agency. The contract is negotiated between the university supervisor, agency supervisor and student, and specifies learning objectives and strategies in three areas: conceptual and policy; practical skill; and personal development. Students are required to participate in a number of key phases and activities of the program or project and write a major report that outlines the processes and outcomes of the project. The placement requires the application and integration of students with accumulated knowledge and skills acquired within the HMGN Master of Public Health. The major report draws particularly on models and methods of scientific inquiry provided in HMGN Master of Public Health. Students are also required to submit a report that outlines the LiWC objectives that have been identified in the contract.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply the skills and knowledge acquired in their public health studies to a professional setting in global nutrition or active living;
2. Conceptually map and interrogate the issues and challenges of designing, planning and implementing a public health project in an organisational environment (either in a community-based, regional, governmental or international setting) with reference to achieving strategic outcomes;
3. Critically review, select and apply inquiry designs and methodologies appropriate to the completion of the professional project;
4. Compose a reflective practice journal which will contribute to the formulation of lifelong learning strategies with their professional practice; and
5. Produce a professional project report which meets both academic and placement partner specialisations and conventions.

**Class Contact:** Fortnightly meetings of at least one hour's duration with the agency supervisor, and a minimum of 200 hours working on the project as verified in a log of hours confirmed by the agency supervisor.

**Required Reading:** To be advised by supervisor.

**Assessment:** Project, Log of hours and list of tasks worked on the project signed by the agency supervisor (1000 words), 10%. Journal, Learning journal involving a minimum of fifteen substantive entries shown to university supervisor at end of project (1000 words), 10%. Performance, End-of-project written pro-forma from the agency supervisor (1,500 words equivalent), 15%. Presentation, End-of-project three-way review meeting (or presentation) involving the student, agency and university supervisors and stakeholders (2000 words), 15%. Report, Professional Project Evaluation Report (7,000 words), 50%. The total word equivalence of combined assessment tasks is 12,000-14,000 words approximate.

### HMG7410 Concepts in Humanitarian Assistance

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit explores the history of humanitarian assistance and the role of different actors within the system. The continuum from prevention and risk reduction to humanitarian response and the transition to development is examined in the context of natural disasters, complex emergencies and post-conflict settings. Mechanisms and tools for co-ordination, partnership, accountability and minimum standards in humanitarian response are investigated and critiqued. The potential roles, scope of practice and responsibilities of the government, organizations and civil society, within the international humanitarian system are addressed. The principles and ethics that inform practice in the field underpin the teaching in this unit.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically review the characteristics of humanitarian assistance endeavours;
2. Analyse contemporary challenges in humanitarian response in different contexts and extrapolate solutions to inform future practice;
3. Interpret statements of ethics, human rights and codes of conduct in the field of humanitarian response and hypothesise their practical impact;
4. Advocate for the use of specific theoretical and practical tools to inform humanitarian assistance; and
5. Apply the Disaster Management Cycle to a range of humanitarian assistance scenarios.

**Class Contact:** Seminar 3.0 hrs

**Required Reading:** Slim, H. (2012) *Essays in Humanitarian Action* Oxford Institute of Ethics, Law and Armed Conflict

**Assessment:** Essay, Essay on ethics and human rights in humanitarian assistance (3000 words), 40%. Assignment, Written assignment on disaster risk management (3000 words), 40%. Other, Debate on dilemmas in humanitarian assistance (1000 words), 20%. Total word equivalence of combined assessment tasks is approximately 6000 - 7000 words.

### HMG7420 Nutrition in Emergencies

**Locations:** St Albans.

**Prerequisites:** HMG7130 - Nutrition for Global Health HMG7310 - Nutrition Assessment and Program Management

**Description:** Humanitarian crises including natural disasters, man made disasters or complex emergencies prevent people from accessing fundamental needs such as shelter, food, water and health care. This unit aligns with the 'Harmonised Training Package for Nutrition in Emergencies' developed by the Inter Agency Standing Committee (IASC) Global Nutrition Cluster and based on the latest technical policy and guidelines on nutrition in emergencies. This unit is offered by Victoria University as stand alone unit to those with a prior background in nutrition and public health who wish to pursue a career in nutrition in emergencies. Students will be equipped with the necessary knowledge and skills to assess the nutrition situation and design and implement emergency programs in response to large-scale and often rapid onset emergencies.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Conceptually map types and causes of malnutrition in emergencies in a variety of local, national and international contexts;
2. Conduct a nutrition assessment in a simulated emergency using standard tools and methodologies;
3. Outline and critique interventions used to prevent and treat malnutrition in emergencies;
4. Design and defend an emergency nutrition intervention based on assessed need in line with national and international minimum standards in emergency response in nutrition; and
5. Debate current challenges and controversies in nutrition in emergencies.

**Class Contact:** Seminar 3.0 hrs

**Required Reading:** The Sphere Project, 2011 1st The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response, The Sphere Project

**Assessment:** Test, Quiz x2 (equivalent to 1000 words each), 20%. Case Study, Written report on a case study of an emergency nutrition response (2500 words), 40%. Other, Simulation of nutrition assessment and response in a humanitarian crisis (in groups) (2500 words), 40%. Total word equivalence of combined assessment tasks is approximately 7000 words.

### HMG7430 Minor Thesis

**Locations:** Footscray Park, St Albans.

**Prerequisites:** HMG7950 - Research Methods in Public Health

**Description:** This unit of study provides students the opportunity, under guidance from a supervisor, to propose a research question, develop skills in research data collection, analysis and interpretation and write a thesis on topics related to public health nutrition or active living of 14,000 words. The research topic will be negotiated between the student and supervisor and will involve research within the field of public health either in Australian and/or international context. Students are required to demonstrate a high-level knowledge of ethical fieldwork procedures and seek timely ethics clearance, if and as appropriate. Students will draw upon preliminary work already completed in the prerequisite unit HMG7950.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit an integrated and comprehensive understanding of literature relating to an approved topic;
2. Successfully apply for ethical approval to undertake their research;
3. Determine suitable study design, research questions and suitable methods for data collection and analysis;
4. Critically analyse and reflect on information and research with the aim of contributing to a contemporary or emerging body of knowledge or practice;
5. Interpret and disseminate research information to a range of specialist and non-specialist audiences; and
6. Utilise specialised cognitive and technical skills to independently plan, design and produce a minor research thesis which aligns with conventions for academic scholarship.

**Class Contact:** Equivalent to 200 hours. Research students will have regular supervision sessions with allocated supervisors.

**Required Reading:** To be advised by supervisor.

**Assessment:** Thesis. The thesis will normally be assessed by at least two expert examiners from an appropriate area of expertise (12,000 -14,000 words), 100%. Total word equivalence of the assessment task is approximately 12,000 - 14,000 words.

### HMG7950 Research Methods in Public Health

**Locations:** Footscray Park.

**Prerequisites:** Nil.

**Description:** This unit provides graduates with the skills to consume and evaluate research to inform evidence-based practice, to undertake applied research in a professional project or to complete a minor thesis in public health. It focuses on integrating the basic principles of quantitative and qualitative inquiry with a contemporary and contextualised approach to data collection and analysis. Students will learn to identify and apply relevant professional and/or scholarly conventions which govern research - particularly in a public health context. They will be engaged in reviewing both qualitative, quantitative and mixed research methods; planning, forming and designing proposals; developing and submitting an ethics proposal; undertaking a literature review; gathering and analysing data; and reporting results for a variety of audiences.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Analyse and critique contemporary perspectives and theories related to research in the field of public health;
2. Conceptually map the essential elements and processes requisite to quality research;
3. Articulate the necessity for ethical conduct of research and elaborate the processes for applying for ethics approval;
4. Undertake a preliminary literature review or analysis of current research in their field; and
5. Design a preliminary research proposal to be undertaken as part of their minor thesis or professional project.

**Class Contact:** This unit will be organised with 12 x 2 hour lectures delivered online or in burst mode.

**Required Reading:** Guest G. & Namey E., (2014) Public Health Research Methods. SAGE Thousand Oaks ISBN 13: 9781452241333 ISBN 10: 1452241333

**Assessment:** Assignment, Critique of Research Designs (3000 words), 40%. Project, Preliminary Research Proposal and Literature Review (3000 words), 40%. Presentation, Oral presentation during seminar-style discussion time (1000 words), 20%. Total combined assessment word equivalence is 7,000 - 8,000 words.

### HMH7102 Scientific Basis for Osteopathy 7

**Locations:** City Flinders.

**Prerequisites:** Successful completion of the HBSO Bachelor of Science (Clinical Sciences) course

**Description:** HMH7102 Scientific basis for osteopathy 7 ensures that student can display an in-depth knowledge of a variety of extremity neuromusculoskeletal complaints that are commonly encountered in osteopathic and manual therapy practice. This knowledge extends beyond the manual therapy management of these conditions to describe how other health professions manage these neuromusculoskeletal complaints. The aging patient is a focus of the unit to ensure that students understand and are equipped to be able to manage patients in our aging population.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Determine the pathophysiology, signs and symptoms, natural history and prognosis of extremity neuro-musculoskeletal complaints;
2. Report the medical management and pharmacological treatments of extremity neuro-musculoskeletal complaints;
3. Analyse the milestones of aging; and
4. Assess physiological, anatomical, functional and psychosocial changes of the aging patient.

**Class Contact:** Lecture 2.0 hrs Seminar 1.0 hr Tutorial 1.0 hr

**Required Reading:** Students will be provided with an up-to-date reading list via the VU Collaborate system. Bryant, B., & Knights, K. (2014). (4th ed.). Pharmacology for health professionals. Sydney, Australia: Elsevier.

**Assessment:** The formative assessment tasks for this unit are: - Osteopathic Clinical Practice Assessment (week 11) - Online quiz (week 5) - Contribution to CBL group

(weekly) Presentation, Report on elderly patient seen in clinic with reflective practice demonstrated (Equivalent to 3500 words), 62%. Examination, Observed performance in the clinical setting, 8%. Examination, 1 hour written paper (Equivalent to 1000 words), 15%. Portfolio, Evidence piece (1000 words), 15%. The total word equivalence of the combined assessment tasks equates to 6000 words for a 12 credit point unit at level 8. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### HMH7103 Clinical Skills 7

**Locations:**City Flinders.

**Prerequisites:**Successful completion of the HBSO Bachelor of Science (Clinical Sciences) course

**Description:**HMH7103 Clinic skills 7 contains two modules. Clinical skills 7a, occurs in the classroom and comprises of practical workshops for students to extend their osteopathic manual therapy and clinical examination skills. The focus is on the development of students' knowledge of a range of extremity neuromusculoskeletal complaints to the design and implementation of patient management strategies including rehabilitation exercises, ergonomic advice and the application of advanced osteopathic and manual therapy skills. To develop these strategies, students will also demonstrate the ability to formulate diagnoses that are complaint-specific and take into account the patients' psychosocial situation and life stage, particularly that of the aging patient. Clinical skills 7b, occurs in the clinical environment and provides students with osteopathic workplace experience through their clinical placement hours in the student led osteopathic clinics within the university. Students treating members of the public under the supervision of osteopathic clinical educators and contribute to the operational running of the clinic. The clinical placement hours within this unit develop students' capacity for teamwork, collaboration with peers and supervisors and communication with patients, and, is the optimal environment for students to develop their confidence and maturity as an osteopathic practitioner.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Design safe and effective self-management and rehabilitation plans for patients with spinal complaints;
2. Exhibit advanced osteopathic manual skills;
3. Adapt principles of ergonomic review and management of the patient;
4. Formulate differential diagnoses for the patients' presenting complaint; and
5. Implement an appropriate osteopathic manual treatment plan for the patients' presenting complaint including the ageing patient.

**Class Contact:**Total of 145 hours comprising of burst mode practical workshops (4 x 3 hours) and 133 hours of clinical placement

**Required Reading:**Students will be provided with an up-to-date reading list via the VU Collaborate system. Brukner, P. & Khan, K. (2012). (4th ed.). Brukner and Kahn's Clinical Sports Medicine. McGraw Hill, Sydney Destefano, L. (2011). (4th ed.). Greenmans Principles of Manual Medicine. Philadelphia, US: Lippincott Williams Wilkins.

**Assessment:**The formative assessment tasks for this unit are: - Osteopathic Clinical Practice Assessment (week 11) - Online quiz (week 5) - Contribution to CBL group (weekly) Examination, Observed performance in clinical setting (5 separate assessments), 60%. Examination, 45 minute written paper (Equivalent to 1000 words), 20%. Portfolio, Evidence piece for portfolio (1000 words), 20%. The total word equivalence of the combined assessment tasks equates to 6000 words for a

12 credit point unit at AQF level 8. Participation in clinical placement requires at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### HMH7201 Patient, Practitioner and Health System 8

**Locations:**City Flinders.

**Prerequisites:**HMH7101 - Patient, Practitioner and Health System 7

**Description:**HMH7201 Patient, practitioner and health system 2 continues to focus on the application of their skills and knowledge to patient management in the student-led osteopathic clinics at VU. Building on previous units, students will reflect on their role as a treating practitioner responsible for patient care in the classroom within this unit. Students will consider their capacity as a clinical leader and discuss their experiences of mentoring junior osteopathy students in their clinical placement. Students will be able to articulate the role of interprofessional care for the management of their patients and also facilitate the referral of patients to seek relevant health and community services. This unit continues to build on the students' skill set around patient management and their ability objectively measure treatment outcomes.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Debate the merits of a holistic approach to patient care;
2. Question the contribution of osteopathy in interprofessional patient care;
3. Coordinate patient referral and access to relevant health and community services; and
4. Exhibit leadership behaviours in clinical and professional settings.

**Class Contact:**Lecture 1.0 hr Seminar 1.0 hr

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessments for this unit are: - Osteopathic Clinical Practice Assessment (one) (week 5) - Contribution to CBL group (weekly) Assignment, IPE activity: referral letter/communication and holistic patient care Reflect on experience in IP team experience (3500 words), 55%. Examination, Observed performance in the clinical setting, 30%. Portfolio, Domain 1 evidence for portfolio (1000 words), 15%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment. The total word equivalence of the combined assessment tasks equates to 6000 words for a 12 credit point unit at level 8. .

### HMH7202 Scientific Basis for Osteopathy 8

**Locations:**City Flinders.

**Prerequisites:**HMH7102 - Scientific Basis for Osteopathy 7

**Description:**HMH7202 Scientific basis for osteopathy 8 utilises the principles and practices established in previous units and applies them to the spine and thorax. Students will also be able to present their management of neuromusculoskeletal spine and thorax complaints and compare to other health professionals management plans. This unit emphasises an understanding of the key milestones and psychosocial issues related to pregnancy, as well as the paediatric and adolescent patient, and how these apply to osteopathic care.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Determine the pathophysiology, signs and symptoms, natural history and prognosis of spine and thorax neuro-musculoskeletal complaints; 2. Report the medical management and pharmacological treatments of spine and thorax neuro-musculoskeletal complaints; 3. Analyse the developmental milestones of child and adolescent patients; 4. Assess physiological, anatomical, functional and psychosocial changes of child and adolescent patients; and 5. Review the physiological processes and psychological effects of pregnancy and post natal care.

**Class Contact:**Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessment tasks for this unit are: - Contribution to CBL group (weekly) - Osteopathic Clinical Practice Assessment in clinic (week 5)

Assignment, Brochure/webpage/blog for specific population group (Equivalent to 2500 words), 45%. Examination, Watch 10 minute video and answer written questions (Equivalent to 2000 words), 35%. Portfolio, Evidence piece (1000 words), 20%. The total word equivalence of the combined assessment tasks equates to 6000 words for a 12 credit point unit at level 8. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

## HM7203 Clinical Skills 8

**Locations:**City Flinders.

**Prerequisites:**HM7103 - Clinical Skills 7

**Description:**HM7203 Clinical skills 8 contains two modules. Clinical skills 8a, occurs in the classroom and comprises of practical workshops for students to extend their osteopathic manual therapy and clinical examination skills. The focus is on the development of students' knowledge of a range of spinal neuromusculoskeletal complaints to the design and implementation of patient management strategies including rehabilitation exercises, ergonomic advice and the application of advanced osteopathic and manual therapy skills. To develop these strategies, students will also demonstrate the ability to formulate diagnoses that are complaint-specific and take into account the patients' psychosocial situation and life stage, particularly that of the pregnant and post-natal patient. Clinical skills 8b, occurs in the clinical environment and provides students with osteopathic workplace experience through their clinical placement hours in the student led osteopathic clinics within the university. Students treating members of the public under the supervision of osteopathic clinical educators and contribute to the operational running of the clinic. The clinical placement hours within this unit develop students' capacity for teamwork, collaboration with peers and supervisors and communication with patients, and, is the optimal environment for students to develop their confidence and maturity as an osteopathic practitioner.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Design safe and effective self-management and rehabilitation plans for patients with extremity complaints; 2. Adapt principles of nutrition to the management of patients; 3. Formulate differential diagnoses, and a working diagnosis for the patient's presenting complaint; and 4. Implement an appropriate biopsychosocial treatment plan for the patients' presenting complaint including the pregnant and post natal patient.

**Class Contact:**Total of 145 hours comprising of burst mode practical workshops (4 x 3 hours) and 133 hours of clinical placement

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessment tasks for this unit are: - Contribution to CBL group (weekly) - Osteopathic Clinical Practice Assessment in clinic (week 5) Assignment, Referral letter/communication with other health professional/s (750 words), 20%. Examination, Observed performance in the clinical setting (5 separate assessments), 60%. Portfolio, Evidence piece (1000 words), 20%. The total word equivalence of the combined assessment tasks equates to 6000 words for a 12 credit point unit at level 8. Participation in clinical placement requires at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

## HM7302 Scientific Basis for Osteopathy 9

**Locations:**City Flinders.

**Prerequisites:**HM7202 - Scientific Basis for Osteopathy 8

**Description:**HM7302 Scientific basis for osteopathy 9 draws on the skills and knowledge from previous units to ensure the student is able to present, and argue, a biomedical and evidence-informed approach to the management of their patients in the student-led osteopathic clinics at VU. In particular, students will have the knowledge to be able to inform patients about the mechanisms of pain using appropriate language. A focus of this semester for the student is preparation for their high stakes clinic exit exam, which is the most significant milestone in the masters program indicating they are ready to enter the osteopathic workforce.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Interpret patient history and relate to relevant anatomy and physiological principles; 2. Solve patient complaints by applying principles of biomechanics; 3. Justify patients diagnosis through interrogation of anatomical, physiological and osteopathic principles; 4. Infer the action of pharmacological agents from patients case history; and 5. Scrutinise the mechanisms of pain pathophysiology in patient complaints.

**Class Contact:**Total of 24 hours comprising of burst mode lectures (4 x 3 hours lectures), and weekly case tutorial (1 hour)

**Required Reading:**No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**The formative assessment tasks for this unit are: - Online quiz (week 5) - Osteopathic Clinical Practice Assessment in clinic (week 5) Examination, Observed performance in clinical setting, 25%. Examination, 40 minute Objective Structured Clinical Examination (OSCE) (Equivalent to 3000 words), 45%. Examination, 30 minute written paper (Equivalent to 500 words), 15%. Portfolio, Evidence pieces (1000 words), 15%. The total word equivalence of the combined assessment tasks equates to 7500 words for a 12 credit point unit at level 9. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

## HM7303 Clinical Skills 9

**Locations:**City Flinders.

**Prerequisites:**HM7203 - Clinical Skills 8

**Description:**HM7303 Clinical skills 9 contains two modules: Clinical skills 9a, occurs

in the classroom and comprises of practical workshops for students to perfect their osteopathic manual therapy and clinical examination skills. Clinical skills 9b, occurs in the clinical environment and provides students with osteopathic workplace experience through their clinical placement hours in the student led osteopathic clinics within the university. Students treat members of the public under the supervision of osteopathic clinical educators and contribute to the operational running of the clinic. The clinical placement hours within this unit develop students' capacity for teamwork, collaboration with peers and supervisors and communication with patients, and is the optimal environment for students to prepare for their high stakes clinic exit exam at the end of the semester. Both modules of Clinical skills 9 aim to amalgamate the practical skills developed in the HBSO and HMM7103 and HMM7203 to ensure students have developed psychomotor skills in osteopathic manual techniques and clinical examination for independent health care practice in their career private practice as an osteopath. Further, students will also be able to demonstrate their ability to manage patient's with a range of neuromusculoskeletal complaints and psychosocial issues. A focus of this semester for the student is preparation for their high stakes clinic exit exam, which is the most significant milestone in the masters program indicating they are ready to enter the osteopathic workforce.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Predict differential diagnoses, a working diagnosis, the most probable diagnosis, and prognosis of musculoskeletal conditions in the clinical setting;
2. Justify and implement an appropriate biopsychosocial treatment plan for the patient's presenting complaint;
3. Prescribe patients self-management and rehabilitation strategies in the clinical setting;
4. Hypothesise patient outcomes resulting from the implementation of osteopathic treatment; and
5. Adapt osteopathic treatment and management approaches to tailor for the patient's needs.

**Class Contact:** Total of 174 hours comprising of burst mode practical workshops (4 x 3 hours), seminars (4 x 3 hours) and 150 hours of clinical placement

**Required Reading:** No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:** The formative assessment tasks for this unit are: - Online quiz (week 5) - Osteopathic Clinical Practice Assessment (week 5) - Submission of draft journal article (week 9) Examination, Observed performance in clinical setting (5 separate assessments), 30%. Examination, 60 minute Objective Structured Clinical Examination (OSCE) (Equivalent to 3000 words), 45%. Portfolio, Evidence piece (1000 words), 15%. Examination, 45 minute Written examination (equivalent to 750 words), 10%. The total word equivalence of the combined assessment tasks equates to 9000 words for a 12 credit point unit at level 9. The assessment in this unit is slightly higher than other units within this semester. The inclusion of the clinic exit exam (Objective Subjective Clinical Examination) has caused the increase in the assessment tasks in this semester. This assessment is a crucial milestone and capstone assessment for students to successfully complete before they graduate. Participation in clinical placement requires at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment.

### HMM7903 Evidence for Practice 9

**Locations:** City Flinders.

**Prerequisites:** HMM7902 - Evidence for Practice 8

**Description:** HMM7903 Evidence for practice 9 uses the students research skills to

produce a manuscript for submission to a reputable professional peer-review journal. The student will also be able to defend their research findings in light of current evidence, and be able to apply evidence in their day-to-day practice as a student health professional in the student-led osteopathic clinics at VU. This unit is the third and final unit comprising of the research project/independent project component of students masters by course work degree.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Compose a peer review journal article;
2. Present findings from a research project; and
3. Implement evidence based practice into the clinical setting.

**Class Contact:** Lecture 1.0 hr Tutorial 1.0 hr Students will also be expected to meet regularly with their project supervisor.

**Required Reading:** No set texts for this unit. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:** The formative assessments for this unit are: - Osteopathic Clinical Practice Assessment (one) (week 5) - Online quiz (week 5) - Draft journal article submission (week 9) Research Paper, Journal article, Presentation of findings (5000 words equivalence), 60%. Examination, Observed performance in the clinical setting, 15%. Examination, 20 minute written examination (500 words equivalence), 10%. Portfolio, Domain 2 evidence for portfolio (1000 words), 15%. Participation in practical sessions with at least 90% attendance unless well-documented acceptable reasons are provided (hurdle requirement). All assessments in this unit are hurdle requirements and as such a minimum pass grade in each is required to satisfactorily complete the unit overall. A minimum of 50% constitutes a pass grade for each assessment. The total word equivalence of the combined assessment tasks equates to 7500 words for a 12 credit point unit at level 9. .

### HNB1101 Frameworks for Nursing Practice

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit comprises three parts. Part 1 (3 weeks) enables students to explore portrayals of nursing in the media and to consider these critically in relation to their personal perceptions of nursing. Part 2 (8 weeks) introduces them to broad frameworks which shape the scope and dimensions of nursing practice. These include population health/health promotion considered within the National Health Priorities; professional practice (ethics, law and regulatory frameworks); critical thinking and analysis (use of evidence in practice); frameworks for patient/client assessment of care; quality use of medicine and therapeutic relationships. Part 3 (1 week) introduces students to issues surrounding the development of a professional practice portfolio which they will develop further throughout their course of study. NOTE: This unit of study will be offered in on-line mode in semester 2 to students previously enrolled in the former HBRN Bachelor of Nursing (Pre- Registration) course.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to: \* critically discuss portrayals of the nurse found in the media; \* discuss some of the ways in which National Health Priorities are being addressed through health promotion strategies; \* discuss ethical and legal boundaries of nursing practice; \* discuss the role of the registered nurse in terms of regulatory frameworks for practice; \* discuss duty of care as it relates to nurses practice; \* discuss the use of evidence in nursing practice; \* demonstrate an understanding of the purpose of assessment frameworks for nursing practice; \* outline the principles underpinning the quality use of medicines; \* demonstrate beginning skills in professional communication, including an understanding of professional boundaries and self-

awareness; \* complete a diagnostic mathematics test; \* demonstrate beginning skills in information literacy and academic writing \* begin developing a personal professional practice portfolio.

**Class Contact:**Sixty hours (60 hours) of contact time per semester in mixed mode delivery: lectures; tutorials and computer laboratories.

**Required Reading:**Berman, A., Snyder, S. J., Levett-Jones, T., Dwyer, T., Hales, M., ... Stanley, D. (2012). (2nd ed.). *Kozier and Erb's fundamentals of nursing* Frenchs Forest, NSW: Pearson Australia Brotto, V., & Rafferty, K. (2012). *Clinical dosage calculations for Australia & New Zealand*. St Melbourne, Victoria: Cengage Learning. Daly, J., Speedy, S., & Jackson, D. (2010). (3rd ed.). *Contexts of nursing: an introduction* Chatswood, NSW: Elsevier Australia Talbot, L., & Verrinder, G. (2010). (4th ed.). *Promoting health: a primary health care approach* Chatswood, NSW: Elsevier Australia

**Assessment:**Diagnostic mathematics test (30 minute test) All students are expected to achieve 100% in the diagnostic mathematics test. Any student not achieving 100% in this test will be referred for remedial work in mathematics skills. Assignment, Written assessment (700 words), 20%. Assignment, Written assessment (800 words), 30%. Essay, Written assessment (1500 words), 50%. Students must achieve an aggregate score of 50% to pass this unit.

## HNB1102 Foundations in Nursing 1

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This unit will introduce students to concepts related to health, illness and the health care experience. Students will develop knowledge and skills on how to assist individuals to meet their basic human needs such as activities of daily living. The principles and practices of occupational health and safety, risk assessment and infection control will be explored. Strategies for developing therapeutic relationships, managing grief and loss and professional communication practices will be introduced and discussed. Students will begin to develop the knowledge and skills required to perform a holistic nursing health assessment. Cultural and spiritual assessment, and physical assessment techniques will be introduced and practised. In preparation for medication administration, students will review foundational maths skills.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the concepts related to health, illness and the health care experience;
2. Apply knowledge and skills in assisting persons experiencing difficulty meeting activities of daily living;
3. Demonstrate knowledge and skills in patient risk assessment and the relevant occupational health and safety policies;
4. Recognise the importance of maintaining confidentiality, patient privacy and consent associated with the provision of foundational nursing care;
5. Define and adhere to principles of infection control and standard precautions when performing nursing interventions;
6. Apply knowledge and skills in history taking health assessment, physical assessment techniques and accurately document these;
7. Apply numeracy skills required for basic drug calculations;
8. Identify population approaches to injury prevention and control (e.g. policies and legislations).

**Class Contact:**Lab 1.0 hrLecture 2.0 hrsTutorial 2.0 hrs

**Required Reading:**DeLaune, S. C., Ladner, P. K., McTier, L., Tollefson, J. & Lawrence, J. (2016). (ANZ 1st ed.) *Australian and New Zealand Fundamentals of Nursing* Cengage Learning Australia Pty. Ltd. Estes, M. E., Calleja, P., Theobald, K. & Harvey, T. (2013). (ANZ 2nd ed.) *Health assessment and physical examination* Cengage Learning Australia Pty. Ltd. Tollefson, J. & Hillman, E. (2015). (6th ed.) *Clinical Psychomotor Skills* Cengage Learning Australia Pty. Ltd.

**Assessment:**Assignment, Written Assessment (1000 words), 40%. Examination,

Written Examination (2 hours), 60%. Mathematic skills competency test. Any student not passing this test (a mark of 90% needed to pass) will be required to undertake remedial work in mathematics. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

## HNB1103 Professional Studies 1

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This unit enables students to explore the development of their health discipline/s. Portrayals of their health profession/s in the media will be discussed and students are to consider these critically in relation to their personal perceptions. Students will be introduced to broad frameworks which shape the scope and dimensions of their practice, including interprofessional practice. These include professional practice (ethics, law and regulatory frameworks); reflective practice, critical thinking and analysis (use of evidence in practice); competencies and scope of practice. There is a particular emphasis on assisting students to develop academic and professional literacy skills in order to practice as a professional. Knowledge and skills related to creating and maintaining a professional practice portfolio will be introduced.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the development of their healthcare profession;
2. Evaluate portrayals of their profession in the media;
3. Discuss the ethical and legal requirements for professional practice;
4. Examine the scope of practice of their profession in terms of regulatory frameworks and interprofessional practice;
5. Discuss the use of evidence in healthcare practice;
6. Apply the knowledge and skills required for reflective practice;
7. Demonstrate knowledge and skills in information literacy and academic writing;
8. Initiate a personal professional practice portfolio.

**Class Contact:**Lecture 2.0 hrsPC Lab 2.0 hrsTutorial 2.0 hrsA total of forty-eight (48) hours per semester consisting of lectures, tutorials and on-line activities.

**Required Reading:**Required textbooks will be prescribed by the Lecturer.

**Assessment:**Assignment, Written assessment (1000 words), 30%. Assignment, Written assessment (1500 words), 55%. Journal, Reflective exercise (500 words), 15%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

## HNB1104 Foundations of Nursing and Midwifery 1

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**This unit introduces concepts related to health, illness and the health care experience. Students will develop knowledge and skills to assist individuals to meet their activities of daily living. The principles and practices of occupational health and safety, risk assessment and infection control will be explored. Students will develop skills in therapeutic communication, holistic health assessment and the provision of quality care. Assessment and care of the woman during pregnancy will also be introduced with a focus on assessment of the woman and her baby. Students will commence the Continuity of Care program, and recruit two (2) women. In support of medication administration, students will be introduced to foundational maths skills.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the concepts related to health, illness and the health care experience.
2. Apply knowledge and skills in assisting persons experiencing difficulty meeting activities of daily living.
3. Utilise professional communication skills required for health assessment and therapeutic relationships in the midwifery and nursing



context. 4. Demonstrate principles and practices of midwifery care utilising a woman-centred approach during pregnancy including assessment of maternal and foetal well-being. 5. Incorporate the principles of occupational health and safety, and infection control in midwifery and nursing practice. 6. Demonstrate foundational health assessment knowledge and skills. 7. Utilise effective and accurate documentation in the care of clients in the midwifery and nursing context.

8. Demonstrate numeracy skills required for the safe practice of medication administration. 9. Provide evidence of recruitment of two (2) women to participate in the Continuity of Care program.

**Class Contact:** This is a double credit unit which totals one hundred and sixteen (116) hours. Students will have 24 hours of lectures, 12 hours of tutorials, 12 hours of laboratory sessions and 12 hours of self-directed learning. In addition, the professional practice (clinical practice) component comprises 16 hours of maternity care in an observation capacity; and 40 hours of nursing in an aged care or sub-acute setting.

**Required Reading:** To be advised.

**Assessment:** Test, Online test (30 mins), 15%. Assignment, Written assessment (1000 words), 25%. Examination, Written examination (2 hours), 50%. Test, Practical skills test (20 mins), 10%. Other, Evidence of recruitment of two (2) women, 0%. To pass this unit, students are required to achieve an aggregate score of at least 50%, and pass the written examination (hurdle). The written examination assesses foundational knowledge which informs practice and underpins subsequent units. Students must complete fifty-six (56) professional practice hours: Nursing - 40 hours, Midwifery - 16 hours. Evidence must be provided that two (2) women have been recruited for the Continuity of Care program.

## HNB1201 Working With Families

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit provides students with an understanding of some of the major health needs of families living within the Western region of Melbourne. It introduces students to family and community nursing with particular emphasis on health issues across the lifespan related to cultural diversity, geographical dislocation and socio-economic disadvantage. It also explores ethical issues related to access to health care.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Identify major health needs of families living in the Western region of Melbourne and compare these to Victorian, National and global health priorities; 2. Discuss theories of family and community nursing; 3. Assemble a genogram of a family; 4. Apply professional, ethical, legal and cultural principles to communication with individual, family and community; 5. Identify key health issues for families in the Western region with particular emphasis on: maternal and child health, adolescent health, adult health, and the health of older persons; and 6. Identify the health impacts of socio-economic disadvantage, and cultural and geographic dislocation.

**Class Contact:** Lab 1.5 hrs Lecture 2.5 hrs Tutorial 1.5 hrs Class contact hours per week may vary according to clinical placement allocation.

**Required Reading:** Kralk, D., & van Loon, A. (2011). (2nd ed.). Community nursing in Australia Milton, Qld: John Wiley & Sons Australia. Beckmann Murray, R., Proctor Zenter, J., & Yakimo, R. (2009). (8th ed.). Health promotion strategies through the life span Upper Saddle River, NJ: Pearson, Prentice Hall.

**Assessment:** Students must achieve an aggregate score of 50% and pass the written examination to achieve a pass in the unit. Students will normally be granted a supplementary assessment if they achieve a grade of 45 to 49%. Students must

achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit. Assignment, Written assessment plan (500 words), 10%. Assignment, Written assessment (2000 words), 60%. Examination, Written examination (1 hour), 30%.

## HNB1202 Health Priorities & Nursing 1

**Locations:** St Albans.

**Prerequisites:** HNB 1101 - Frameworks for Nursing Practice

**Description:** This unit introduces students to the National Health Priority, Injury Prevention and Control, and provides them with an opportunity to apply the knowledge learnt in their personal and professional lives. In the clinical laboratory, students learn the skills required to undertake a comprehensive health assessment, identify normal and abnormal findings and document these.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss population approaches to injury prevention and control (i.e. policies, legislation and health promotion initiatives); 2. Identify key issues in injury prevention and control across the lifespan and in a variety of settings; 3. Demonstrate an awareness of skills to aid in developing and supporting self in relation to nursing practice; 4. Discuss a range of history taking and physical assessment tools and techniques used in Victorian health care settings; 5. Demonstrate beginning skills in history taking and physical assessment in the clinical laboratory; 6. Discuss consent, privacy, and confidentiality when dealing with patients/clients and their information; 7. Differentiate between the roles of the division 1 and division 2 registered nurse and patient services assistants/personal care attendants; 8. Discuss how clients cultural and family values can be met within the clinical environment; and 9. Briefly explain health care funding, its relationship to the provision of care and actions nurses can take to utilise resources efficiently.

**Class Contact:** Lab 1.5 hrs Lecture 1.5 hrs Tutorial 1.5 hrs Class contact hours per week may vary according to clinical placement allocation.

**Required Reading:** Australian Nursing and Midwifery Council. (2006). ANMC National competency standards for the registered nurse. Canberra: Author.

([http://www.anmc.org.au/docs/Competency\\_standards\\_RN.pdf](http://www.anmc.org.au/docs/Competency_standards_RN.pdf)) Australian Nursing and Midwifery Council. (2008). Code of ethics for nurses in Australia [Brochure]. Canberra: Author. (Available at <http://www.anmc.org.au>)

Australian Nursing and Midwifery Council. (2008). Code of professional conduct for nurses in Australia [Brochure]. Canberra: Author. (Available at <http://www.anc.org.au>)

Health Professions Registration Act 2005 Act No. 97/2005 (incorporating amendments as at 2006) (Available at <http://www.dms.dpc.vic.gov.au>) Ivey, A.E. & Ivey, M.B. (2007). Intentional Interviewing and Counselling: Facilitating Client Development in a Multicultural Society. Belmont, CA: Thomson Brooks/Cole.

Nurses Board of Victoria. (2006). Professional conduct information. Melbourne: Author. (Available at <http://www.nbv.org.au>)

Nurses Board of Victoria. (2006). Professional boundaries. Guidelines for registered nurses in Victoria. Melbourne: Author. (Available at <http://www.nbv.org.au>)

Tollefson, J. (2004). Clinical psychomotor skills. Assessment tools for nursing students (2nd ed.). Tuggerah, NSW: Social Science Press.

Weber, J & Kelley, J. (2007). Health Assessment in Nursing (3rd ed.). Philadelphia, USA: Lippincott.

Jarvis, C (2008) 5th Ed Physical Examination & Health Assessment Saunders Canada

Jarvis, C (2008) 5th Ed Physical Examination & Health Assessment: Student Laboratory Manual Saunders Canada

Berman A, Snyder SJ, Kozier B, Erb, G, Levett-Jones T. (2010) 1st Kozier & Erb's Fundamentals of Nursing Pearson Frenchs Forest

**Assessment:** Mathematics mastery test (30 minute exam) (hurdle) Week 6 All

students are required to achieve 100% in the mathematics mastery test. Any student not passing this test will be required to undertake remedial work in mathematics skills and be retested. Successful completion of the mathematics mastery test is a requirement for progression into Health Priorities & Nursing 2 and Clinical Practicum 2. Assignment, Written assessment (1000 words), 35%. Examination, Practical examination (20 minutes), 15%. Assignment, Written assessment (1500 words), 50%. Students must achieve an aggregate score of 50% to pass this unit. Students will normally be granted a supplementary assessment if they achieve a grade of 45 to 49%. Students must achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit.

## HNB1203 Clinical Practicum 1

**Locations:**St Abans.

**Prerequisites:**HNB 1101 - Frameworks for Nursing PracticeCurrent POLICE CHECK; Current WORKING WITH CHILDREN'S CHECK; Student Declaration Form. All clinical practicum units of study have a special requirement for the provision of Mandatory Documentation see School of Nursing & Midwifery Clinical Practicum Rules.

**Description:**This unit provides students with the opportunity to apply the knowledge learnt in Health Priorities & Nursing 1 in beginning professional practice. Students will undertake comprehensive health assessments, identifying normal and abnormal findings and documenting these. Students will focus on injury prevention and safety issues while undertaking their clinical placement. Students will also observe the roles of other members of the health care team and consider how the values of the family and culture are met within the care facility.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students are expected to be able to:

- Identify their current scope of practice and work within this;
- Demonstrate beginning skills in risk assessment;
- Identify key issues in injury prevention in the clinical setting;
- Discuss Occupational Health and Safety in relation to risk assessment and nursing practice and apply this in the clinical setting;
- Discuss infection control principles and demonstrate these in the clinical setting;
- Conduct a health assessment interview to obtain a health history and accurately record this using appropriate medical terminology;
- Demonstrate beginning skills in Mental Status Examination and taking a psychiatric history;
- Demonstrate beginning physical assessment skills in the clinical setting;
- Undertake functional health assessments appropriate to allocated patients and accurately record these identifying any abnormalities;
- Demonstrate respect for individuals values and beliefs;
- Assess the health status for an allocated patient then plan, implement care for and evaluate the care of this patient in consultation with the nursing team;
- Describe the role of the Nurse Unit Manager/Nurse in-charge in an institutional setting with stable clients;
- Consider the clients socio-cultural and family values within the clinical environment;
- Use the Situation, Task, Action and Result (STAR) format to begin entering clinical achievements into their personal professional practice portfolio.

**Class Contact:**7 hours of medium fidelity simulation laboratories will be conducted during semester to complement the theory and laboratory hours in Health Priorities in Nursing 1 and 120 hours of clinical practice in clinical practicum.

**Required Reading:**Crisp, J & Taylor, C 2009, 3rd edn, Potter & Perry's fundamentals of nursing, Australia: Mosby, Sydney. Ivey, A.E & Ivey, MB 2007, Intentional interviewing and counselling: facilitating client development in a multicultural society, Thomson Brooks/Cole, Belmont, CA. Jarvis C 2008, 5th edn, Physical examination and health assessment, Saunders Elsevier, St Louis. Tollefson, J 2007, 3rd edn, Clinical psychomotor skills. Assessment tools for nursing students, Social Science Press, Tuggerah, NSW.

**Assessment:**Practicum, Interim Clinical Appraisal - midway, Pass/Fail. Practicum, Final Clinical Appraisal - completion, Pass/Fail. Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum assessment 1 & 2 assesses all graduate capabilities 1 to 6 and all learning outcomes 1 to 7. Assessment (100%) is linked to LiWC.

## HNB1204 Foundations of Nursing and Midwifery 2

**Locations:**St Abans.

**Prerequisites:**HNB 1104 - Foundations of Nursing and Midwifery 1HBM1001 - Anatomy and Physiology 1

**Description:**This unit expands on health assessment, infection control and occupational health and safety. The principles of asepsis are introduced. Principles of safe medication use are applied to the routes of oral, topical, and intramuscular injection administration. The unit also focuses on foundational knowledge in labour, birth and post-birth care for the woman and her baby, utilising a woman-centred approach. The student will explore the role of the midwife in supporting the woman experiencing pain during labour, birth and in the postnatal period. Students will develop foundational knowledge to effectively care for the woman and baby post birth. Nutrition for the baby, with a focus on lactation, will also be examined. Students will continue to follow the two (2) recruited women from the Continuity of Care program in 'HNB 1104 Foundation of Nursing and Midwifery 1', until the post-birth period.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the importance of professional practice including confidentiality and patient privacy associated with the provision of foundational nursing and midwifery care.
2. Utilise the nursing process to develop nursing care plans.
3. Demonstrate knowledge and skills in foundational clinical skills (e.g., basic life support, simple sterile dressing and vital signs).
4. Exhibit safe midwifery practice during pregnancy, labour and birth including assessment of the woman and her newborn.
5. Examine the holistic factors influencing the pain experience, assessment of pain during labour, and use of pharmacological and non-pharmacological methods to support the woman during labour and birthing.
6. Exhibit safe midwifery practice when caring for the woman and her baby in the postpartum period, including breastfeeding.
7. Demonstrate accurate and safe administration of medications administration.

**Class Contact:**This is a double credit unit which totals two hundred and twenty (220) hours. Students will have 24 hours of lectures, 12 hours of tutorials, 12 hours of laboratory sessions and 12 hours of self-directed learning. In addition, the professional practice (clinical practice) component comprises 80 hours of maternity care; and 80 hours of nursing in an aged care or sub-acute setting.

**Required Reading:**To be confirmed.

**Assessment:** Assignment, Written assessment (1000 words), 30%. Examination, Written assessment (2 hours), 50%. Test, Practical skills testing (30 minutes), 20%. Practicum, Final Professional Practice Performance Appraisal (Nursing), 0%. Practicum, Final Professional Practice Performance Appraisal (Midwifery), 0%. Report, Continuity of Care Report (1000 words), 0%. Test, Drug Calculations, 0%. To pass this unit, students are required to achieve an aggregate score of 50%, and achieve 100% for the drug calculations test (hurdle). Accuracy in medication administration is an absolute requirement for safe midwifery and nursing practice. Students must complete 160 professional practice hours: Nursing - 80 hours, Midwifery - 80 hours; and achieve the grade 'competent' in the Final Professional Practice Performance Appraisal for Midwifery and Nursing. Supplementary assessment is not available for the Professional Practice Performance Appraisals. The Continuity of Care Report must also be submitted.

## HNB1205 Foundations in Nursing 2

**Locations:** St Abars.

**Prerequisites:** HNB1102 - Foundations in Nursing 1

**Description:** This unit builds on previous knowledge and skills and enables students to further assist individuals to meet their activities of daily living. The principles and practices of occupational health and safety, risk assessment and infection control will be expanded upon. Assessment of the person within a holistic framework will be further explored using a problem solving approach. Cardiac, respiratory, urinary and abdominal assessments will be introduced and practised. Students will be able to identify normal and abnormal findings and document these. Principles of asepsis will be introduced. Students will also be introduced to the principles of medication administration.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Demonstrate beginning skills in professional communication and documentation skills; 2. Describe the importance of professional practice including confidentiality and patient privacy associated with the provision of foundational nursing care; 3. Demonstrate knowledge and skills in patient risk assessment; 4. Apply skills in history taking and applying the nursing process to develop nursing care plans and patient pathways 5. Demonstrate knowledge and skills in related clinical skills (e.g. basic life support, simple sterile dressing); 6. Demonstrate knowledge and skills in performing physical assessment (cardiac, respiratory, urinary and abdominal) in the laboratory; 7. Accurately document physical assessment findings; 8. Demonstrate skills in the practice of oral, topical and rectal medication administration and management in the laboratory setting; 9. Demonstrate mastery of drug calculations.

**Class Contact:** Lecture 3.0 hrs Tutorial 2.0 hrs

**Required Reading:** Required textbooks will be prescribed by the UoS coordinator.

**Assessment:** Assignment, Written assessment (1000 words), 30%. Examination, Practical skills assessment (1 hour), 30%. Examination, Written examination (1.5 hours), 40%. Hurdle: Mastery of drug calculations (100% required to pass). To gain an overall pass in this unit, students must achieve an aggregate score of 50%, a minimum score of 80% in the practical skills assessment and pass the drug calculations test.

## HNB1206 Professional Practice 1

**Locations:** St Abars.

**Prerequisites:** RBM1103 - Bioscience 1: Body Structure & Function HNB1102 - Foundations in Nursing 1 HNB1103 - Professional Studies 1

**Description:** This unit provides students with the opportunity to apply the knowledge

taught in HNB1103 Professional Studies 1, HNB1102 Foundations in Nursing 1 & HNB1205 Foundations in Nursing 2 in beginning professional practice. Students will undertake comprehensive health assessments, identifying normal and abnormal findings and developing documentation skills. Using assessment skills and information students will begin to utilise care plans that direct care provided to patients. During clinical placement students will build upon knowledge of injury prevention and safety issues. Students will also observe the roles of other members of the health care team and consider how the values of the family and culture are met within the health care facility.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and practise within their current scope of practice;
2. Complete a health assessment interview to obtain a health history and accurately record this using appropriate terminology;
3. Demonstrate skills in conducting holistic physical assessment and taking a comprehensive health history;
4. Demonstrate respect for individuals taking into consideration the socio-cultural and family values within the clinical environment;
5. Assess the health status for an allocated patient then plan, implement, care for and evaluate the care of this patient in consultation with the nursing team;
6. Apply the expected legal and ethical standards in providing health care;
7. Examine occupational health and safety regulations in relation to injury prevention, risk assessment and nursing practice and apply this in the clinical setting;
8. Discuss infection control principles and demonstrate these in the clinical setting;
9. Examine the role of the Registered Nurse, interdisciplinary and interprofessional team members and patient support staff in a health care setting; and
10. Demonstrate competent practice in the delivery of oral, topical and/or rectal medications.

**Class Contact:** Sim (Simulation) 1.0 hr Students to complete seven (7) hours of simulation over the semester. Students will complete 120 hours of learning in the clinical environment.

**Required Reading:** Required textbooks will be prescribed by the UoS coordinator.

**Assessment:** Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the College of Health and Biomedicine Clinical Rules. Practicum, Interim Clinical Appraisal, Yes/No. Practicum, Final Clinical Appraisal, Yes/No. Students must achieve the grade 'competent' on their final clinical appraisal and complete the required number of "Employer competencies" to pass this unit.

## HNB2101 Working With Evidence in Practice

**Locations:** St Abars.

**Prerequisites:** Nil.

**Description:** This unit aims to prepare students to be consumers of research using an evidence based practice approach. It introduces students to different research methodologies used in health care and assists them to develop critical appraisal skills.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the origins and development of evidence based practice;
2. Identify the stages of evidence based nursing;
3. Frame a research question in a structured and focused manner;
4. Search for evidence using bibliographic data bases;
5. Briefly describe qualitative and quantitative research methodologies;
6. Critically appraise a journal article using an appropriate appraisal tool; and
7. Identify barriers and facilitators to implementing evidence based practice.

**Class Contact:** Lecture 2.0 hrs PC Lab 1.0 hr Tutorial 2.0 hrs

**Required Reading:** Richardson-Tench, M., Taylor, B., Kermode, S., & Roberts, K.,

2011 4th edn, Research in Nursing: Evidence for Best Practice, Cengage Learning, Australia

**Assessment:** Students must achieve an aggregate score of 50% to pass this unit. Hurdle requirement: students are required to attend 80% of the scheduled tutorial classes. Test, On-Line Test (1) (45 Minutes), 25%. Test, On-Line Test (2) (45 Minutes), 25%. Assignment, Written Assignment (1500 words), 50%. On-Line Test (1) covers learning outcomes 1, 2, 3 & 5. On-Line Test (2) covers learning outcomes 3, 5 & 7. Written Assignment (1500 words) covers learning outcomes 4 & 6. On-Line Test (1) covers graduate capabilities 1, 2, 4 & 6. On-Line Test (2) covers graduate capabilities 1, 2, 4, 5 & 6. Written Assignment (1500 words) covers graduate capabilities 1, 2, 3, 4 & 6.

## HNB2102 Health Priorities & Nursing 2

**Locations:** St Albans.

**Prerequisites:** HNB 1202 - Health Priorities & Nursing 1HNB1203 - Clinical Practicum 1RBM1203 - Bioscience 2: Human Body Structure & Function

**Description:** This unit builds on previous nursing units of study and further develops the students knowledge of the National Health Priorities and complements Pathophysiology & Quality Use of Medicines 2. In particular students will study the nursing management of patients suffering from asthma, other respiratory disorders, cardiovascular disease and their related co-morbidities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to:

- discuss population approaches to identified national health priorities (i.e. policies, legislation, health ecology and health promotion initiatives);
- identify genetic and social determinants of health in relation to identified national health priorities;
- discuss holistic (gender, cultural and spiritual) assessment of individuals across the lifespan experiencing one or more of the conditions identified in the national health priorities;
- discuss burden of disease and health costs associated with identified national health priorities;
- demonstrate knowledge of the nursing management of individuals across the lifespan experiencing asthma, respiratory and cardiovascular diseases and related disease processes in various contexts of care using a problem solving approach;
- demonstrate knowledge of infection control and Occupational Health and Safety issues in the institutional, community and global context in relation to one or more of the conditions identified in the national health priorities;
- discuss communication theory, non-verbal communication and active listening;
- demonstrate skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders) in the clinical laboratory.

**Class Contact:** Lab 1.5 hrsLecture 1.5 hrsSim (Simulation) 1.0 hrClass contact hours per week may vary according to clinical placement allocation.

**Required Reading:** Required ReadingLeMone, P & Burke, K. (2011) Medical- Surgical Nursing Critical thinking in Client Care Frenchs Forest, Pearson Australia Tollefson, J. (2007). (3rd ed.) Clinical psychomotor skills. Assessment tools for nursing students

South Melbourne, VIC: Cengage Learning Australia. Bullock, S., Manias, E. & Galbraith, A. (2011) (6th ed) Fundamentals of Pharmacology Frenchs Forest, Pearson Australia Jarvis, C. (2008). (5th ed.) Physical Examination & Health Assessment St Louis, Missouri: Saunders Elsevier.

**Assessment:** Hurdle requirement for clinical placement Drug calculation mastery test (100% needed for pass) Students are not permitted to administer medications until they have passed this hurdle requirement. NB. Successful completion of the drug calculation mastery test is a requirement for progression into Clinical Practicum 3. Assignment, Written assessment (1200 words), 35%. Examination, Written examination (2 hours), 65%. Students must achieve an aggregate score of 50% and pass the written examination to pass this Unit of Study. Students must achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit. Students who do not achieve a pass in the written examination but who achieve an aggregate of 50% or greater will have a UM (ungraded fail) grade awarded as their final result. Students are required to attend 80% of the scheduled simulation sessions. Where there is less than 80% a student developed simulation activity will be required in lieu of attendance. .

## HNB2103 Clinical Practicum 2

**Locations:** St Albans.

**Prerequisites:** HNB 1202 - Health Priorities & Nursing 1HNB1203 - Clinical Practicum 1RBM1203 - Bioscience 2: Human Body Structure & FunctionCurrent POLICE CHECK; Current WORKING WITH CHILDREN'S CHECK; Student Declaration Form. All clinical practicum units of study have a special requirement for the provision of Mandatory Documentation see School of Nursing & Midwifery Clinical Practicum Rules.

**Description:** This unit builds on previous nursing units of study and further develops the students assessment and clinical decision making skills in the clinical environment. Students will apply their knowledge of pathophysiology, nursing interventions and the quality use of medicines to management of clients suffering from asthma, other respiratory diseases, cardiovascular disease and their related co-morbidities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this;
2. Demonstrate more advanced communication skills and interview techniques within the clinical setting; \* demonstrate holistic (gender, cultural and spiritual) assessment of individuals across the lifespan experiencing one or more of the conditions identified in the national health priorities;
3. Demonstrate knowledge of the nursing management of individuals across the lifespan experiencing asthma, respiratory and cardiovascular disease and related disease processes in various contexts of care using a problem solving approach;
4. Apply the principles of infection control and Occupational Health and Safety in an institutional setting and in relation to one or more of the conditions identified in the national health priorities;
5. Assess, plan and implement the care for and evaluate the care of an increasing patient load within the student's scope of practice and in consultation with the patient and the health care team;
6. Demonstrate skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders etc.); and
7. Continue entering clinical achievements into their personal professional practice portfolio.

**Class Contact:** This is a 160 hour acute care clinical placement unit of study which aligns with the theory unit of study Health Priorities and Nursing 2.

**Required Reading:** Required readingLeMone, P & Burke, K 2011, Medical - Surgical Nursing Critical Thinking in Client Care Frenchs Forest, Pearson Australia Tollefson, J 2010 4th edn Clinical Psychomotor Skills Assessment tools for nursing students

Cengage Learning, Australia Bullock, S, Manias, E & Galbraith, A 2011 6th edn Fundamentals of Pharmacology Frenchs Forest, Pearson Australia

**Assessment:**Practicum, Interim Clinical Appraisal - midway, Pass/Fail. Practicum, Final Clinical Appraisal - completion, Pass/Fail. Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum assessment 1 & 2 assesses all graduate capabilities 1 to 4 and all learning outcomes 1 to 7. Assessment (100%) is linked to LiWC.

## HNB2104 Nursing and Acute Care 1

**Locations:**St Abans.

**Prerequisites:**HNB 1205 - Foundations in Nursing 2HNB 1206 - Professional Practice 1RBM1 202 - Bioscience 2: Body Structure & Function

**Description:**This unit builds on previous foundational units of study in year 1 and complements RBM2101 Pathophysiology and Quality use of Medicines 2. In particular, it develops the student's knowledge and skills in the provision of person-centered nursing care and interprofessional evidence based management of individuals across the life-span experiencing acute illness. Content is largely framed around the national health priorities of respiratory, renal, neurological and cardiovascular disorders and their related co-morbidities. A case study approach using inquiry based learning will be utilized to develop student's ability to apply their problem solving, critical thinking and clinical decision making skills. Students will develop knowledge and skills in the safe administration and management of medications.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Describe holistic assessment of individuals across the lifespan experiencing acute and prolonged illness;  
2. Utilise evidence based practice to explain the interprofessional management of individuals experiencing acute and prolonged illness such as respiratory, renal, neurological and cardiovascular conditions including the pre and post operative patient;  
3. Apply knowledge and skills to nursing assessment, planning, intervention and evaluation of patients with acute and prolonged illness;  
4. Articulate knowledge and demonstrate clinical skills (e.g., performing an ECG, insertion of urinary indwelling catheter and care of the pre and post operative patient);  
5. Utilize reflective practice skills in technical skill acquisition and clinical simulation;  
6. Practise skills in the administration and management of medications in the clinical laboratory;  
7. Demonstrate numeracy skills required for the safe practice of medication administration;

**Class Contact:**Lab 2.0 hrsLecture 2.0 hrsTutorial 2.0 hrs

**Required Reading:**Brotto, V., & Rafferty, K. (2015). (2nd ed.). Clinical dosage calculation for Australia and New Zealand. Cengage: Melbourne. Farrell, M., & Dempsey, J. (2013). (3rd ed.) Smeltzer & Bare's Textbook of medical surgical nursing, Lippincott, Williams and Wilkins, Sydney. Tolleffson, J., & Hillman, J. (2016) (6th Edition) Clinical Psychomotor Skills Assessment Tools For Nurses Cengage: Melbourne.

**Assessment:**Assignment, Participation in on-line activities (1000 words), 15%. Other, OSCA (objective, subjective, clinical assessment) Skill Task (30 minutes), 15%. Other, Medication Calculation Assessment (30 minutes), 0%. Examination, Written assessment (2 hours), 70%. Students must achieve 100% in the Medication Calculation Assessment to pass as this is integral to safe nursing practice. Students will be eligible for a maximum of 3 attempts for the medication calculation assessment. To gain an overall pass in this unit, students must attend all laboratory

classes and submit all assessment items and achieve an aggregate score of 50%. There will be no supplementary assessments for this unit. .

## HNB2105 Nursing and Mental Health 1

**Locations:**St Abans.

**Prerequisites:**HNB 1205 - Foundations in Nursing 2HNB 1206 - Professional Practice 1RBM1 202 - Bioscience 2: Body Structure & Function

**Description:**This unit introduces students to Psychology, Mental Health and Illness. It aims to build on the communication and assessment skills developed in previous units of study. In addition, the objective is to develop students' knowledge, skills and attitudes in the promotion of mental health. The unit provides the knowledge and skills students require to meet the needs of people with altered mental health status in hospital and community settings. It also complements the information provided in RBM2101 Pathophysiology & Quality Use of Medicines 1.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Discuss the major phenomena of social, emotional, personality and cognitive development across the lifespan;  
2. Describe characteristic behaviours that people are likely to exhibit at various stages of the lifespan;  
3. Outline some major theories of human development;  
4. Describe the theoretical bases of mental health nursing;  
5. Examine the delivery of mental health services in Australia, with emphasis on the period from middle twentieth century to the present;  
6. Articulate knowledge of mental health and illness throughout the lifespan including determinants of mental illness, clinical manifestations and psychopathology  
7. Describe the legislative and ethical foundations of mental health care and treatment, in particular the roles and responsibilities of the nurse under the Victorian Mental Health Act;  
8. Apply skills in beginning health assessment knowledge and skills in communication, mental status examination and risk assessment;  
9. Demonstrate the ability to plan, implement and evaluate mental health nursing care for individuals and families with anxiety, mood and psychotic disorders;  
10. Critically discuss common therapeutic modalities, including psychopharmacology.

**Class Contact:**Lab 2.0 hrsLecture 2.0 hrsTutorial 2.0 hrs

**Required Reading:**Elder, R., Evans, K. & Nizette, D. (2013). (3rd ed.), Psychiatric and mental health nursing. Chatswood, NSW: Mosby. Fortinash, K. M., & Holoday-Worret, P. A. (2007). (5th ed.), Psychiatric nursing care plans. St Louis: Mosby

**Assessment:**Assignment, Written Assessment (1000 words), 25%. Test, Three (3) Online Tests (20 minutes each), 15%. Examination, Written Examination (2 hours), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50% and pass the written examination.

## HNB2106 Professional Practice 2

**Locations:**St Abans.

**Prerequisites:**HNB 1206 - Professional Practice 1HNB 1205 - Foundations in Nursing 2RBM1 202 - Bioscience 2: Body Structure & Function

**Description:**The aim of this unit is to provide students with the opportunity to apply the acute medical/surgical and mental health knowledge and skills developed in HNB2104 Nursing and Acute Care 1, HNB2105 Nursing and Mental Health 1 and RBM2101 Pathophysiology and Quality Use of Medicines 1 in either a medical/surgical or mental health setting. Students are required to complete 160 hours in a medical/surgical or mental health setting.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Identify their current scope of practice and work within this;  
2. Apply relevant knowledge and skills and utilise a problem solving approach to the nursing

management of individuals across various contexts of care; 3. Explain the legislative and ethical foundations of relevant health care and treatment, in particular the roles and responsibilities of the registered nurse; 4. Assess, plan, implement and evaluate nursing care for individuals and families in consultation with the nursing team; 5. Demonstrate health assessment knowledge and skills in physical assessment; 6. Demonstrate skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders etc.); 7. Utilise culturally appropriate communication, assessment and intervention strategies. 8. Additional specific learning outcomes for those students attending acute care placements; 8. Describe the clinical manifestations and collaborative management of common acute health disorders 9. Additional specific learning outcomes for those students attending mental health placements; 9. Describe the clinical manifestations and collaborative management of common psychiatric disorders; 10. Perform a mental health status examination; 11. Utilise psychotherapeutic communication skills;

**Class Contact:**Lecture 2.0 hrs

**Required Reading:**Required textbooks will be prescribed by the UoS coordinator.

**Assessment:**Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the College of Health and Biomedicine Clinical Rules. Practicum, Interim Clinical Appraisal, Yes/No. Practicum, Final Clinical Appraisal, Yes/No. Students must achieve the grade 'competent' on their final clinical appraisal and complete the required number of 'Employer Competencies' to pass this unit. The clinical appraisal process assesses learning outcomes 1 to 7 as generic competencies for nursing practice. Learning outcome 8 is a specific competency for acute care nursing practice. Whilst learning outcomes 9 to 12 are mental health specific competencies in relation to nursing practice.

### HNB2107 Nursing Professional Practice 1

**Locations:**St Abans.

**Prerequisites:**HBM1202 - Anatomy & Physiology 2HNB1204 - Foundations of Nursing and Midwifery 2

**Description:**The aim of this unit is to provide students with the opportunity to apply knowledge and skills developed in 'HNB2104 Nursing and Acute Care 1' and 'RBM2101 Pathophysiology and Quality Use of Medicines 1' in an acute medical/surgical health care setting. Students are required to complete 160 professional practice hours. In particular, students will have the opportunity to practice acute care skills required of the registered nurse.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Identify their current scope of practice and work within this. 2. Apply relevant knowledge and skills and utilise a problem solving approach to the nursing management of individuals across various contexts of care. 3. Explain the legislative and ethical foundations of relevant health care and treatment, in particular the roles and responsibilities of the registered nurse. 4. Assess, plan, implement and evaluate nursing care for individuals and families in consultation with the nursing team. 5. Demonstrate health assessment knowledge and skills in physical assessment. 6. Demonstrate skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders, etc.).

7. Utilise culturally appropriate communication, assessment and intervention strategies. 8. Describe the clinical manifestations and collaborative management of common acute health disorders.

**Class Contact:**h this professional practice unit, students will have one hundred and sixty (160) hours in an external acute care setting.

**Required Reading:**To be confirmed.

**Assessment:**Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Students must achieve the grade 'competent' on their Final Professional Practice Performance Appraisal to pass this unit. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HNB2202 Health Priorities & Nursing 3

**Locations:**St Abans.

**Prerequisites:**HNB2102 - Health Priorities & Nursing 2HNB2103 - Clinical Practicum 2APT1311 - Psychology Across the Lifespan

**Description:**This unit introduces students to the National Health Priority, Mental Health and Wellbeing and builds on the communications and assessment skills developed in previous units. It aims to develop students knowledge, skills and attitudes in the promotion of mental health. The unit provides the skills students require to meet the needs of people with altered mental health status in institutional and community settings. It also complements the information provided in Pathophysiology & Quality Use of Medicines 2.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss mental health and illness throughout the lifespan including the social and genetic determinants of mental illness; 2. Briefly explain the structure, function and policy issues of Victoria's Psychiatric Services; 3. Describe the theoretical bases of mental health nursing; 4. Briefly explain the use of classification systems currently found within the hospital environment; 5. Demonstrate knowledge of the legislative and ethical foundations of mental health care and treatment, in particular the roles and responsibilities of the nurse under the Victorian Mental Health Act; 6. Discuss the use of a problem solving approach as a framework to guide practice in mental health settings; 7. Describe the clinical manifestations of common psychiatric disorders; 8. Demonstrate beginning health assessment knowledge and skills in psychosocial assessment and mental status examination; 9. Demonstrate the ability to plan, implement and evaluate mental health nursing care for individuals and families in simulated scenarios; 10. Discuss common therapeutic modalities, including psychopharmacology; 11. Demonstrate beginning psychotherapeutic communication skills in mental health nursing, including the use of Ivey's 5 stage interview in clinical skills laboratories; and 12. Discuss the principles of mental health risk assessment and crisis intervention.

**Class Contact:**Lab 1.5 hrsLecture 1.5 hrsSim (Simulation) 1.0 hr

**Required Reading:**Text updateElder, R., Evans, K., & Nizette, D. (2013) 3rd Psychiatric and Mental Health Nursing Elsevier Stein-Parbury, J. (20014) 5th Patient and person Churchill Livingstone, London Usher, K., Foster, K., & Bullock, S. (2009) Psychopharmacology for health professionals, Elsevier, Chatswood, NSW.

**Assessment:**Assignment, Written assessment (1000 words), 35%. Examination, Written examination (2 hours), 65%. To gain an overall pass in this unit students must achieve an aggregate score of 50% and pass the written examination. Students must achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit.

### HNB2203 Clinical Practicum 3

**Locations:**St Abans.

**Prerequisites:**HNB2102 - Health Priorities & Nursing 2HNB2103 - Clinical Practicum 2APT1311 - Psychology Across the LifespanCurrent POLICE CHECK; Current WORKING WITH CHILDREN'S CHECK; Student Declaration Form. All clinical practicum units of study have a special requirement for the provision of Mandatory Documentation see School of Nursing & Midwifery Clinical Practicum Rules.

**Description:** The aim of this unit is to provide students with the opportunity to apply the mental health knowledge and skills developed in RBM2205 Pathophysiology and Quality Use of Medicines 2 and HNB2202 Health Priorities and Nursing 3 in an institutional and/or community setting.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this;
2. Utilise a problem solving approach as a framework to guide practice in mental health settings;
3. Demonstrate knowledge of the legislative and ethical foundations of mental health care and treatment, in particular the roles and responsibilities of the nurse under the Victorian Mental Health Act;
4. Describe the clinical manifestations of common psychiatric disorders;
5. Demonstrate beginning health assessment knowledge and skills in psychosocial assessment and mental status examination;
6. Demonstrate the ability to plan, implement and evaluate mental health nursing care for individuals and families in consultation with the nursing team;
7. Discuss common therapeutic modalities, including psychopharmacology;
8. Demonstrate skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders etc.);
9. Demonstrate beginning psychotherapeutic communication skills in mental health nursing, including the use of Ivey's 5 stage interview;
10. Demonstrate beginning assessment skills in mental health risk assessment and crisis intervention;
11. Demonstrate culturally appropriate assessment and intervention strategies; and
12. Continue entering clinical achievements into their personal professional practice portfolio.

**Class Contact:** This is a clinical practicum unit comprising one hundred and sixty (160) hours in a mental health setting. This unit aligns with the theory Unit of Study HNB 2202 Health Priorities and Nursing 3.

**Required Reading:** Updating texts Happell, B., Byrne, L., McAllister, M., Wanda, T., (2013) Clinical helper for mental health nursing the vital guide for students and new graduates Crows Nest NSW, Allen & Unwin Moxham, L., Dwyer, T., Reid-Searl, K., Robson, P., Broadbent M., (2013) Nursing students adult mental health survival guide Frenchs Forest NSW, Pearson

**Assessment:** Practicum, Interim Clinical Appraisal - midway, Pass/Fail. Practicum, Final Clinical Appraisal - completion, Pass/Fail. Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum assessment 1 & 2 assesses all graduate capabilities 1 to 4 and all learning outcomes 1 to 13. Assessment (100%) is linked to LiWC.

## HNB2204 Health Priorities & Nursing 4

**Locations:** St Albans.

**Prerequisites:** HNB2102 - Health Priorities & Nursing 2

**Description:** This unit builds on previous nursing units of study and further develops the students knowledge of the National Health Priorities. In particular students will be introduced to the nursing management of patients suffering from diabetes mellitus, cancer, arthritis and musculoskeletal conditions and related co-morbidities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to: 1. Apply knowledge specific to the identified national health priorities through the completion of Problem Based Learning scenario(s); 2. Understand the influence of genetics in relation to the identified national health priorities; 3. Demonstrate holistic (gender, cultural and spiritual) assessment of individuals across the lifespan experiencing one or more of the conditions identified in the National Health Priorities using a Problem Based Learning approach; 4. Critically appraise the

evidence base for the nursing management of individuals across the lifespan experiencing one or more of the conditions identified in the National Health Priorities; 5. Demonstrate further development of communication skills and interview techniques.

**Class Contact:** Lab 2.0 hrs Lecture 2.5 hrs Tutorial 1.5 hrs

**Required Reading:** LeMone. P & Burke. K. 2011. Medical-Surgical Nursing Critical thinking in Client Care Frenchs Forest, Pearson Australia Tollefson, J 2004, 2nd edn, Clinical psychomotor skills. Assessment tools for nursing students, Social Science Press, Tuggerah, NSW Bullock, S Manias, E & Galbraith, A 2007, 5th edn, Fundamentals of pharmacology, Frenchs Forest: Pearson Education, Australia. Jarvis, C 2008. 5th edn, Physical Examination & Health Assessment St Louis, Missouri: Saunders Elsevir.

**Assessment:** Assignment, Written assessment (1000 words), 30%. Assignment, Written assessment (1000 words), 30%. Examination, Written examination (1.5 hours), 40%. Students must achieve an aggregate score of 50% and pass the written examination to pass this subject. Students must achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit.

## HNB2205 Nursing and Acute Care 2

**Locations:** St Albans.

**Prerequisites:** HNB2104 - Nursing and Acute Care 1 RBM2101 - Pathophysiology & Quality Use of Medicines 1

**Description:** This unit builds on previous nursing units of study and further develops the students' knowledge of the National Health Priorities and compliments 'RBM2202 Pathophysiology & Quality Use of Medicines 2'. In particular students will be introduced to the nursing management of patients suffering from endocrine disorders, gastrointestinal disorders, arthritis and musculoskeletal conditions, cancer and their related co-morbidities. Patient Case studies and simulation activities will be utilised to develop student's ability to apply their problem solving, critical thinking and clinical decision making skills. In addition, students will expand on their psychomotor skills in the clinical laboratory.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Describe holistic assessment of individuals across the lifespan experiencing acute illness. 2. Utilise evidence based practice to explain the interprofessional management of individuals experiencing endocrine, gastrointestinal, musculoskeletal, cancer and palliative care conditions. 3. Demonstrate skills and knowledge in related clinical skills (e.g. NGT, stoma care, blood transfusions). 4. Utilise evidence based practice in the management of complex wounds. 5. Develop reflective practice skills with technical skill acquisition and clinical simulation.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Required textbooks will be prescribed by the Lecturer.

**Assessment:** Assignment, Written assessment (1000 words), 25%. Examination, Written examination (2 hours), 50%. Examination, Skills assessment (1 hour), 25%. To gain an overall pass in this unit students must achieve an aggregate score of 50% and pass the written examination (Hurdle).

## HNB2206 Nursing and Mental Health 2

**Locations:** St Albans.

**Prerequisites:** HNB2105 - Nursing and Mental Health 1

**Description:** This unit builds on HNB2105 Nursing and Mental Health 1 to assist students to further develop knowledge, skills and attitudes in the promotion of mental health. In addition the unit aims to equip students with the necessary skills to care for consumers experiencing various types of mental illness. Students will have the opportunity to learn about and apply a range of therapeutic interventions.

Students will examine the role culture has in mental illness and also investigate current mental health research and use evidence based practice in a range of areas within mental health including health promotion and early intervention.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Examine the use of classification systems and the structure, function and policy issues of psychiatric services;
2. Demonstrate knowledge in mental health and illness throughout the lifespan including mental health promotion, determinants of mental illness, clinical manifestations, and psychopathology, this includes eating, personality, and somatoform disorders;
3. Demonstrate understanding of common therapeutic modalities, including psychopharmacology, group and family therapy;
4. Critically discuss the physical, psychological and social manifestations of individuals with a dual disability (intellectual disability and mental illness);
5. Demonstrate knowledge in substance use, substance-related disorders and dual diagnosis;
6. Critically analyse the range of intervention and treatment services available to individuals with substance use including, harm minimisation and motivational interviewing;
7. Demonstrate advanced skills in communication, psychosocial assessment, mental status examination and risk assessment;
8. Demonstrate the ability to plan, implement and evaluate mental health care for individuals and families;
9. Demonstrate culturally appropriate skills in assessment and intervention of individuals from various cultural groups including Aboriginal and Torres Strait Islanders with mental illness.

**Class Contact:** Lecture 2.0 hrs Sim (Simulation) 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Elder, R., Evans, K. & Nizette, D. (2013) 3rd ed. Psychiatric and mental health nursing Chatswood, NSW: Mosby. Fortinash, K. M., & Holoday-Worret, P. A. (2007) 5th ed. Psychiatric nursing care plans St Louis: Mosby.

**Assessment:** Examination, Practical Skills Testing (1 hour), 20%. Assignment, Written Assessment (1000 words), 20%. Examination, Written Examination (2 hours), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50% and pass the written examination. The written examination assesses critical knowledge which further informs mental health practice.

### HNB2207 Professional Practice 3

**Locations:** St Abans.

**Prerequisites:** RBM2101 - Pathophysiology & Quality Use of Medicines 1 HNB2104 - Nursing and Acute Care 1 HNB2105 - Nursing and Mental Health 1

**Description:** The aim of this unit is to provide students with the opportunity to apply the acute medical surgical and mental health knowledge and skills developed in HNB2104 Nursing and Acute Care 1, HNB2105 Nursing and Mental Health 1 and RBM2101 Pathophysiology and Quality Use of Medicines 1 in either a medical/surgical or mental health setting. Students are required to complete 160 hours in a medical/surgical or mental health setting. Students placed in HNB2106 Professional Practice 2 in a mental health setting will be placed in a medical/surgical setting in semester 2. Students placed in HNB2106 Professional Practice 2 to a medical/surgical setting will be placed in a mental health care setting in semester 2 (this unit).

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this;
2. Apply relevant knowledge and skills and utilise a problem solving approach to the nursing management of individuals across various contexts of care;
3. Explain the legislative and ethical foundations of relevant health care and treatment, in particular the roles and responsibilities of the registered nurse;
4. Assess, plan, implement and evaluate nursing care for individuals and families in consultation with the nursing

5. Demonstrate health assessment knowledge and skills in physical assessment;
6. Demonstrate skills in the practice of medication management (including drug calculation, knowledge of medication used, medication orders etc.);

7. Utilise culturally appropriate communication, assessment and intervention strategies.
8. Describe the clinical manifestations and collaborative management of common acute health disorders (Acute Care placement)
9. Describe the clinical manifestations and collaborative management of common psychiatric disorders (Mental Health placement)
10. Perform a mental health status examination (Mental Health placement);
11. Utilise psychotherapeutic communication skills in mental health nursing (Mental Health placement);
12. Demonstrate assessment skills in mental health risk assessment and crisis (Mental Health placement).

**Class Contact:** Students will complete one hundred and sixty (160) hours in the clinical environment.

**Required Reading:** Required textbooks will be prescribed by the UoS coordinator.

**Assessment:** Students must achieve the grade 'competent' on their final clinical appraisal and complete the required number of 'Employer Competencies' to pass this unit. The clinical appraisal process assesses learning outcomes 1 to 7 as generic competencies for nursing practice. Learning outcome 8 is a specific competency for acute care nursing practice. Whilst learning outcomes 9 to 12 are mental health specific competencies in relation to nursing practice. Practicum, Interim Clinical Appraisal, Yes/No. Practicum, Final Clinical Appraisal, Yes/No. Clinical appraisal assesses learning outcomes 1-12 and graduate capabilities 1, 2, and 3.

### HNB3102 Nursing Professional Practice 2

**Locations:** St Abans.

**Prerequisites:** RBM2202 - Pathophysiology & Quality Use of Medicines 2 HNB2104 - Nursing and Acute Care 1 HNB2107 - Nursing Professional Practice 1

**Description:** The aim of this unit is to provide students with the opportunity to apply acute medical/surgical knowledge and skills developed in 'HNB2104 Nursing and Acute Care 1' and 'RBM2202 Pathophysiology and Quality Use of Medicines 2' in an acute or specialised healthcare setting.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this.
2. Apply relevant knowledge and skills and utilise a problem solving approach to the nursing management of individuals across various contexts of care.
3. Explain the legislative and ethical foundations of relevant health care and treatment, in particular the roles and responsibilities of the registered nurse.
4. Assess, plan, implement and evaluate nursing care for individuals and families in consultation with the nursing team.
5. Demonstrate health assessment knowledge and skills in physical assessment.
6. Exhibit skills in the safe practice of medication management (including drug calculation, knowledge of medication used, medication orders etc.).
7. Utilise culturally appropriate communication, assessment and intervention strategies.
8. Describe the clinical manifestations and collaborative management of common acute health disorders.

**Class Contact:** This is a professional practice unit. Students will complete 120 hours in an acute or specialised healthcare setting.

**Required Reading:** To be confirmed.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Students must achieve the grade 'competent' on their final professional practice appraisal to pass this unit. Supplementary assessment is not available for the Professional Practice Performance Appraisal.



## HNB3117 Health Priorities & Nursing 5

**Locations:**St Abans.

**Prerequisites:**HNB2202 - Health Priorities & Nursing 3HNB2203 - Clinical Practicum 3HNB2204 - Health Priorities & Nursing 4

**Description:**This unit builds on Health Priorities and Nursing 3 and assists students to develop further knowledge, skills and attitudes towards the promotion of mental health.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate more advanced skills in caring for consumers who are receiving treatment and care for their mental illness; 2. Discuss the clinical manifestations of psychiatric disorders across the lifespan; 3. Demonstrate more advanced skills in mental status examination; 4. Demonstrate the ability to plan, implement and evaluate mental health care for individuals and families; 5. Discuss common therapeutic modalities, including psychopharmacology, group and family therapy and motivational interviewing; 6. Demonstrate culturally appropriate skills in assessment and intervention of individuals from various cultural groups including Aboriginal and Torres Strait Islanders; 7. Discuss contemporary research relevant to mental health and illness nursing; 8. Examine mental health prevention, early intervention, and promotion; 9. Examine specialist mental health services; and 10. Demonstrate integration of communication skills and interview technique at a beginning practitioner level.

**Class Contact:**Lab 1.5 hrsLecture 1.5 hrsSim (Simulation) 1.0 hrClass contact hours per week may vary according to clinical placement allocation.

**Required Reading:**Elder, R Evans, K & Nizette, D 2004 3rd edition Psychiatric mental health nursing Mosby, Sydney Fortinash, KM & Holday Worret, PA 2007 5th edition Psychiatric nursing care plans Mosby, St Louis Kneisl, CR Wilson, HS & Trigoboff, E 2004 Contemporary psychiatric-mental health nursing Prentice Hall, New Jersey Stein-Parbury, J 2005 3rd edition Patient and person Churchill Livingstone, London Usher, K Foster, K & Bullock, S 2009 Psychopharmacology for health professionals Mosby, Sydney.

**Assessment:**Assignment, Written assessment (1000 words), 35%. Examination, Written examination (2 hours) Exam period, 65%. Students must achieve an aggregate score of 50% and pass the written examination to pass this unit of study. Assignment covers Learning Outcomes 2,4,5,7,9,10 and Graduate Capabilities 1,2,3,4,5 and LiWC. Examination covers Learning Outcomes 1,2,3,5,6,7,8 and Graduate Capabilities 1,2,3,5,6.

## HNB3118 Nursing and Complex Care

**Locations:**St Abans.

**Prerequisites:**HNB2202 - Health Priorities & Nursing 3HNB2204 - Health Priorities & Nursing 4HNB2203 - Clinical Practicum 3RBM2205 - Pathophysiology & Quality Use of Medicines 2

**Description:**This unit integrates and builds upon the knowledge and skills gained in previous units of study. Students gain a deeper knowledge of health conditions of the health needs of the local community and other conditions not previously studied. Students also gain a greater understanding of the social-cultural aspects of the person and how these impact on their health and the illness experience. The unit seeks to facilitate individual and family management skills through the application of higher-level knowledge and skills in clinical decision making. This unit aims to promote the ability of students to influence decisions affecting care outcomes.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Consolidate knowledge and clinical decision making through the completion of

problem based learning packages; 2. Discuss the legal and ethical issues surrounding refusal of treatment and end of life decisions; 3. Assess, plan, implement and evaluate the care of complex patients in case based scenarios; 4. Discuss interventions for complex patients 5. Discuss and appreciate the requirements for the safe practice of complex medication regimes (including drug calculation, knowledge of medication used, medication orders etc.); 6. Have an appreciation for time management skills when caring for patients with complex needs; 7. Demonstrate a commitment to work as a member of a team collaboratively planning care for patients; and 8. Discuss the needs for beginning delegation and supervision skills.

**Class Contact:**Lecture 3.0 hrsTutorial 2.0 hrsClass contact hours per week may vary according to clinical placement allocation.

**Required Reading:**RN Competency Standards August 2008

<http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> Code of Ethics for Nurses August 2008 <http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> Code of Professional Conduct for Nurses August 2008

<http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> LeMone, P et al 2011 Medical-Surgical Nursing: critical thinking in client care. Upper Saddle River NJ, Pearson Professional Boundaries for Nurses - March 2010

<http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> Bullock, S. Manias, E., & Galbraith, A. (2010). Fundamentals of pharmacology (5th ed.).

Australia: Frenchs Forest: Pearson Education. Health Professions Registration Act 2005 Act No. 97/2005 (incorporating amendments as at 2006) (Available at <http://www.dms.dpc.vic.gov.au>) Weber, J & Kelley J. (2007) Health Assessment in Nursing (3rd ed.). Philadelphia: Lippincott Williams & Wilkins. August 2008 RN Competency Standards <http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> August 2008 Code of Ethics for Nurses

<http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> August 2008 Code of Professional Conduct for Nurses <http://www.nursingmidwiferyboard.gov.au/Codes-and-Guidelines.aspx> Bullock, S

Manias, E & Galbraith, A 2010 5th Fundamentals of Pharmacology Australia: Frenchs forest. Pearson LeMone, P et al 2011 1st Medical-Surgical Nursing: critical thinking in client care Upper Saddle River NJ Pearson Weber, J & Kelley 2007 3rd health Assessment in Nursing Philadelphia. Lippincott Williams & Wilkins

**Assessment:**Students are required to sit a mathematics mastery test as a diagnostic tool. Any student not achieving 100% mastery will be required to undertake remedial work in mathematics skills. Assignment, Written assessment (1000 words) Week 6, 30%. Examination, Written examination (2 hours) Exam period, 70%. To gain an overall pass in this unit students must achieve an aggregate score of 50% and gain a pass in the written examination. Students will normally be granted a supplementary assessment if they achieve a grade of 45 to 49%. Students must achieve at least 50% in the supplementary assessment to be granted a P 50% as a final grade for the unit. Students who do not achieve a pass in the written examination but who achieve an aggregate of 50% or greater will have a M (ungraded fail) grade awarded as their final result.

## HNB3119 Clinical Practicum 4

**Locations:**St Abans.

**Prerequisites:**HNB2202 - Health Priorities & Nursing 3HNB2204 - Health Priorities & Nursing 4HNB2203 - Clinical Practicum 3RBM2205 - Pathophysiology & Quality Use of Medicines 2Current POLICE CHECK; Current WORKING WITH CHILDREN'S CHECK; Student Declaration Form. All clinical practicum units of study have a special requirement for the provision of Mandatory Documentation see School of Nursing & Midwifery Clinical Practicum Rules.

**Description:** This unit integrates and builds upon the knowledge and skills gained in previous units of study. Students apply the knowledge and skills gained in Nursing & Complex Care to the clinical setting specifically focussing on the health needs of the local community. Students also consider how the social-cultural aspects of clients in their care impact on their health and the illness experience. Students apply the higher-level knowledge and skills gained in Nursing & Complex Care in clinical decision making, enabling more independent decision making and skills to engage in collaborative practice in a range of contexts across the lifespan. This unit aims to promote the ability of students to influence decisions affecting care outcomes.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this;
2. Discuss quality measures used to evaluate healthcare delivery performance;
3. Utilise communication strategies to enhance disciplinary and interdisciplinary teamwork;
4. Demonstrate problem solving, time management and decision-making strategies that support successful outcomes in patient care;
5. Demonstrate comprehensive risk management in patient care;
6. Demonstrate the ability to provide patient care in a changing health care environment;
7. Demonstrate effective presentation and report writing skills;
8. Demonstrate consolidation of knowledge and clinical decision making through discussion of patient care with preceptors/educators;
9. Demonstrate the ability to assess, plan and implement the care for and evaluate the care of complex patients
10. Demonstrate the ability to safely undertake complex interventions;
11. Demonstrate skills in the safe practice of complex medication regimes (including drug calculation, knowledge of medication used, medication orders etc.);
12. Demonstrate time management skills;
13. Demonstrate the ability to work as a member of the multidisciplinary team collaboratively planning care for patients;
14. Demonstrate professional communication skills in interactions with patients, carers and health professionals; and
15. Continue entering clinical achievements into their personal professional practice portfolio.

**Class Contact:** This is a 160 hour acute care clinical placement subject which aligns with the theory subject Nursing and Complex Care.

**Required Reading:** Tollefson, J 2010 4th edn. Clinical Psychomotor Skills: Assessment Tools for Nursing Students Cengage Learning Australia LeMone, P etal, 2011 1st Medical Surgical Nursing: Critical Thinking in Client Care Pearson, Sydney Bullock, S Manias, E Galbraith, A 2010 5th Fundamentals of Pharmacology Pearson, Sydney

**Assessment:** Practicum, Interim Clinical Appraisal - midway, Pass/Fail. Practicum, Final Clinical Appraisal - completion, Pass/Fail. Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum assessment 1 & 2 assesses all graduate capabilities 1 to 6 and all learning outcomes 1 to 15. Assessment (100%) is linked to LiWC.

## HNB3120 Issues in Professional Practice

**Locations:** St Abans.

**Prerequisites:** HNB2202 - Health Priorities & Nursing 3HNB2204 - Health Priorities & Nursing 4HNB2203 - Clinical Practicum 3RBM2205 - Pathophysiology & Quality Use of Medicines 2

**Description:** The aim of this unit is for students to further consider the concept of professional practice. Professional practice will be explored in the context of the healthcare system and with a practical insight into the processes of transition from student to beginning practitioner.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Determine best practice services in the health care industry;
2. Describe quality measures used to evaluate healthcare delivery performance;
3. Discern and utilise communication strategies to enhance disciplinary and interdisciplinary teamwork (including conflict resolution, and grievance procedures);
4. Compare leadership styles and determine how teamwork can be fostered to achieve an effective work and care environment;
5. Analyse critical pathways as a modality of patient care;
6. Examine problem solving, time management and decision-making strategies that support successful outcomes in patient care;
7. Explain comprehensive risk management in patient care;
8. Clearly identify the role of the Division 1 nurse;
9. Discuss employer expectations of the Division 1 nurse;
10. Discuss the realities of providing patient care in a dynamic and challenging health care environment;
11. Demonstrate effective presentation and report writing skills;
12. Finalise their Personal-Professional practice portfolio including their reflective journal, record of in-service education, SDL, short courses, voluntary work, student reps, awards and appraisals; and
13. Appraise their own self-wellness and psychological resilience.

**Class Contact:** Lecture 1.5 hrs Sim (Simulation) 1.0 hr Tutorial 1.5 hrs

**Required Reading:** Chang, E., & Daly, J. (Ed.) (2012) 3e Transitions in nursing: preparing for professional practice Sydney: Churchill Livingstone, Elsevier Health Practitioner Regulation National Law Act 2009 Available from <http://www.ahpra.gov.au/Legislation-and-Publications/Legislation.aspx>

**Assessment:** To gain an overall pass in this unit students must achieve an aggregate score of 50% for the unit. Assignment, Written assessment (500 words), 15%. Assignment, Written assessment (2000 words), 70%. Other, Oral presentation on written assessment topic (10 minutes) Weeks 9-12, 15%.

## HNB3123 Working With Evidence

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit aims to prepare students to be consumers of research. The contribution of research knowledge to the provision of evidence based health care will be evaluated. Different research methodologies used in healthcare will assist students to develop the critical appraisal skills necessary for evidence based practice.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the origins and development of evidence based healthcare practice;
2. Critically examine the relationship between research and improvement in healthcare outcomes;
3. Frame a research question in a structured and focused manner;
4. Search for evidence using bibliographic data bases;
5. Demonstrate an understanding of qualitative and quantitative research methodologies;
6. Critically appraise a peer reviewed journal article using an appropriate appraisal tool;
7. Examine the ethical principles of research;
8. Evaluate research papers including systematic reviews on aspects of clinical practice.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** There is no Required Text for this Unit.

**Assessment:** Assignment, Written Assessment (500 words), 10%. Assignment, Written Assignment (1200 words), 30%. Examination, Written Examination (2 hours), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

## HNB3124 Professional Practice 4

**Locations:** St Abans.

**Prerequisites:** HNB2106 - Professional Practice 2RBM2202 - Pathophysiology & Quality Use of Medicines 2HNB2205 - Nursing and Acute Care 2HNB2206 - Nursing

and Mental Health 2HNB2207 - Professional Practice 3

**Description:** This unit integrates and builds upon the knowledge and skills gained in previous units of study. Students apply the knowledge and skills gained in HNB3141 Nursing & Complex Care to the clinical setting specifically focussing on the health needs of the local community. Students also consider how the social-cultural aspects of clients in their care impact on their health and the illness experience. Students apply the higher-level knowledge and skills gained in HNB3141 Nursing & Complex Care in clinical decision making, enabling more independent decision making and skills to engage in collaborative practice in a range of contexts across the lifespan. This unit aims to promote the ability of students to influence decisions affecting care outcomes.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Examine their current scope of practice and work within this;
2. Apply quality measures to evaluate healthcare delivery performance;
3. Articulate communication strategies to enhance disciplinary and interdisciplinary teamwork
4. Demonstrate problem solving, time management and decision-making strategies that support successful outcomes in patient care;
5. Utilise comprehensive risk management in patient care
6. Demonstrate the ability to provide patient care in a changing health care environment
7. Explain knowledge and defend clinical decisions in patient care with preceptors/educators;
8. Exhibit the ability to assess, plan and implement care for and evaluate the care of complex patients;
9. Demonstrate effective presentation and report writing skills;
10. Safely perform complex nursing interventions

**Class Contact:** Students to complete one hundred and twenty (120) hours in a clinical environment.

**Required Reading:** Required textbooks will be prescribed by the UoS coordinator.

**Assessment:** Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the Bachelor of Nursing Professional Practice Guidelines. Practicum, Interim Clinical Appraisal, Yes/No. Practicum, Final clinical appraisal, Yes/No. Students must achieve the grade 'competent' on their final clinical appraisal to pass this unit.

## HNB3140 Professional Studies 2 & Interprofessional Practice

**Locations:** St Abans.

**Prerequisites:** HNB2106 - Professional Practice 2HNB2207 - Professional Practice 3HNB2205 - Nursing and Acute Care 2HNB2206 - Nursing and Mental Health 2RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit builds on HNB1103 Professional Studies 1 and enables students to further develop their skills and knowledge in the area of professional and interprofessional practice (IPP). The unit is focused on assisting students with transition from student nurse to registered graduate nurse. The role and responsibilities of registered nurses and working within IPP will be expanded upon. Students will be taught the knowledge and skills required to apply for registration and gain a graduate year position. Leadership roles and responsibilities within nursing will also be critically discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Produce a curriculum vitae and application letter appropriate for applying for a Graduate Year position;
2. Demonstrate skills in interview techniques relevant to Graduate Year applications;
3. Describe the process for registration with the Australian Health Practitioner Regulation Authority (AHPRA);
4. Further examine the roles and scope of practice of healthcare professionals;
5. Demonstrate knowledge and skills in appropriate delegation;
6. Demonstrate an understanding

of Crisis Resource Management (CRM) and situational awareness in relation to healthcare practices;

7. Discuss conflict resolution and performance management in the healthcare setting;
8. Apply appropriate knowledge and skills in professional and interprofessional communication and teamwork within a simulated setting.

**Class Contact:** Lecture 2.0 hrs Sim (Simulation) 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** No specific text is required for this unit. Contemporary references will be used and given in the unit outline

**Assessment:** The assessment tasks link the learning outcomes and graduate capabilities. The first task will link to communication for future employment and require critical thinking and planning. The group presentation will critically reflect capstone knowledge and link this to future employment and understanding of the registered Nurse standards. The final assignment will draw together the collaborative work of the group and that of the individual to produce a reflective and knowledge based assignment. Assignment, Written assessment (1000 words), 25%. Presentation, Group class presentation, 25%. Assignment, Written assessment (2000 words), 50%.

## HNB3141 Nursing and Complex Care

**Locations:** St Abans.

**Prerequisites:** HNB2106 - Professional Practice 2HNB2205 - Nursing and Acute Care 2HNB2207 - Professional Practice 3RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit builds upon and integrates knowledge and skills gained in previous units of study. Students gain a deeper knowledge of the healthcare needs of culturally diverse communities of people with acute and chronic conditions as they transition through the healthcare system from home to hospital to the community and home. Students take a holistic, problem solving approach to nursing the person with complex healthcare needs. They are encouraged to apply higher-level knowledge and skills in clinical decision making. Taking an interdisciplinary approach this unit aims to promote the ability of students to influence decisions affecting care outcomes working collaboratively with other members of the healthcare team in a range of settings.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Further expand knowledge and clinical decision making through the completion of problem based scenarios in relation to patients with a range of complex problems related to shock and other conditions;
2. Integrate previous knowledge about pathophysiology and pharmacology to utilise a problem based approach in decision making about complex patients with acute and chronic illnesses;
3. Demonstrate an integrated interprofessional approach to the assessment and delivery of nursing and medical interventions to people with complex care requirements via simulations and in the laboratory;
4. Explain the need for safe practice for the preparation and administration of medications for people with complex conditions in a range of settings;
5. Examine previous knowledge and skills that will encourage an understanding of how to take an interdisciplinary approach to care planning for patients;
6. Consolidate previous knowledge about shock management and the perioperative patient experience and integrate into the care of patients having planned or emergency surgery in the perioperative and critical care environments;
7. Demonstrate mastery in complex drug calculations;
8. Demonstrate knowledge, critical thinking and skills in complex psychomotor nursing interventions.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs A total of fifty-four (54) hours comprising of on-line, mixed mode and/or face-to-face lectures, tutorials, clinical laboratories and simulation.

**Required Reading:** Students are strongly encouraged to have access to the following texts. Bratto, V. & Rafferty, K. (2015) 2nd Clinical dosage calculation for Australia and New Zealand Melbourne. Cengage Farrell, M. & Dempsey, J. (2013) 3rd Smeltzer & Bare's Textbook of medical surgical nursing, Sydney. Williams and Wilkins Tollefson, J. & Hillman, E. (2016) 6th Clinical psychomotor skills:

Assessment tools for nurses Melbourne, Cengage

**Assessment:** Other, Participation in online activities (1000 words), 20%. Other, OSCA (skill testing) (10 minutes), 10%. Examination, Written Examination (2 hours), 70%. Test, Drug Calculation Mastery - 20 minutes, 0%. Non Weighted Hurdle: Medication Calculation Assessment. Students must achieve 100% to pass. Students will be eligible for a maximum of 3 attempts for the medication calculation assessment. To gain an overall pass in this unit, students must attend all laboratory classes (or provide evidence to unit of study coordinator for consideration) and submit all assessment items. Students must achieve an aggregate score of 50%. There will be no supplementary assessments for this unit.

## HNB3200 Neonatal Nursing

**Locations:** St Abans.

**Prerequisites:** HNB 2205 - Nursing and Acute Care 2 RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit enables students to explore the speciality of neonatal nursing at an advanced undergraduate level. The content within the unit will expose students to principles of neonatal nursing and critically explore the skills and knowledge required to provide care for neonatal patients and their families across a range of common complications associated with neonates and prematurity. The unit will include use of evidence based practice, ethics, critical thinking and analysis

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain a range of common neonatal conditions across the neonatal period;
2. Examine evidence based care of neonatal patients and their families;
3. Articulate the assessment, diagnosis and collaborative management of neonatal conditions including rationales;
4. Illustrate knowledge and understanding of medication management of neonatal conditions;
5. Provide evidence of reflective practice, problem solving and critical thinking in group discussions;
6. Demonstrate advanced knowledge and skills in information literacy and academic writing.

**Class Contact:** Lecture 2.0 hrs A total of forty-eight (48) hours of content will be delivered either online or in a blended learning format.

**Required Reading:** Nil texts required for this unit. The unit will utilise current evidence based journals to support content.

**Assessment:** Test, Four (4) Online Tests (30 minutes each), 40%. Assignment, Written assessment (2000 words), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

## HNB3205 Nursing Specific Populations

**Locations:** St Abans.

**Prerequisites:** HNB 3118 - Nursing and Complex Care HNB 3117 - Health Priorities & Nursing 5 HNB 3119 - Clinical Practicum 4

**Description:** In this unit, students further develop their knowledge and understanding of unique health issues affecting specific individuals and patient populations cared for across diverse and contemporary practice contexts. The unit explores contemporary models of nursing practice, inter-professional care and primary health care designed to address the health care needs of specific populations. Examples of specific health issues addressed in this unit may include: communicable diseases, men's and women's health, child/adolescent health, disaster nursing, refugee health, sexual

health and bariatrics. The contemporary and expanding role of nurses will be explored across diverse contexts such as practice nursing, community nursing, school nursing, case management and the nurse practitioner.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically discuss health care issues related to specific populations;
2. Demonstrate the ability to assess, plan, implement and evaluate care of specific populations using case based scenarios;
3. Demonstrate problem solving and critical thinking skills to adjust care and priorities in changing simulation situations;
4. Demonstrate inter-professional communication skills and clinical decision making skills during related clinical situations;
5. Utilise research findings to support or improve current practice;
6. Demonstrate mastery of complex drug calculations;
7. Analyse the legal and ethical issues surrounding caring for specific populations; and
8. Examine the challenges of providing appropriate care to specific populations within varied and contemporary practice contexts.

**Class Contact:** Lecture 2.0 hrs Sim (Simulation) 1.0 hr Tutorial 1.0 hr Class contact hours per week may vary according to clinical placement allocation.

**Required Reading:** Nil.

**Assessment:** To gain an overall pass in this unit the student must achieve an aggregate score of 50%, achieve 100% in the drug calculations mastery test and successfully complete three of the four on-line simulations, and attend and participate in the two face to face simulations. Assignment, Written assignment (1500 words), 40%. Assignment, Written assignment (2000 words), 60%. Hurdle 1: The student must achieve 100% in the drug calculations mastery test. Hurdle 2: Successful completion of three of the four on-line simulations and attendance and participation in the face to face simulations. Assignment 1 and 2 assesses Graduate Capabilities P5, I5, C5, W5, S6, CD4 and Learning Outcomes 1, 3, 4, 5, 6 & 7 Hurdle 1 assesses Graduate Capabilities P4, & I5 and Learning Outcome 6 Hurdle 2 assesses the entire LiWC component (25%), Graduate Capabilities P4, I5, C5, W4, S4, & CD5 and Learning Outcomes 1, 2, 3 & 8 Assignment 1 and 2 assesses Graduate Capabilities P5, I5, C5, W5, S6, CD4 and Learning Outcomes 1, 3, 4, 5, 6 & 7.

## HNB3206 Clinical Practicum 5

**Locations:** St Abans.

**Prerequisites:** HNB 3118 - Nursing and Complex Care HNB 3119 - Clinical Practicum 4 HNB 3117 - Health Priorities & Nursing 5 Current POLICE CHECK; Current WORKING WITH CHILDREN'S CHECK; Student Declaration Form. All clinical practicum units of study have a special requirement for the provision of Mandatory Documentation see School of Nursing & Midwifery Clinical Practicum Rules.

**Description:** Consolidation and clinical application of the knowledge and skills gained in previous nursing and bioscience subjects as indicated in the learning outcomes. Students will be supported and supervised in their clinical placements by preceptors and / or clinical teachers.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify their current scope of practice and work within this;
2. Professionally identify and solve complex clinical problems;
3. Demonstrate the ability to comprehensively assess, plan, implement and evaluate care for a patient load similar to that of a graduate nurse;
4. Demonstrate the ability to adjust care and priorities in changing situations;
5. Demonstrate professional communication skills in interactions with patients, significant others and health professionals;
6. Demonstrate beginning delegation and supervision skills in the clinical environment; and
7. Use research findings to support or improve current practice.

**Class Contact:** This is a 240 hour clinical placement unit - 160 hours will be dedicated

to an acute care placement and 80 hours will be dedicated to a community health rotation. This unit aligns with the theory units Nursing Specific Populations and Nursing Complex Care; and incorporates 15 hours of simulation laboratory work over the semester.

**Required Reading:** Required readings are relevant to all clinical placement areas used in the unit. Further readings relevant to particular clinical placement areas will be made available via the unit's e-learning system. LeMone, P., Burke, K., Dwyer, T., Levett-Jones, T., Moxham, L., Reid-Searl, K.,...Raymond, D. (2011). Medical-surgical nursing: critical thinking in client care. Upper Saddle River, NJ: Pearson. Bullock, S., Manias, E., & Galbraith, A. (2010). (5th ed.). Fundamentals of pharmacology. Frenchs Forest, Australia: Pearson. Tollefson, J. (2010). (4th ed.). Clinical psychomotor skills: assessment tools for nursing students. Sydney: Cengage Learning.

**Assessment:** Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Hurdle assessment 1: Reflective e-portfolio exercise in relation to the community health rotation. Hurdle assessment 2: Completion of all simulation exercises. In order to pass this unit of study, students must complete all hurdle requirements and achieve a pass grade on final clinical appraisal. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum, Interim Clinical Appraisal - midway point of acute care component of placement, Pass/Fail. Practicum, Final Clinical Appraisal - completion point of acute care component of placement, Pass/Fail. Students must meet the minimum standards identified on the Clinical Appraisal Tool on their clinical appraisal to gain a pass in this unit. Clinical unit of study enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum assessment 1 & 2 assesses all graduate capabilities 1 to 6 and all learning outcomes 1 to 7. Assessment (100%) is linked to LiWC.

### HNB3208 Directed Studies for Nursing

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit enables students to negotiate an individual learning contract relevant to the study of healthcare with the Unit coordinator. Topics equivalent to other third year 12 credit point units and relevant to the discipline area will be developed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Identify and describe the key elements of the negotiated study area associated with their selected area of study; 2. Locate and describe the relevant underpinning theory in relation to the negotiated study area; 3. Relate the appropriate assessments, and investigative techniques where applicable to the negotiated study area; and 4. Reflect upon the negotiated area of study as outlined in the learning contract and identify the elements of new or enriched learning encountered.

**Class Contact:** Students are expected to undertake six (6) hours per week of on-line or equivalent activity over eight (8) weeks. Students will also undergo a combination of lectures, tutorials and laboratories equivalent to forty-five (45) hours.

**Required Reading:** The content of this unit of study will vary according to the specific needs of the students undertaking it. The required reading will depend upon the content area of the studies undertaken. Students are expected to access a range of readings (ie the literature) from peer reviewed and professional sources.

**Assessment:** Test, Four (4) On-line Tests, 40%. Assignment, Written Assignment (2000 words), 60%. Assignment tasks will be negotiated with defined groups of students with similar learning contracts. .

### HNB3209 Nursing and the Community

**Locations:** St Abans.

**Prerequisites:** HNB3141 - Nursing and Complex Care HNB3123 - Working With Evidence HNB3124 - Professional Practice 4

**Description:** This advanced practice unit will provide students with the opportunity to apply and integrate their knowledge and skills for the delivery of person-centred care in non-acute and community settings. Students will review, observe and participate in models of care delivery which includes collaborative and autonomous models of nursing practice, multidisciplinary and interprofessional partnerships with patients, families and supporting services. Key concepts and issues impacting on quality improvement approaches in healthcare and their effect on health outcomes, compliance and chronic disease management will be critically examined. Students will have the opportunity to undertake two weeks of supervised professional practice in a community setting.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Analyse the scope of community nursing (acute, non-acute, chronic and palliative care) and interprofessional practice in Australia; 2. Appraise advances in and limitations of Primary Health Care (PHC) in Australia and globally; 3. Compare and contrast major community health needs of vulnerable families and patients in local, national and global regions and relate these to the national and global health priorities; 4. Demonstrate knowledge and skills in the assessment, planning, implementation and evaluation of care of patients, families or communities within community settings; 5. Examine issues associated with community based program delivery; 6. Analyse issues related to health outcomes, compliance and chronic disease management; 7. Integrate the principles of occupational health and safety, risk assessment and nursing practice within community settings; 8. Demonstrate knowledge and skills required to practice community nursing in a variety of community settings; 9. Prepare a practice portfolio based on their community professional practice experience.

**Class Contact:** Lecture 2.0 hrs Tutorial 4.0 hrs A total of forty-eight (48) theoretical hours per semester comprising of lectures, on-line activities and tutorials. In addition students will undertake eighty (80) hours of professional practice placement in a community setting.

**Required Reading:** Required textbooks will be prescribed by the Lecturer.

**Assessment:** Examination, Online tests - 15 mins x 2 (5% each), 30 mins x 1 (10%), 20%. Assignment, Written assessment (2000 words), 30%. Portfolio, Community practice portfolio (3000 words), 50%. Practicum, Professional Practice Performance Appraisal, 0%. To gain an overall pass in this unit students must achieve an aggregate score of 50% and pass the Professional Practice Performance Appraisal.

### HNB3210 Professional Practice 5

**Locations:** St Abans.

**Prerequisites:** HNB3140 - Professional Studies 2 & Interprofessional Practice HNB3141 - Nursing and Complex Care HNB3124 - Professional Practice 4

**Description:** Student will be expected to consolidate and apply the knowledge and skills gained in previous nursing and bioscience subjects as indicated in the learning outcomes. Students will be supported and supervised in their professional practice placements by preceptors and / or clinical teachers.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Identify their current scope of practice and work within this; 2. Professionally identify and solve complex clinical problems; 3. Demonstrate the ability to comprehensively assess, plan, implement and evaluate care for a patient load similar

to that of a graduate nurse; 4. Demonstrate the ability to adjust care and priorities in changing situations; 5. Demonstrate professional communication skills in interactions with patients, and their significant others and health professionals; 6. Demonstrate beginning delegation and supervision skills in the clinical environment; and 7. Apply research findings to support or improve current practice.

**Class Contact:** Placement 10.0 hrs Students are to complete four (4) hours of simulation in the semester. In addition students are required to complete a total of one-hundred and sixty (160) hours of professional practice.

**Required Reading:** Texts required for Nursing and Acute Care 1 & 2 (HNB2104 & HNB2205) and Nursing and Complex Care (HNB3141)

**Assessment:** Students must achieve the grade 'competent' on their final clinical appraisal, complete the required number of "Employer competencies" and have completed 800 hours of clinical placement over the course to pass this unit. Professional practice enrolment, placement allocation and academic progress will be managed according to the School of Nursing & Midwifery Clinical Rules. Practicum, Interim Clinical Appraisal, Yes/No. Practicum, Final Clinical Appraisal, Yes/No.

### HNB3217 Cardiac Nursing

**Locations:** St Albans.

**Prerequisites:** HNB 2205 - Nursing and Acute Care 2 RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit enables students to explore the speciality of cardiac nursing at an advanced undergraduate level. The content within the unit will expose students to advanced practice principles of cardiac nursing critically exploring the skills and knowledge required to provide care for cardiac patients across a range of conditions. Students will consolidate and build upon previous cardiac nursing knowledge provided in years one and two of the degree. The unit will include use of evidence base practice, ethics, critical thinking and analysis.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Consolidate knowledge of cardiac patients and evidence based care provided;
2. Demonstrate understanding of common interventions in the diagnosis of cardiac conditions;
3. Demonstrate understanding of cardiac interventions with rationales;
4. Consolidate medication knowledge of cardiac management and patient care;
5. Explain cardiac conditions across the life span;
6. Provide evidence of reflective practice in group discussions;
7. Demonstrate knowledge and skills in information literacy and academic writing.

**Class Contact:** Lecture 2.0 hrs A total of forty-eight (48) hours per semester of content will be delivered either online or in a blended learning format.

**Required Reading:** Nil

**Assessment:** Test, Four (4) Online tests (30 mins each), 40%. Assignment, Written Assessment (2000 words), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

### HNB3218 Paediatric Nursing

**Locations:** St Albans.

**Prerequisites:** HNB 2205 - Nursing and Acute Care 2 RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit enables students to explore the speciality of paediatric nursing at an advanced undergraduate level. The content within the unit will expose students to advanced practice principles of paediatric nursing critically exploring the skills and knowledge required to provide care for paediatric patients across a range of conditions. Students will consolidate and build upon previous paediatric nursing knowledge provided in years one and two of the degree. The unit will include use of

evidence base practice, ethics, critical thinking and analysis.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Consolidate knowledge of paediatric patients and evidence based care provided;
2. Demonstrate understanding of common interventions in the diagnosis of paediatric conditions;
3. Demonstrate understanding of paediatric interventions with rationales;
4. Consolidate medication knowledge of paediatric management and care;
5. Explain a range of common paediatric conditions across the paediatric life span;
6. Provide evidence of reflective practice in group discussions;
7. Demonstrate knowledge and skills in information literacy and academic writing.

**Class Contact:** Lecture 2.0 hrs Forty-eight (48) hours per semester consisting of a total of six (6) hours of content per week over eight (8) weeks, which will be delivered either online or in a blended learning format.

**Required Reading:** Nil

**Assessment:** Test, Four (4) Online Tests (30 mins each), 40%. Assignment, Written Assessment (2000 words), 60%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%.

### HNB3219 Perioperative Nursing

**Locations:** St Albans.

**Prerequisites:** HNB 3141 - Nursing and Complex Care HNB 3140 - Professional Studies 2 & Interprofessional Practice

**Description:** Students are provided with a wide variety of learning options with which to interact in the unit. Issues around professional Perioperative Nursing and the different contemporary surgical and nursing specialities are explored in detail as students are taken on the patient's surgical journey from the decision to have surgery to the resolution of surgical sequelae. This unit enables students to explore areas of interest as well as building on foundational knowledge. It is designed to be interactive using multi media as well as providing students with the latest information and resources in contemporary surgical and nursing trends.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify the role of the perioperative nurse and differentiate between the nursing roles in perioperative settings;
2. Explain the role of the perioperative nurse in caring for people undergoing surgical and anaesthetic intervention in a variety of settings;
3. Consolidate previous knowledge about surgery and anaesthesia and integrate into the care of people requiring a diversity of specialist surgical procedures;
4. Explain the need for aseptic techniques in surgery;
5. Identify the risks for patients and staff in the perioperative setting;
6. Discuss the history and the professional growth of perioperative nursing;
7. Recognise and explore perioperative nursing practice and identify areas for knowledge enrichment.

**Class Contact:** Students are expected to interact with a diversity of learning materials that are designed so they can self-pace through the unit. There are four specifically designed learning modules that make up the unit. They are designed so that students have 6-8 hours of online activities per week over 8 weeks.

**Required Reading:** Students are directed to resources as appropriate for each speciality area

**Assessment:** Test, Four (4) Online Tests (30 minutes each), 40%. Assignment, Assignment (2,000 words), 60%. To pass this unit students require an aggregate score of 50%.

### HNB3220 International Project

**Locations:** St Albans.

**Prerequisites:** RBM1103 - Bioscience 1: Body Structure & Function HNB1103 -

Professional Studies 1HNB1102 - Foundations in Nursing 1

**Description:** This unit is designed for students that want to experience living and observing health care in another country. It is designed to build on foundational knowledge and develop students awareness and understanding of the issues and challenges of the health care system in a country other than Australia as well as enable students to critically reflect on the Australian health care system from a global perspective.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Summarise and provide an analysis of the current key issues for the health system in the destination country;
2. Explain the differences between public and private health care systems and urban and rural access to health care;
3. Discuss the role of nurses and other members of the health team in the destination country;
4. Discuss the concept of transnational nursing;
5. Reflect and evaluate on the strengths and weaknesses of health care delivery systems in other countries;
6. Compare and contrast cultural differences and assess how these affect consumer attitudes towards nurses and health.

**Class Contact:** Contact hours will vary from student to student but it is expected that students will have a minimum of 2 weeks intensive guided experience in the delivery of health care while in another country. Students will be exposed to another culture and will have 40-50 hours of information sessions and experiential learning over 2 weeks. As required by ANMAC there is a compulsory face to face information session, supported by an online cultural orientation programme to be completed pre departure as well as a debrief session on return to Australia.

**Required Reading:** Muennig, P., & Su, C. (2013). (1st ed.) *Introducing global health: Practice, policy, and solutions*. USA: John Wiley & Sons Walraven, G. (2011). (1st ed.) *Health and poverty: Global health problems and solutions*. UK: Taylor and Francis Pumell, L. (2012). (4th ed.) *Transcultural health care: A culturally competent approach*, USA :FA Davis Company

**Assessment:** Portfolio, The portfolio consists of a daily reflective journal completed on tour, photos, video evidence and written work on key issues in global health care., 100%. To pass this unit students must obtain a cumulative mark of 50%.

### HNB3224 Mental Health and Illness

**Locations:** St Abans.

**Prerequisites:** HNB 2206 - Nursing and Mental Health 2RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This elective unit is designed to develop students' knowledge, skills and attitudes in order to promote mental health and to meet the needs of people with altered mental health status in inpatient and community settings. To consolidate and expand on previously acquired knowledge in mental health nursing.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Examine the experience and treatment of individuals presenting with mental illness;
2. Analyse the ethical and legal requirements for mental health care;
3. Explore the standards of practice for mental health nurses;
4. Identify and discuss psychopharmacology in relation to the treatment of an acutely agitated consumer;
5. Further develop knowledge and administration skills in psychotropic medications;
6. Recognise and explore the relationship between metabolic syndrome and mental illness;
7. Explore current psychiatric advanced directives;
8. Examine the nurse practitioner model and its application in mental health.

**Class Contact:** Lecture 4.0 hrs Students are expected to interact with a diversity of learning materials that are designed so they can self-pace through the unit. There are four specifically designed learning modules that make up the unit. They are designed

so that students have 6-8 hours of activities per week over 8 weeks.

**Required Reading:** There are nil required texts for this unit. The unit coordinator will provide a list of readings and resources for students, if applicable.

**Assessment:** Test, Online test for 30 minutes. Each test is worth 10% (4 tests), 40%. Assignment, 2000 words, 60%. To pass this unit, students required to achieve a cumulative mark of 50% .

### HNB3225 History of Nursing

**Locations:** St Abans.

**Prerequisites:** RBM1103 - Bioscience 1: Body Structure & Function AEK2103 - Aboriginal Health and Wellbeing HNB 1102 - Foundations in Nursing 1HNB1103 - Professional Studies 1

**Description:** Students are provided with a variety of multi-media options with which to interact. This unit builds on knowledge about the history of nursing as a profession gained in previous units of study. Students gain a deeper knowledge about the development of nursing beyond Nightingale and in particular about those that have contributed to the development of nursing transnationally and in Australia. Students will gain beginning research skills in historical methods as they interact with the materials to gain insight into the experiences of Australian nurses at war and on the international stage.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Examine the impact of Florence Nightingale on the development of nursing in Australia;
2. Evaluate the development of the professions focusing on the professions of midwifery and nursing in Australia;
3. Identify eminent nurses that have shaped the development of nursing in Australia as well as internationally;
4. Consolidate knowledge about the beginning of nursing in Australia and its development into a profession;
5. Explain the major events that have shaped the development of the nursing profession in Australia;
6. Explore methods used for historical research;
7. Locate sources for historical research in Australia and in other countries.

**Class Contact:** Students are expected to interact with a diversity of learning materials that are specifically designed so they can self-pace through each of the four learning modules. They are designed so that students have 6-8 hours of online activities per week over 8 weeks. The materials are interactive and designed with the learning activities to trigger group discussion and motivate students.

**Required Reading:** Bassett, J. (1997). (2nd ed.) *Guns and brooches : Australian army nursing from the Boer War to the Gulf War*. Melbourne: Oxford University Press Nelson, S., & Rafferty, AM. (2010). (1st ed.) *Notes on Nightingale: The influence and legacy of a nursing icon*. USA: Cornell University Press

**Assessment:** Test, Four (4) Online Tests (30 minutes each), 40%. Assignment, Assignment (2,000 words), 60%. To pass this unit students are required to achieve a cumulative mark of 50%.

### HNB3227 Mental Health and Nursing

**Locations:** St Abans.

**Prerequisites:** HNB2107 - Nursing Professional Practice 1HNB1204 - Foundations of Nursing and Midwifery 2RBM2202 - Pathophysiology & Quality Use of Medicines 2

**Description:** This unit introduces students to Psychology, Mental Health and Illness. It aims to build on the communication and assessment skills developed in previous units of study. In addition, the objective is to develop students' knowledge, skills and attitudes in the promotion of mental health. The unit provides the knowledge and skills students require to meet the needs of people with altered mental health status in hospital and community settings. It also complements the information provided in

'RBM2202 Pathophysiology & Quality Use of Medicines 2.'

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Outline major theories of human development.
2. Authenticate the importance of professional practice including confidentiality and patient privacy associated with the provision of foundational nursing and midwifery care.
3. Describe the theoretical bases of mental health nursing and the delivery of mental health services in Australia.
4. Articulate knowledge of determinants of mental illness, clinical manifestations and psychopathology.
5. Interrogate the legislative and ethical foundations of mental health care and treatment, in particular the roles and responsibilities of the nurse under the Victorian Mental Health Act.
6. Discuss mental health nursing care for individuals and families with anxiety, mood and psychotic disorders.
7. Appraise common therapeutic modalities, including psychopharmacology.

**Class Contact:** Lab 1.0 hr Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** To be confirmed.

**Assessment:** Assignment, Written assessment (1000 words), 25%. Examination, Written examination (2 hours), 60%. Test, Three (3) online tests (15 minutes each), 15%.

### HNB3229 Nursing Professional Practice 3 - Mental Health

**Locations:** St Abans.

**Prerequisites:** HNB 2107 - Nursing Professional Practice 1 HNB 1204 - Foundations of Nursing and Midwifery 2

**Description:** The aim of this unit is to provide students with the opportunity to apply the mental health knowledge and skills developed in 'HNB3227 Mental Health and Nursing' in a mental health setting. Students are required to complete 160 hours in a mental health setting.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Apply relevant knowledge and skills and utilise a problem solving approach to the nursing management of individuals with mental health issues.
2. Advocate the legislative and ethical foundations of mental health care and treatment.
3. Exhibit safe medication administration.
4. Utilise culturally appropriate psychotherapeutic communication, assessment and intervention strategies in the mental health setting and during crisis.

**Class Contact:** In this professional practice unit, students will have one hundred and sixty (160) hours of professional practice experience in an external mental health setting.

**Required Reading:** To be confirmed.

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Students must achieve the grade 'competent' on their final Professional Practice Performance Appraisal to pass this unit. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HNB4201 Nursing Professional Practice 4

**Locations:** St Abans.

**Prerequisites:** HMB 4104 - Professional Studies 2 HNB3141 - Nursing and Complex Care

**Description:** This capstone professional practice unit prepares students for transition to practice as a graduate nurse. Students will be expected to apply theoretical principles, evidence-based knowledge and nursing practice skills, at an increased level of complexity and independence.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Implement evidence based comprehensive and individualised quality nursing care.
2. Apply legal and ethical principles in delivery of nursing care.
3. Participate in reflective practice through documentation, discussion, and self-evaluation.
4. Exhibit effective communication skills in interactions with patients, significant others and health professionals.
5. Demonstrate the ability to adjust care and priorities in changing situations, and identify and manage the deteriorating patient.

**Class Contact:** This professional practice unit includes one hundred and sixty (160) hours in an acute care healthcare setting.

**Required Reading:** Nil

**Assessment:** Practicum, Interim Professional Practice Performance Appraisal, Yes/No. Practicum, Final Professional Practice Performance Appraisal, Yes/No. Students must achieve the grade 'competent' on their final Professional Practice Performance Appraisal to pass this unit. Supplementary assessment is not available for the Professional Practice Performance Appraisal. .

### HNM6800 Research Thesis (Full-Time)

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This subject, the aim of which is to enable students to competently research an area of study utilising knowledge and skills gained in previous studies, consists of a project carried out by students on an individual basis. The project is expected to be an investigation of an approved topic, followed by the submission of a suitably formatted thesis in which the topic is introduced and formulated; the investigation described in detail; results and conclusions from the study elaborated; and an extended discussion presented. Students may be required to undertake some lecture courses, as specified at the time of commencement.

**Credit Points:** 48

**Class Contact:** Independent research in addition to regular meetings with the students supervisors.

**Required Reading:** To be advised by supervisor.

**Assessment:** The thesis will normally be assessed by at least two expert examiners from an appropriate area of expertise.

### HNM6801 Research Thesis (Part-Time)

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This subject, the aim of which is to enable students to competently research an area of study utilising knowledge and skills gained in previous studies, consists of a project carried out by students on an individual basis. The project is expected to be an investigation of an approved topic, followed by the submission of a suitably formatted thesis in which the topic is introduced and formulated; the investigation described in detail; results and conclusions from the study elaborated; and an extended discussion presented. Students may be required to undertake some lecture courses, as specified at the time of commencement.

**Credit Points:** 24

**Class Contact:** Independent research in addition to regular meetings with the students supervisors.

**Required Reading:** To be advised by supervisor.

**Assessment:** The thesis will normally be assessed by at least two expert examiners from an appropriate area of expertise.

### HNM8900 Nursing and Midwifery Research Thesis (Full-Time)

**Locations:** St Abans.



**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations;. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals;. 6. intellectual independence, initiative and creativity in new situations and/or for further learning;. 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:** Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

## **HNM8901 Nursing and Midwifery (Part-Time)**

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes and procedures outlined as part of the university's Higher Degrees by Research Policy.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field; 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem; 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature;

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations;. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals;. 6. intellectual independence, initiative and creativity in new situations and/or for further learning;. 7. ethical practice and full responsibility and accountability for personal outputs; and 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Class Contact:** Regular meetings with supervisor and participation in agreed research professional development activities.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** Thesis, Research Thesis, Pass/Fail. The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be internally assessed by the supervisory team, the College and University through 6- or 12-monthly progress reports. On completion, the thesis will be assessed through independent examination by at least two external expert examiners of international standing.

## **HNP6901 Research Thesis (Full Time)**

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral

Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Research Thesis, Thesis, Pass/Fail.

### HNP6902 Research Thesis (Full Time)

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) in Nursing and Midwifery at Victoria University is an advanced degree that is awarded for thesis-based research which enables research students to independently make a valuable, original and substantial contribution to knowledge in Nursing and Midwifery. Research students will be required to apply intellectual rigor to the formulation of a research question(s), the employment of a range of research methods and the comprehensive analysis of findings in a significant research project, in the context of existing research. This should be conducted in consideration of intercultural and international contexts; social and environmental sustainability and application to industry, community, government, or the professions. In this unit of study, and in consultation with a thesis supervisor, the students will be expected to demonstrate the progress towards thesis completion.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the

School and University through 6-monthly progress reports. Research Thesis, Thesis, Pass/Fail.

### HNP6911 Research Thesis (Part Time)

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of

the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Research Thesis, Thesis, Pass/Fail.

### HNP6912 Research Thesis (Part Time)

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of:

- expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field
- intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem
- expert cognitive, technical and creative skills to:
- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature
- expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations.
- capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals.
- intellectual independence, initiative and creativity in new situations and/or for further learning
- ethical practice and full responsibility and accountability for personal outputs
- autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Research Thesis, Thesis, Pass/Fail.

## HPC1000 Introduction to Human Nutrition and Food

**Locations:**Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:**Nil

**Description:**This introductory unit will provide students with the foundational knowledge needed to understand the nutritional requirements for adult human health and the discipline of food science and the potential career opportunities within the food industry, government, agricultural, marine, trade and other organizations both in Australia and internationally. Initially the unit focuses on the macronutrients: carbohydrates, protein and lipids and how they are digested, absorbed, transported and stored in the body, as well as how they are converted to energy and their roles in energy balance. Subsequently the unit explores micronutrients and examines their functions in the body, requirements, symptoms of micronutrient deficiencies, and food sources. Students will also learn the basic concepts and principles of food composition, food processing, preservation and safety, and will explore possible solutions to world food supply problems.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate an understanding of scientific nutrition literature and evidence based guidelines;
2. Describe the digestion, absorption and transport of food and nutrients in the body;
3. Articulate the roles of the macronutrients in the production, utilisation and storage of energy in the body;
4. Compare vitamins and minerals, and how bioavailability affects requirements of both;
5. Examine the principles of energy balance in the body, in relation to foods consumed, energy expended and energy stored;
6. Interpret the basic principles of food processing and the importance of food safety, and importance of food safety and regulation;
7. Discuss the composition of foods and the role of food science in the food industry and food supply in Australia and overseas.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:**Whitney, E.Rolfes, S.R., Crowe, T., Cameron-Smith, D., Walsh, A., (2014) Australian and New Zealand 2nd Edition Understanding Nutrition Australia: Cengage Shewfelt, R. L. Orta-Ramirez, A. and Clarke, A.D. (2015) 2nd Edition Introducing Food Science: Issues, Products, Functions and Principles CRC Press, Boca Raton, FL, USA

**Assessment:**Essay, Essay (700 words), 25%. Case Study, Case Study (300 words), 15%. Test, Mid-Semester Test in class, 20%. Examination, Final Examination (1.5 hours equal to 1500 words), 40%.

## HPC1001 Food Components

**Locations:**Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:**HPC1000 - Introduction to Human Nutrition and Food

**Description:**This unit will provide students with knowledge of the main food constituents: Proteins (Importance of proteins in food, Structure of amino acids, Types of amino acids, Peptide bonds, Protein structures, Conjugated proteins, Relationship of the protein structure towards functional and nutritional properties of food); Carbohydrates (Basic Chemistry of Carbohydrates, Structure and examples of mono-di, oligo and polysaccharides, Relationship of structure towards functional and nutritional properties of food, Fibre); Lipids (Definition and main classes of lipids,

Structure and nomenclature of fatty acids, Types of fatty acids, Relationship between fatty acid structures towards functional and nutritional properties of food); Water (Importance of water in food, Structure of water and ice and their relation towards properties of food, Types of water and its relation towards properties of food, Relationship between water activity and moisture in food systems; Minerals (Importance of variety of minerals in food, Important minerals and their properties in relation to properties of food); Vitamins (Importance of vitamins in food, Relationship of vitamins' structure towards properties of its presence in food systems).

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Articulate the importance of the main food components in food systems;
2. Describe and assess the structural and compositional features of food macromolecules;
3. Advise of the food components responsible for functional and nutritional properties of food systems; and
4. Recognise and evaluate the key chemical features of food macromolecules and their sensitivity towards environmental variables during processing.

**Class Contact:**Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:**Links to relevant documents and resources will be available for students via VU Collaborate.S. Damodaran, K.L. Parkin & O.R. Fennema (2008) 4th ed. Fennema's Food Chemistry CRC Press; Taylor and Francis Group, Boca Raton, FL, USA T.P.Coulter (2009) 5th ed. Food - The Chemistry of its Components RSC Paperbacks, Royal Society of Chemistry, UK

**Assessment:**Assignment, Written Assignment (1500 words), 20%. Assignment, Group Oral Presentation (5 minutes per student), 20%. Examination, Final Written Examination (2.5 hours), 60%.

## RBF1140 Introduction to Food, Nutrition and Health 1

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**This unit provides students with an introduction to nutrition and food science. The unit comprises an introduction to the food industry, its components and organisation, both in Australia and internationally; the composition of foods, food processing and food safety; introduction to the preservation and processing of fruits and vegetables, grains and oilseeds, dairy products, meat, poultry, fish and beverages.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the food industry in Australia and overseas;
2. Discuss the composition of foods, including food composition data;
3. Explain the basic principles of food processing and the importance of food safety; and
4. Explain at an introductory level, preservation techniques for various food commodity groups.

**Class Contact:**Forty-eight (48) hours or equivalent for one semester comprising lectures and tutorial/demonstrations.

**Required Reading:**Parker, R. (2003). Introduction to food science. Albany, USA: Delmar, Thomson Learning Inc.

**Assessment:**In order to obtain a pass or higher in this graded unit, normally all components of assessment must be passed. Assignment, Two assignments, 40%. Examination, one 3-hour written paper, 50%. Tutorial Participation, Tutorial exercises, 10%.

## RBF2210 Nutrition and Food Analysis 1

**Locations:**Werribee, St Albans.

**Prerequisites:**RBF1140 - Introduction to Food, Nutrition and Health 1RBF2410 -

## Food Components

**Description:** This unit emphasises experimental techniques as applied to nutrition and food studies and the rationale for the various experimental procedures used in foods and nutrition. Topics will include: classifiable and instrumental methods of food analysis; principles and procedures for analysis of foods using HPLC, GC, UV/Vis, IR; statistical analysis in food analysis; analysis of macro and micronutrients of foods, method selection and development; food composition labelling; and analysis of colour, flavour and texture of foods.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss and evaluate the principles of and procedures for food analysis and labelling;
2. Compare and evaluate different methods used in the analysis of foods;
3. Distinguish amongst various methods used in quality control and in rapid screening techniques;
4. Estimate accuracy and reproducibility in food analysis; and
5. Propose, design and establish novel methods of food analysis.

**Class Contact:** Thirty-six (36) hours for one semester comprising lectures, tutorials, laboratories and site visits.

**Required Reading:** Nielsen, S. S. (2003). (3rd ed.). Food analysis Gaithersburg, MD: Aspen Publishing. Pomeranz, Y., & Meloan, C. E. (2000). (3rd ed.). Food analysis: Theory and practice Gaithersburg, MD: Aspen Publishing. Wrolstad, R. E. (Ed.), Acree, T. E. (Ed.), Decker, E. A. (Ed.), Penner, M. H. (Ed.), Reid, D. S. (Ed.), Schwartz, S. J. (Ed.), et al. (2004). Handbook of food analytical chemistry. Hoboken, NJ: John Wiley & Sons.

**Assessment:** Assignment, One assignment, 20%. Practicum, Practical work, 30%. Examination, One 2 hour written examination, 50%.

## RBF2215 Nutrition and Food Analysis 2

**Locations:** Werribee, St Albans.

**Prerequisites:** RBF1140 - Introduction to Food, Nutrition and Health 1

**Description:** This unit concentrates on the rationale for analytical procedures used in nutrition as well as experimental designs and statistical analyses appropriate to nutrition and foods. Topics will include: design, planning and evaluation of diet analysis; nutritional epidemiology; anthropometry; biochemical markers; feeding trials; N balance studies; amino acid score, digestibility of food, nutritional survey and data collection, dietary instrument design, energy measurement of nutrients; analysis of nutritive value of foods and use of analysis software; pitfalls and complications encountered in human nutrition experimentation and strategies commonly used to overcome these.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the advantages and disadvantages of a range of techniques used in nutritional research;
2. Select experimental methods appropriate to particular research objectives and designs;
3. Identify the limitations of presently-available experimental methods in nutrition;
4. Describe the important design strategies of nutritional epidemiological studies;
5. Discuss the correct procedures for interpretation of data; and
6. Undertake a critical analysis of the design and implementation of intervention projects and statistical analysis of data sets.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures and practical laboratories.

**Required Reading:** Margetts, B. M., & Nelson, M. (Eds.) (1997). (2nd ed.). Design in nutritional epidemiology New York: Oxford University Press.

**Assessment:** Assignment, One assignment (2000 words), 20%. Practicum, Practical work and 6 laboratory reports, 30%. Examination, One 2.5 hour written examination, 50%.

## RBF2218 Nutrition and Community Health

**Locations:** Werribee.

**Prerequisites:** Nil.

**Description:** Importance of community nutrition in public health promotion. Nutrition data: type, collection, analysis. Health behaviour theories. Food security. Community nutrition throughout the lifespan (breastfeeding promotion; childhood and adolescence; adults and chronic disease prevention; nutrition-related problems in the elderly). Development of effective communication programs. Education and intervention programs in locating public health data and health epidemiology. Cultural competency and international nutrition.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Discuss the concept of community, community nutrition practice, social and economic trends for community nutrition, the community needs assessment;
2. Assess the nutritional status for given target populations;
3. Explain the basic principles of epidemiology;
4. Discuss current standards of assessment of nutrition;
5. Comment on nutrition intervention programs, public health policy, program planning, evaluation and implementation of community nutrition projects and national nutrition priority areas; and
6. Explain the importance of nutrition throughout the life cycle, and marketing nutrition in the community.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures, tutorials and practical sessions.

**Required Reading:** Boyle, M. A., & Hoben, D. H. (2006). Community nutrition in action. An entrepreneurial approach (4th ed.). Thomson Wadsworth Publication.

**Assessment:** Assignment, Two assignments (2000 words each) (20% each), 40%. Examination, One 2.5 hour written examination, 60%.

## RBF2242 Food Preservation

**Locations:** Werribee, St Albans.

**Prerequisites:** HFS1140 - Introduction to Food Science RBF1140 - Introduction to Food, Nutrition and Health 1 Required: Either RBF1140 Introduction to Food, Nutrition and Health 1 or HFS1140 Introduction to Food Science (not both)

**Description:** This unit introduces the basic principles in food preservation and food packaging. Food can be preserved by controlling moisture, controlling temperature (heating, pasteurizing, sterilizing, canning, chilling, freezing), using chemicals and irradiation, and modified atmospheres. The impact of the various preservation techniques on the product safety, quality and nutritional value of food will be discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate different methods of spoilage of various food groups;
2. Analyse different methods of preservation and fermentation, explaining the 'pros' and 'cons' of each method;
3. Propose appropriate methods of preservation, including the concept of hurdles to control a given deterioration; and
4. Elaborate on the role of food packaging in food preservation.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs St Albans: lectures and tutorials Werribee: practicals

**Required Reading:** Gould, G. W. (Ed.) 2012 New methods for food preservation London: Springer Publishing

**Assessment:** In order to obtain a pass or higher in this graded unit, normally all components of assessment must be passed. Assignment, Team case study assignment (approx. equal to 1000 words each student), 40%. Presentation, Oral presentation by team of final project (approximately equal to 1000 words per

student), 20%. Examination, Final Examination (2 hours), 40%. Combined individual assessment task equate to approximately 4,000 words.

### RBF2410 Food Components

**Locations:**Werribee, St Albans.

**Prerequisites:**RBF1140 - Introduction to Food, Nutrition and Health 1HFS1140 - Introduction to Food ScienceEither RBF1140 Introduction to Food, Nutrition and Health 1 or HFS1140 Introduction to Food Science, not both

**Description:**This unit will introduce students to food constituents; water; structure, chemistry, stability and functional properties of proteins, carbohydrates, fats and oils, vitamins and minerals; Food colour, texture and flavour. Reactions leading to deterioration of foods: oxidative deterioration and rancidity, anti-oxidants, browning reactions; food additives, natural and synthetic colorants and flavouring agents; gels, colloids, foams and emulsions.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe and assess the structural and compositional features of food macromolecules;
2. Predict the functional properties of food molecules based on their chemical properties;
3. Recognise and evaluate the key chemical features of food systems; and
4. Develop novel food systems based on complex interactions of their main macromolecules.

**Class Contact:**Forty-eight (48) hours for one semester comprising lectures, tutorials and practical sessions.

**Required Reading:**Coulate, T.P. (2009). 5th ed. Food: The chemistry of its components Cambridge: RCS Publishing.

**Assessment:**Assignment, Written assignment (2000 words), 45%. Examination, Written Examination (2.5 hours), 55%. Total combined assessment word equivalence is approximately 4000 words.

### RBF3151 Food Quality Assurance

**Locations:**St Albans.

**Prerequisites:**HPC1001 - Food ComponentsHFS2003 - Food Microbiology

**Description:**The aim of this unit is to provide an introduction to the concepts and principles of food quality evaluation assurance, food legislation, food standards, sensory and objective evaluation of foods and relevant testing methods. It explores the concept of quality from sensory, scientific, regulatory and legal perspectives, including the concepts of total quality control (TQC) and total quality management (TQM). The importance of quality assurance principles and systems and both Australian and International food standards codes are emphasized.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Review and apply principles of quality assurance and quality management systems in food manufacturing, distribution and services;
2. Interpret Australian and International food legislations and food standard codes with respect to quality assurance of a food in the food manufacturing and services sectors;
3. Assess principle statistical control techniques to assure the quality of a food;
4. Identify and create particular sensory tests for evaluation of a food of interest with respect to quality assurance of that particular food within food production and services divisions.

**Class Contact:**Lab2.0 hrsLecture2.0 hrsObservation excursions to industrial food processors may be arranged as appropriate.

**Required Reading:**Hubbard, M. R. 2012 3rd Edition Statistical quality control for the food industry. NY: Chapman and Hall Lyon, D.H., Francombe, M.A., Terry A. Hasdell, T.A. 2012 Guidelines for sensory Analysis in Food Product Development and Quality Control NY: Springer Publishers

**Assessment:**Assignment, Written Assignment (1500 words), 25%. Presentation, Oral Presentation based on the assignment topic (500 words equivalent), 10%. Report, Laboratory Report on testing food quality (1000 words), 15%. Examination, Final Written Examination (2 hours, 2000 words equivalent), 50%.

### RBF3252 Food Safety

**Locations:**Werribee, St Albans.

**Prerequisites:**RBF3730 - Food Microbiology

**Description:**This unit provides basic concepts and principles of food safety, food legislation, food standards as applied to production of clean and hygienic food. Students will be introduced to the principles of HACCP to ensure the production of clean and hygienic food, and will rigorously evaluate the cleaning and sanitation practices in the food, beverage, and hospitality industries, including retail and industrial food production settings.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Apply and integrate the principles and practices of food safety management to the production, preservation, storage and distribution of food;
2. Develop production and processing techniques using the HACCP approach to ensure the production of clean and hygienic food;
3. Critically evaluate production processes in order to determine practical approaches to food microbiology and food safety; and
4. Plan and design innovative food safety procedures for food retail businesses and industrial processors.

**Class Contact:**Forty-eight (48) hours for one semester comprising lectures, tutorials and workshops.

**Required Reading:**The following textbooks are recommended but not required:Cramer, M., 2013 2nd Edition Food Plant Sanitation: Design, Maintenance, and Good Manufacturing Practices CRC Press Ortega-Rivas, 2009 Processing Effects on the Safety and Quality of Foods CRC Press Newslow, D. 2013 Food Safety Management Programs: Applications, Best Practices and Compliance CRC Press

**Assessment:**Report, Written assignment on practices to prevent a food safety problem (foodborne illness) (2000 words), 40%. Assignment, Written assignment on HACCP (1000 words), 20%. Examination, One 2 hour written examination, 40%. Individual assessment tasks combined equate to a total of approximately 5000 words.

### RBF3256 Food Product Development

**Locations:**Footscray Nicholson, Werribee, Footscray Park, St Albans.

**Prerequisites:**HFS2004 - Food Quality AssuranceRBF3151 - Food Quality AssuranceRequired HFS2004 or RBF3151

**Description:**This unit prepares students for the workplace realities of developing new food products, beginning with generating a new product idea, then developing the concept, testing the formulation, devising the processing techniques and product specifications, creating a marketing strategy, through to marketing trials with consumers. Students will learn packaging and labelling requirements, product costing and pricing, how to scale up production, and how to market the product and plan a product launch. Food science students will be well-prepared for the workforce challenges of creating innovative food products to meet market demand.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Appraise the main features and trends of a specific food product within an appropriate market setting;
2. Critically assess the development cycle of a food product and review relevant principles of marketing theory;
3. Apply knowledge of consumers' food choices to the design and development of a prototype food product

at laboratory and pilot scale; 4. Develop and justify technical specifications for the new product; and 5. Conduct testing in an appropriate market and evaluate consumers' responses.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Earle, M., Earle, R., & Anderson, A. (2009) 4th Edition Food product development. Boca Raton: CRC Press

**Assessment:**Test, Class test, 10%. Assignment, Assignment (2000 words per student), 30%. Presentation, Oral presentation by team of final project (30 minutes), 20%. Examination, Final examination (2 hours), 40%.

### RBF3730 Food Microbiology

**Locations:**Werribee, St Albans.

**Prerequisites:**Nil

**Description:**Food-borne disease is an important problem in today's world, resulting in illness and possibly death for consumers, and financial ruin for the food industry. The aim of this subject is to develop an knowledge and skills in microbiology with particular reference to the role of micro-organisms in food processing, food spoilage and food-borne disease. Students will gain an appreciation of the local and global consequences, both positive and negative of microbial growth and fermentation in foods. The role of legislation and standards in the control and prevention of food-borne disease, including hygiene, sanitation and waste treatment, will also be covered.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Identify and describe the differences among main groups of microorganisms, including bacteria, viruses, and fungi;
2. Conceptually map the transmission of disease-causing microorganisms in food products;
3. Articulate the conditions under which microbial growth flourishes and is inhibited in food; and
4. Critically review food processing techniques and agents used to control and prevent food-borne disease.

**Class Contact:**Lecture 3.0 hrs 3 hour laboratory: Weeks 2-8 of semester (21 hours) 1 hour tutorial: Weeks 9-11 (3 hours).

**Required Reading:** Jay, J.M., Loessner, M.J., Golden, D.A., 2005 7th Edition Modern Food Microbiology Aspen Publishers Inc.

**Assessment:**Assignment, Written research report (1000 words), 25%. Other, Practical work - 2 lab reports (each approx. 500 words), 25%. Examination, Final examination (2 hours), 50%. Individual assessment tasks in combination total approximately 4,000 words equivalent (year 2 unit).

### RBF3900 Project

**Locations:**Footscray Nicholson, Werribee, Footscray Park.

**Prerequisites:**Nil

**Description:**The Research Project unit of study is an individual program of supervised research in which the student, in consultation with the supervisor, conceptualizes, designs, conducts and disseminates the outcomes of a specific food science project. Research placements enable students to undertake a structured work experience program as an integral part of their degree course. Gaining practical experience in their chosen field enables food science students to test their interest and ability in these areas. The project will be, as far as is possible, concerned with a real problem in food science, such as the production of off-flavours during milk processing, the encapsulation of micronutrients to be added to a food product, or the development of a new functional food with desirable sensory qualities. The outcomes will be a written report and oral presentation of the project to the VU Food Science community.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically evaluate the scientific literature in food analysis, processes, production and other areas of food science;
2. Assess problems and design experiments to test hypotheses relevant to the discipline of food science;
3. Plan, design and conduct a food science experiment, both independently and with guidance from a supervisor;
4. Report on an individual research project using appropriate scientific writing; and
5. Disseminate research findings to peers and the VU Food Science community using effective communication skills.

**Class Contact:**Lab 6.5 hrs Lecture 2.0 hrs Lectures will be delivered in burst mode over the first 2 weeks. Students will then complete at least 76 hours supervised lab based work to complete the project.

**Required Reading:**Selected material as advised by the project supervisor. The supervisor will suggest appropriate journal papers to commence the students reading on the research topic, which will be sought by the student.

**Assessment:**Assignment, Written project proposal (1000 words), 15%. Presentation, Oral (15 minutes), 15%. Report, Written Research Report (4000 words), 70%. In consultation with the Unit Coordinator students will choose a research project. The Research Project will be assessed by: the written research report (70%) of ~4000 words due at the end of semester; an oral presentation (10 mins + 5 mins question time) due towards the end of semester during a research seminar organised by the unit coordinator (15%); and the supervisor's assessment of research competence, based upon the student's contributions to the project design and completion (15%).

### RBF3901 Research Project

**Locations:**Werribee, St Albans.

**Prerequisites:**Nil

**Description:**The Research Project unit of study is an individual program of supervised research in which the student, in consultation with the supervisor, conceptualizes, designs, conducts and disseminates the outcomes of a specific food science project. Research placements enable students to undertake a structured work experience program as an integral part of their degree course. Gaining practical experience in their chosen field enables food science students to test their interest and ability in these areas. The project will be, as far as is possible, concerned with a real problem in food science, such as the production of off-flavours during milk processing, the encapsulation of micronutrients to be added to a food product, or the development of a new functional food with desirable sensory qualities. The outcomes will be a written report and oral presentation of the project to the VU Food Science community.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically evaluate the scientific literature in food analysis, processes, production and other areas of food science;
2. Assess problems and design experiments to test hypotheses relevant to the discipline of food science;
3. Plan, design and conduct a food science experiment, both independently and with guidance from a supervisor;
4. Report on an individual research project using appropriate scientific writing; and
5. Disseminate research findings to peers and the VU Food Science community using effective communication skills.

**Class Contact:**Approximately 8 hours per week for one semester (or equivalent hours over the course of a semester comprising a total of ~96 hours) comprising of laboratory work for a research project either in a VU-based or external laboratory. Students will also be expected to attend a 1 hour information seminar at the commencement of the semester (to be advised by the unit coordinator) and a 3 hour research dissemination seminar at the conclusion of the semester.

**Required Reading:** Selected material as advised by the project supervisor. The supervisor will suggest appropriate journal papers to commence the students reading on the research topic, which will be sought by the student.

**Assessment:** In consultation with the Unit Coordinator students will choose a research project. Report, Written research report - 4000 words, 70%. Presentation, Oral (10 mins + 5 mins questions), 15%. Practicum, Supervisor assessment of laboratory skills, 15%. The Research Project will be assessed by: the written research report (70%) of ~4000 words due at the end of semester; an oral presentation (10 mins + 5 mins question time) due towards the end of semester during a research seminar organised by the unit coordinator (15%); and the supervisor's assessment of research competence, based upon the student's contributions to the project design and completion (15%). Individual assessment tasks combined total 5000 words equivalent.

### RBF8001 Research Thesis 1 Full Time

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below./

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8.

autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### RBF8002 Research Thesis 2 Full Time

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem.
- develop, adapt and implement research methodologies to extend and redefine existing knowledge.
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature.

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning 7. ethical practice and full responsibility and accountability for personal outputs 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will



provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### RBF8011 Research Thesis 1 Part Time

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### RBF8012 Research Thesis 2 Part Time

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the School and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### RBM1100 Functional Anatomy of the Trunk

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**This unit of study introduces students to functional anatomy. After a brief introduction to anatomical principles, embryological origins, terminology, bones,

joints, muscles, vessels and nerves; students learn gross, histological and some surface anatomy of the thorax, abdomen and pelvis. The following regions are studied in detail: thoracic cage, pleura and lungs, heart, mediastinal structures, abdominal wall, pelvic girdle, gastrointestinal organs, urinary organs and reproductive organs. The relevance of anatomy to medicine is highlighted via common clinical scenarios. Practical classes involve exposure to bones, models and human cadaver dissected/prosected specimens.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate anatomical literacy and relate structures to basic anatomical principles;
2. Identify the bones and bony markings of the thorax, abdomen, pelvis and perineum;
3. Explain movements of the joints and muscles of the thorax, abdomen, pelvis and perineum;
4. Appraise the role of the arteries, veins and lymphatics of the thorax, abdomen, pelvis and perineum;
5. Examine and integrate the visceral and somatic nerve supply of the thorax, abdomen, pelvis and perineum;
6. Outline the gross and histological structure of the viscera of the thorax, abdomen, pelvis and perineum;
7. Demonstrate observational and descriptive skills in relation to histological slides, anatomical models, and human cadaver specimens.

**Class Contact:** Lab 2.0 hrs Lecture 3.0 hrs

**Required Reading:** Moore, K.L., Dalley, A.F. & Aqr, A.M.R., (2014) 7th ed. Clinically Oriented Anatomy Lippincott Williams & Wilkins Philadelphia Baltimore, USA

**Assessment:** Test, Two (2) Multiple Choice and Short Answer Tests (1.5 hours), 30%. Examination, Practical Examination - Short Answer Flag (1.5 hours), 40%. Examination, Theory Examination - Multiple Choice and/or Short Answer (2 hours), 30%.

## **RBM1102 Bioscience 1: Human Body Structure and Function**

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** In this unit, human anatomy and physiology will be introduced and placed in context with nursing in an integrated fashion. The subject begins with an overview of the organisation of the human body. Basic concepts in chemistry and biochemistry are presented as essential background for understanding pharmacology and the structure and function of cells and tissues. Students are introduced to microbiology and the importance of infection control. After these fundamental concepts have been covered, students will study the structure and function of the skeletal and muscular systems, the nervous system, and the endocrine system.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students are expected to be able to: \* use appropriate anatomical terminology; \* describe basic principles of chemistry and biochemistry; \* describe the structure of the cell and state cell function; \* describe the structure, function and location of epithelial and connective tissues; \* describe the structure, function and importance of the integumentary system; \* describe the fundamentals of microbiology and infection control; \* appreciate the relevance of microbiology in the work of health professionals; \* describe the basic anatomy of the central and peripheral nervous systems; \* explain the basic principles of neurophysiology; \* describe the structure of various bones, joints, and muscles; \* describe the major functions of bone, joints, and muscles; and \* describe how physiological homeostasis is maintained; \* describe the role of the neuro-endocrine system in regulating body functions.

**Class Contact:** A total of 60 hours for the semester, or 5 hrs class contact per week comprising 2 hrs lecture, 1 hr tutorial and 2 hrs practical, or equivalent.

**Required Reading:** Marieb, E.N., & Hoehn, K. (2007). Human Anatomy and Physiology. (7th ed.). California, USA: Pearson Benjamin Cummings. Marieb, E.N., & Hoehn, K. (2007), 7th Edition Human Anatomy and Physiology Pearson Benjamin Cummings, California, USA

**Assessment:** In order to obtain a pass or higher in this graded unit, normally all components of assessment must be submitted and an aggregate mark of at least 50% must be attained. Practical sessions have a hurdle requirement of at least 80% attendance. Supplementary assessment in the form of a supplementary theory exam will normally be offered to students achieving an N (45-49%) grade and have completed / submitted all other assessment tasks. Students must achieve at least 50% on the supplementary exam to be granted a P 50 as a final grade for the unit. Test, Theory Test 1, 10%. Test, Theory Test 1, 10%. Examination, Practical during examination period., 30%. Examination, Theory (2.5 hr.) during examination period., 50%.

## **RBM1103 Bioscience 1: Body Structure & Function**

**Locations:** St Abans.

**Prerequisites:** Nil

**Description:** In this unit, human anatomy and physiology will be introduced and placed in context with nursing in an integrated fashion. The unit provides an overview of the organisation of the human body. Basic concepts in chemistry and biochemistry are presented as essential background for understanding pharmacology and the structure and function of cells and tissues. Students are introduced to microbiology and the importance of infection control. Students will study the structure and function of the musculoskeletal, nervous and endocrine systems.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Use appropriate anatomical terminology;
2. Describe basic principles of chemistry and biochemistry;
3. Describe the structure of the cell and state cell function;
4. Describe the location, structure and function of epithelial and connective tissues;
5. Describe the structure, function and importance of the integumentary system;
6. Describe the fundamentals of microbiology and the importance of infection control;
7. Describe the basic anatomy of the central and peripheral nervous systems;
8. Explain the basic principles of neurophysiology;
9. Describe the structure and function of various bones, joints, and muscles;
10. Describe how physiological homeostasis is maintained; and
11. Describe the structure and function of the neuro-endocrine system.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Marieb, E.N., & Hoehn, K. (2010) 8th Human anatomy and physiology Pearson Benjamin Cummings: California, USA.

**Assessment:** Test, Two (2) tests (30 minutes each), 20%. Examination, Practical examination (1 hour), 30%. Examination, Written examination (2 hours), 50%. Total word equivalence of combined assessment tasks is approximately 3500 words.

## **RBM1107 Bioscience for Paramedics 1**

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** In this unit, human anatomy and physiology will be introduced and placed in context with paramedic science in an integrated fashion. The subject begins with an overview of the organisation of the human body. Basic concepts in chemistry and biochemistry are presented as essential background for an understanding of the structure and function of cells and tissues. Students are introduced to microbiology and the importance of infection control. After these fundamental concepts have been covered, students will study the structure and function of the cardiovascular system

and nervous system. Topics in this unit can be exchanged with topics in units RBM1208 and RBM2109.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the chemical, cellular and tissue levels of the human organism; 2. Describe the anatomy and physiology of the integumentary, nervous and cardiovascular systems; and 3. Explain the importance of infection control in a paramedic setting.

**Class Contact:** Lab 2.0 hrs Lecture 1.0 hr Tutorial 1.0 hr Practical sessions will be provided subject to clinical placements. Practical sessions are compulsory.

**Required Reading:** Marieb, E.N. & Hoehn, K (2013) 9th Edition Human Anatomy and Physiology Pearson

**Assessment:** Please note: Submission of 80% of the pre-tutorial activities is a hurdle requirement for RBM1107. Each of the quizzes will revise themes and content of that week's lecture in advance of the tutorial the next week. Students are required to complete these quizzes for allocation of team submission grades for respective weeks. In order to obtain a pass or higher in this graded unit, students must have: - successfully completed 8/10 pre-tutorial online activities; AND - scored 50% total for all assessment tasks Laboratory Work, Laboratory Worksheet (700 words), 10%. Test, Guided Inquiry Team Worksheets (500 words), 10%. Test, Quizzes x 2 (10% each), 25%. Examination, Final Exam (2 hours), 55%. Total combined assessment word count is approximately 3,000 words.

## RBM1110 Nutritional Biochemistry 1

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit emphasizes on the principles of biochemistry and provides an understanding in relation to nutritional biochemistry. Topics on chemical bonding, water and buffers; nutritional importance of essential amino acids and lipids; the role of biomolecules, structure-function relationships of macromolecules, including carbohydrates, proteins, lipids; biomembranes; introduction to major metabolic pathways; storage and conversion of energy processes; protein synthesis and information flow, will be discussed. It will focus and provide an insight to biochemical events as they occur in the human body in both normal and disease state.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the basic chemistry of macronutrients; 2. Identify elements, compounds and mixtures; 3. Explain the transport and storage of energy in the human body; 4. Describe moles, percent mass and molar composition; 5. Describe structure and function relationship for macronutrients; and 6. Describe protein synthesis and introduce the basic metabolic pathways of macronutrients.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures and tutorials/practicals.

**Required Reading:** Tymoczko, J. L., Berg, J. M., & Stryer, L 2nd Biochemistry. A short course Freeman, NY Betteheim, F.A., Brown, W.H., Campbell, M.K., & Farrell, S.O. (2013) 10th Introduction to general, organic and biochemistry CentageBrain

**Assessment:** Assignment, Individual Assignment (750 words), 35%. Test, Topic test, multiple choice (equivalent to 250 words), 15%. Examination, Final Examination (2 hours), 50%. Individual assessment tasks combined total, approximately equivalent to 3000 words.

## RBM1121 Anatomy & Physiology 1

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** The structure and function of the human body is introduced and placed in an integrated fashion within the context of midwifery. Following a brief overview of the organisation of the human body, students are introduced to the structure and function of cells and various types of tissues. Basic concepts in chemistry and biochemistry are covered in relation to the human body and students are introduced to microbiology within the context of infection control. The bones, joints and muscles of the body are taught in an integrated way using a regional approach. The nervous system and endocrine system are discussed to highlight their regulatory role for control, co-ordination and communication. The importance of homeostasis and the role of the neuro-endocrine system in maintaining equilibrium within the human body are emphasised. This is followed by a discussion of the special senses, in particular sight, hearing and balance. The integumentary system is covered to emphasise the importance of, for example, skin colour, temperature and sensation relevant to midwifery. Information presented in this unit will be useful in the clinical context.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Outline the structures and functions of human cells and tissues; 2. Explain the basic concepts of chemistry, biochemistry, microbiology and infection control in relation to the human body; 3. Describe the structures and functions of the integumentary, musculo-skeletal, endocrine and nervous systems; and 4. Explain homeostasis and the role of the neuro-endocrine system in regulating body functions.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** Marieb, E.N. & Hoehn, K. (2010). 8th edition Human Anatomy and Physiology International, Benjamin Cummings Publishing

**Assessment:** Test, MCQs, 20%. Other, Class assessment & 1.5 hrs exam on laboratories, 40%. Examination, 2.5 hrs written exam, 40%.

## RBM1174 Human Physiology

**Locations:** Footscray Park.

**Prerequisites:** Nil.

**Description:** The general aim of the unit is to give students an understanding of basic concepts in human physiology. The unit will comprise a description of basic cell structures and functions for generalised and specialised cells; outline co-ordinated body functions with specific applications to the cardiovascular, respiratory, musculo-skeletal, neural, alimentary and renal systems. In addition, basic concepts in organic metabolism and energy balance will be considered.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe and relate the structure and function of the cardiovascular system, urinary system, respiratory system, gastrointestinal system, musculo-skeletal and neuroendocrine system to normal physiological processes; 2. Apply the occupational health and safety, environmental, social and cultural responsibilities and regulations while working in a laboratory environment; 3. Develop skills in common experimental techniques, observation, recording of data and critical analysis that enables them to solve scientific problems; and 4. Communicate effectively while collaborating with peers and staff and work independently in a laboratory environment.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs

**Required Reading:** Sherwood, L. (2013) 8 Human Physiology: From Cells to Systems USA: Thomson Learning

**Assessment:** Practicum, Three (3) x Laboratory Reports, 20%. Test, Three (3) x 30 minute topic tests, 20%. Examination, Two (2) hour written examination, 60%. Students are required to obtain a cumulative mark of 50% for this unit. 80% attendance is required for the practicum component (hurdle requirement).

## **RBM1180 Biochemistry**

**Locations:**City Flinders.

**Prerequisites:**Nil.

**Description:**This unit examines the principles of biochemistry and their relevance to osteopathic theory and practice. It comprises three sections: Cellular constituents and their functions Metabolism, energy and regulation Information transfer The unit provides an insight to biochemical events that occur in the human body - both healthy and diseased. Examples will relate biochemistry to health and medical issues (specifically those associated with osteopathy). Biochemical interpretation for particular processes and pathologies will be discussed.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Integrate relevant principles of biochemistry in their further study of osteopathic theory and practice; 2. Perform basic biochemical calculations, explain the concepts of pH and buffer and their importance in metabolism; 3. Discuss the types and functions of various cellular constituents; 4. Examine metabolic pathways, their roles and how they are regulated; and 5. Discuss how energy for cellular and body function is extracted from biological molecules.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures and tutorials.

**Required Reading:**Tymoczko, J.L., Berg, J.M., & Stryer, L. (2013). (2nd ed.) Biochemistry. A short course. Freeman, NY. Nelson, D.L., & Cox, M.M. (2008). (5th ed.). Lehninger principles of biochemistry. Freeman, NY.

**Assessment:**Case Study, Oral presentation of assigned case studies (20 mins; 500 words), 20%. Test, Two (2) online MCQ tests of 30 mins duration to be held at week 6 and 9 (500 words), 30%. Examination, Theory/Written, a combination of MCQ, short and long answer questions. Duration of examination is 2 hr (2000 words), 50%. Case study presentation (500 words) forms a summative assessment and carries a 10% value. Two topic tests (equivalent to 500 words) worth 40% of the final grade will be held on week 6 and week 9 and they form part of a summative assessment. Students will attempt thirty (30) Multiple Choice Questions in 30 minutes. The end of semester examination (equivalent to 2000 words) of 2 hours duration, comprises a combination of multiple choice questions and short/long answer questions. This examination forms a summative assessment and is worth 50%.

## **RBM1200 Functional Anatomy of the Limbs**

**Locations:**St Abans.

**Prerequisites:**RBM1100 - Functional Anatomy of the Trunk

**Description:**Students study gross anatomy of the upper and lower limbs. The following regions are studied in detail: pelvic girdle, gluteal region, hip, thigh, knee, leg, ankle and foot; pectoral girdle, shoulder, arm, elbow, forearm, wrist and hand. The relevance of functional anatomy to health, healing and injury will be highlighted.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Locate and illustrate the gross structure of the upper and lower limb; 2. Articulate the anatomical make-up and movement of major joints in the lower limb such as the hip, knee and ankle and upper limb such as the shoulder, elbow and wrist; 3. Examine and explain the structure and composition of bones that make up the pelvic and shoulder girdles; 4. Compare and contrast the muscles, blood supply, venous drainage and innervation of the gluteal region, thigh, leg, foot, shoulder region, arm, forearm and hand; 5. Synthesise and apply theoretical anatomical concepts from a range of sources (and/or in a range of situations).

**Class Contact:**Lab2.0 hrsLecture3.0 hrs

**Required Reading:**Stone, R. & Stone, J. (2012) 7th ed. Atlas of Skeletal Muscles Boston: McGraw Hill

**Assessment:**Test, In Class Test of the Lower Limb (30 mins), 10%. Test, In Class Test of the Upper Limb (30 mins), 10%. Examination, Practical Examination (1.5 hours), 30%. Examination, Theory Examination (2 hours), 50%.

## **RBM1202 Bioscience 2: Body Structure & Function**

**Locations:**St Abans.

**Prerequisites:**RBM1103 - Bioscience 1: Body Structure & Function

**Description:**The aim of this unit is to build upon the anatomy and physiology introduced in RBM1103 Bioscience 1: Body Structure and Function. The structure and function of the cardiovascular, respiratory, urinary, gastrointestinal, immune, and reproductive systems will be covered. The neuro-endocrine regulation of these systems will be presented to provide an understanding of how homeostatic mechanisms regulate variables such as blood pressure, blood gas status, acid-base balance, and fluid and electrolyte balance. Students will be introduced to basic concepts of inheritance, nutrition, and metabolism.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the composition of blood and state the various functions of blood; 2. Describe the structure and function of the lymphatic system; 3. Describe the structure and function of the cardiovascular system; 4. Explain how the cardiovascular system maintains homeostasis of blood pressure and blood flow; 5. Describe the structure and function of the respiratory system including the mechanics of breathing; 6. Explain how the respiratory system maintains homeostasis of blood gases and pH; 7. Describe the structure and function of the renal system; 8. Describe the structure and function of the gastrointestinal system; 9. Describe the structure and the function of the male and female reproductive systems; and 10. Explain the basic principles of human genetics; describe basic metabolism and nutrition.

**Class Contact:**Lecture1.0 hrTutorial2.0 hrsFifty-two (52) hours for one semester comprising of lectures, tutorials and practical laboratories.

**Required Reading:**Marieb, E.N. & Hoehn, K. (2010). 8th Human anatomy and physiology Pearson Benjamin Cummings: California, USA.

**Assessment:**Test, Two (2) Tests (30 minutes each), 20%. Examination, Practical Examination (1 hour), 30%. Examination, Written Examination (2 hours), 50%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%. Total combined assessment word equivalence is 3000-3500 words.

## **RBM1203 Bioscience 2: Human Body Structure & Function**

**Locations:**St Abans.

**Prerequisites:**RBM1102 - Bioscience 1: Human Body Structure and Function

**Description:**The aim of this unit is to build upon the anatomy and physiology introduced in Bioscience 1. The structure and function of the cardiovascular, respiratory, urinary, gastrointestinal, immune, and reproductive systems will be covered. The neuro-endocrine regulation of these systems will be presented to provide an understanding of how homeostatic mechanisms regulate variables such as blood pressure, blood gas status, acid-base balance, and fluid and electrolyte balance. Students will also be introduced to basic concepts of inheritance, nutrition, and metabolism.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students are expected to be able to: \* describe the composition of blood and state the various functions of blood; \* describe the role of erythrocytes, thrombocytes, and leukocytes; \* describe the

structure of, and explain the function of the lymphatic system; \* describe the structure of the heart, and how it works; \* describe the anatomy of arteries, veins, and capillaries; \* explain how the cardiovascular system maintains homeostasis of blood pressure and blood flow; \* describe the anatomy of the respiratory system and explain the mechanics of breathing; \* explain how the respiratory system maintains homeostasis of blood gases and pH; \* describe the structure of the renal system; \* explain how the kidney maintains fluid & electrolyte balance; \* describe the anatomy of the organs comprising the digestive system and the function of each; \* describe the structure and the function of the male and female reproductive systems; \* explain the basic principles of human genetics; and \* describe basic metabolism and nutrition.

**Class Contact:** 5 hours per week; comprising of 2 hours of lectures, 2 hours of practical and 1 hour of tutorial or equivalent. Class contact hours per week may vary according to clinical placement allocations.

**Required Reading:** Marieb, E.N. & Hoehn, K. (2007). Human Anatomy and Physiology. (7th ed.). California, USA: Pearson Benjamin Cummings.

**Assessment:** In order to obtain a pass or higher in this graded unit, normally all components of assessment must be submitted and an aggregate mark of at least 50% must be attained. Supplementary assessment in the form of a supplementary theory exam will normally be offered to students achieving an N (45-49%) grade and have completed /submitted all other assessment tasks. Students must achieve at least 50% on the supplementary exam to be granted a P 50 as a final grade for the unit. Test, Theory - Test 1, 10%. Test, Theory - Test 2, 10%. Examination, Practical - During Examination Period., 30%. Examination, Theory - During Examination Period., 50%.

## RBM1208 Bioscience for Paramedics 2

**Locations:** St Abans.

**Prerequisites:** RBM1107 BIOSCIENCE FOR PARAMEDICS 1; or equivalent.

**Description:** This unit will cover structure and function of organ systems which includes study of endocrine system, lymphatic and immune system, nervous system, special senses, fluid/electrolyte and acid base balance, renal system and genetics.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structural features of the endocrine, lymphatic/immune, nervous, special senses, fluid/electrolyte and acid base balance, renal and genetic systems;
2. Demonstrate understanding of the role of the endocrine, lymphatic/immune, nervous, special senses, fluid/electrolyte and acid base balance, renal and genetic systems in body maintenance and physiological regulation; and
3. Apply knowledge and understanding of human structure and function of these organ systems to clinical scenarios using guided inquiry learning.

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** Marieb, E. N., & Hoehn, K. (2013). Human anatomy and physiology (9th ed.). USA: Pearson Benjamin Cummings.

**Assessment:** Report, Guided inquiry team worksheets (10% total, 11 tutorials, one (1) worksheet per tutorial, (500 words), 10%. Test, 2 multiple choice tests (15% each, approximately 1000 words), 30%. Examination, 2.0 hours written (1500 words), 60%. In order to obtain a pass or higher in this graded unit, students must have: - successfully completed 8/10 pre-tutorial online quizzes (hurdle requirement); AND - achieve an aggregate score of 50% for all assessment tasks. The total combined assessment word equivalence is approximately 3000 words.

## RBM1209 Exercise Physiology & Nutrition for Paramedics

**Locations:** St Abans.

**Prerequisites:** RBM1107 - Bioscience for Paramedics 1

**Description:** This unit is a practitioner health unit and delivers all aspects of practitioner health required for paramedics for optimising good health. This includes an introduction to the back to basics (manual handling) program and concepts of resilience and coping mechanisms to deal with stress and shift work. This unit also explores fundamentals of exercise physiology and nutrition at an introductory level. The major topic areas covered with respect to exercise physiology are exercise metabolism, physiology of the cardiovascular, neuromuscular and respiratory systems. Topic areas covered with respect to nutrition include key concepts of metabolism, diet and the shift worker and lifelong nutrition choices.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the key concepts and definitions related to exercise and nutrition for the paramedic;
2. Demonstrate proper manual handling techniques for paramedics within the workshop;
3. Explain the concept of stress and its effects on the mind and body and apply key techniques to help reduce and manage the impact of stress; and
4. Describe and apply a model of resilience to a case study.

**Class Contact:** Lecture 2.0 hrs Workshop 2.0 hrs

**Required Reading:** A McGraw-Hill Custom Publication (2013) 1st ed RBM1209 Exercise Physiology and Nutrition for paramedics McGraw-Hill Education A custom eBook Exercise Physiology and Nutrition for Paramedics will be available for purchase. Please refer to VU Collaborate.

**Assessment:** Test, Two (2) multiple choice tests (20% each, approximately 1000 words), 40%. Examination, Final Exam (2 hour written exam, approximately 2000 words), 60%. The total combined assessment word equivalence is approximately 3000 words. In order to obtain a pass or higher in this graded unit, students will need to achieve an aggregate score of 50% for all assessment tasks, and it is highly recommended that students attend 80% of workshops.

## RBM1222 Anatomy & Physiology 2

**Locations:** St Abans.

**Prerequisites:** RBM1121 - Anatomy & Physiology 1

**Description:** This unit continues the study of the structure and function of the human body, using homeostatic regulation of the internal environment as the ongoing theme. The cardiovascular, respiratory, urinary, gastrointestinal and reproductive systems are placed in context with their overall regulation and co-ordination via the neuro-endocrine system. This provides an understanding of how homeostatic mechanisms regulate variables such as blood pressure, blood gas status, fluid and electrolyte balance and acid-base balance. The provision of nutrients to the body by the gastrointestinal system is integrated with the study of biochemistry and metabolism. An introduction to basic concepts of inheritance is followed by the study of the male and female reproductive systems

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structure and function of the cardiovascular, respiratory, urinary, gastrointestinal and reproductive systems in the human body;
2. Explain how the homeostatic mechanisms regulate the blood pressure, blood gas status, fluid and electrolyte balance and acid-base balance; and
3. Explain the basic principles of normal human genetics.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 1.0 hr

**Required Reading:** Marieb, e.N., & Hoehn, K. (2010). 8th ed. Human Anatomy and Physiology Benjamin Cummings Publishing

**Assessment:** Test, MCQs, 20%. Other, Class assessment & 1.5 hrs exam on laboratories, 40%. Examination, 2.5 hrs written exam, 40%.

## RBM1501 Foundations in Biomedical Science A

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:**This unit has been designed to provide students with the fundamental skills necessary for the successful completion of the biomedical sciences course. A series of lectures and workshops will provide students with an introduction to communication theory and professional practice. This will cover communication skills of summarising, synthesising, note taking, laboratory report and essay writing, researching and referencing. Students will be encouraged to develop critical thinking and self-editing skills. Oral presentation techniques such as formal talks, impromptu presentations and small group presentations will be developed. During laboratory classes students will gain an understanding of the scientific method and will become familiar with some career options in the biomedical sciences. An important outcome of the laboratory component is that students develop fundamental laboratory and problem solving skills.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Demonstrate skills in researching, summarising, synthesizing and referencing for scientific writing purposes;
2. Exhibit sound and effective oral presentation techniques;
3. List and elaborate potential career options in the field of biomedicine;
4. Identify and demonstrate fundamental laboratory skills;
5. Demonstrate skills in participating in group work and preparing collaborative assessments; and
6. Develop an e-portfolio as a basis for further learning plans, strategies and reflection.
7. Demonstrate maths and statistical analysis skills.

**Class Contact:**Lab2.0 hrsLecture2.0 hrsPC Lab2.0 hrsTutorial2.0 hrsSixty (60) hours per semester comprising lectures, workshops/tutorials and laboratories.

**Required Reading:**bin Hay, Dianne Bochner, Gil Blacket, Carol Dungey (2012) 4th Making the grade: a guide to successful communication and study Australia Oxford University Press

**Assessment:**Report, One Written Report (300 words), 10%. Test, Two tests, each approximately 30 minutes, 20%. Laboratory Work, Laboratory worksheets (4) each approximately 300 words, 20%. Project, Group Project (1000 words) and Oral Presentation, 50%.

## RBM1502 Foundations in Biomedical Science B

**Locations:**St Albans.

**Prerequisites:**None

**Description:**This unit of study enables students to extend the skills and techniques required to critically analyse scientific reports, scientific data and understand research methods employed in biomedical science which includes an extended statistics and mathematical component. Foundations for Biomedical Sciences B builds on content delivered in Foundations A.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Identify and exhibit fundamental note taking, summary and synthesis skills used in academic writing;
2. Research, write and reference journal articles according to specified criteria and academic conventions;
3. Explain and review scientific research methods used in biomedical science; and
4. Design a scientific poster and demonstrate relevant oral presentation skills.

**Class Contact:**Lecture2.0 hrsPC Lab2.0 hrsTutorial2.0 hrsTwo (2) hour tutorial: Weeks 2, 4, 6, 8, 10, 12 of semester (12 hours) Two (2) hour computer laboratory: Weeks 3, 5, 7, 9, 10, 11 of semester (12 hours)

**Required Reading:**bin Hay, Dianne Bochner et al, (2013) 4 Making the Grade - a guide to successful communication Oxford University Press Recommended books:

Graham, A. (2013). Statistics : a complete introduction. London : Hodder & Stoughton. Dunn, O., & Clark, V. (2009). Basic statistics a primer for the biomedical sciences. Hoboken, N.J. : John Wiley & Sons.

**Assessment:**Report, Group plan for poster presentation (150 words), 5%. Test, Maths / Statistics (600 words), 20%. Test, Maths / Statistics (750 words), 25%. Literature Review, Mini Literature Review (900 words), 30%. Poster, 10 minutes-group (600 words), 20%. Total combined assessment word equivalence is approximately 3000 words. To pass the unit, 50% total accumulative mark on assessments tasks needs to be achieved together with 80% attendance at tutorials/computer laboratory sessions.

## RBM1518 Human Physiology 1

**Locations:**Footscray Park, St Albans.

**Prerequisites:**Nil

**Description:**The unit introduces students to the organisation and function of the human body. Characteristics of the major tissues and organs are covered, including the integumentary, musculoskeletal, nervous, endocrine and reproductive systems. Basic genetics is also covered. The importance of homeostasis and the role of the neuro-endocrine system in maintaining equilibrium within the body are emphasized as ongoing concepts.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the fundamental structure, functions and interactions of the musculoskeletal, nervous, endocrine, integumentary reproductive systems in the human body;
2. Explain how the body systems act and interact to maintain a constant internal environment (homeostasis);
3. Demonstrate requisite skills in experimental techniques, recording and critical analysis of data and report writing.

**Class Contact:**Lab2.0 hrsLecture2.0 hrsTutorial1.0 hr

**Required Reading:**Marieb, e.N., & Hoehn, K.N. (2015) 10th ed. Human Anatomy & Physiology Pearson

**Assessment:**Test, Three (3) Topic Tests (20 minutes each), 20%. Laboratory Work, Two (2) Lab Reports (750- 1000 words each), 30%. Examination, Final Exam (2 hours), 50%.

## RBM1528 Human Physiology 2

**Locations:**Footscray Park, St Albans.

**Prerequisites:**RBM1518 - Human Physiology 1

**Description:**This unit continues the study of the structure and functions of the body, using homeostatic regulation of the internal environment as the ongoing theme. The cardiovascular, respiratory, urinary, and gastrointestinal systems are placed in context with their overall regulation and co-ordination via the neuro-endocrine system. This provides an understanding of how homeostatic mechanisms regulate variables such as blood pressure, blood gas status, acid-base balance, fluid and electrolyte balance and blood glucose. Genetic inheritance is also introduced. The completion of both RBM1518 Human Physiology 1 and 2 will provide a solid foundation for advanced study in physiology.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe and relate the structure and function of the cardiovascular, urinary, respiratory and gastrointestinal systems and the role of genetics to normal physiological processes;
2. Describe how the cardiovascular, urinary, respiratory and gastrointestinal systems act and interact to maintain homeostasis;
3. Develop and demonstrate requisite skills in experimental techniques, recording and critical analysis of data and report writing.

**Class Contact:** Lab 2.0 hrs Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** Marieb, E.N. & Hoehn, K.N. (2015) 10th ed. Human Anatomy & Physiology USA, Pearson.

**Assessment:** Test, Tests x 2 (20 minutes each), 20%. Laboratory Work, Lab reports x 2 (750 words each), 30%. Examination, Final Exam (2 hours), 50%.

## RBM1820 Nutrition, Society and Communication

**Locations:** Footscray Nicholson, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** Students will be introduced to common cultural dietary practices; the effect of cultural, religious and socioeconomic influences on food choice and dietary habits; media and communication tools, and ethical considerations; strategies and attributes of nutrition health campaigns; and the potential impact of such campaigns.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate academic and professional written and oral skills to a standard consistent with skills of nutrition and food professionals;
2. Demonstrate competency in the retrieval of information from libraries and library databases;
3. Discuss the influence of culture and religion on nutrition; and
4. Discuss strategies used in common nutrition health campaigns including their potential impact as well as food and ethical considerations.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs Some kitchen based activities will be included.

**Required Reading:** Links to relevant documents and resources will be available for students.

**Assessment:** Presentation, Group presentation (5 minutes per student), 20%. Assignment, Written assignment (1000 words), 40%. Examination, Final Examination (2 hours), 40%.

## RBM1830 Diet Therapy 1

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** Dietary assessment techniques, case history taking to assess the dietary habits of clients, dietary nutrient requirements for a balanced and healthy diet, basic counselling skills with respect to the assessment and evaluation of dietary habits and the communication of corrective strategies to clients, codes of ethical practice in dealing with clients.

**Credit Points:** 12

**Class Contact:** Lecture 3.0 hrs Tutorial 1.0 hr

**Required Reading:** Colbin A (1996) Food and Healing, 2nd edition, USA, Ballantine. Thomas B, (2001) The Manual of Dietetic Practice, 3rd Ed, Oxford Blackwell Science.

**Assessment:** Examination (3 hour), 50%; Clinic observation journal, 50%.

## RBM2100 Rehabilitation Anatomy

**Locations:** St Albans.

**Prerequisites:** RBM1200 - Functional Anatomy of the Limbs AHE1101 - Structural Kinesiology AHE2202 - Functional Kinesiology Students will need to satisfactorily complete either RBM1200 or both AHE1101 and AHE2202

**Description:** This unit will highlight the relevance of functional and clinical anatomy to health and healing will be highlighted through a detailed study of the mechanics and muscles affecting the movement of joints in the body. This information will be presented and highlighted to students through the study of a number of different areas including kinesiology, biomechanics, gait analysis, posture, massage, muscle testing, exercise, stretching, basic soft tissue techniques, and awareness through

movement and posture. There will be a particular emphasis on muscle testing and surface anatomy.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain the anatomical principles and theory behind spinal and orthopaedic injury;
2. Perform clinical tests on muscles and joints of the spine, trunk and extremities and interpret results;
3. Perform clinical tests of the hip, knee and shoulder joints and interpret results.

**Class Contact:** Lab 2.0 hrs Lecture 3.0 hrs

**Required Reading:** Behnke, R.S. (2012) 3rd ed. Kinetic Anatomy Human Kinetics Australia

**Assessment:** Examination, Practical Examination (1000 words), 20%. Assignment, Written Assignment (1000 words), 25%. Examination, Theory Examination (2000 words), 55%.

## RBM2101 Pathophysiology & Quality Use of Medicines 1

**Locations:** St Albans.

**Prerequisites:** RBM1202 - Bioscience 2: Body Structure & Function HNB1205 - Foundations in Nursing 2 HNB1206 - Professional Practice 1

**Description:** The aim of this unit is to present major concepts and principles of pathophysiology, illustrating their relationship to a range of common/important acute and chronic illnesses. This unit supports the topics in concurrent nursing units by: providing a scientific basis for understanding disease processes such as cellular injury, inflammation, infection, and shock; by elucidating the underlying mechanisms which result in clinical manifestations; and by presenting the rationale for therapeutic interventions. In particular, students will be introduced to pharmacokinetics, pharmacodynamics and pharmacological interventions related to the pathophysiology studied. Microbiology will also be discussed with reference to the growth and physiology of micro-organisms, their pathogenic potential, infection control and antibiotic treatment. In this unit, major disorders of the cardiovascular, respiratory, renal and nervous systems will be examined, as well as fluid and electrolyte imbalances, acid/base imbalances and shock. The pathophysiological principles underlying disorders of major body systems and subsystems will also be discussed.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the fundamentals of microbiology and the importance of infection control and its relevance in the work of health professionals;
2. Describe the major pathophysiological concepts, processes, progression, and complications of cardiovascular, respiratory, renal, nervous, acid base and fluid and electrolyte diseases/conditions;
3. Identify the environmental influences, which contribute to various pathophysiological processes, and relate these to disease prevention as well as pathogenesis;
4. Discuss the principles of pharmacodynamics and pharmacokinetics as they apply to specific drugs or drug classifications;
5. Discuss medication administration and nursing management of the client receiving medications including legal and ethical issues.

**Class Contact:** Lab 2.0 hrs Tutorial 2.0 hrs

**Required Reading:** McCance, K.L., & Huether, S.E. (2014). 7th Pathophysiology: The Biologic Basis for Disease in Adults and Children St Louis, Missouri: Elsevier  
**Assessment:** Test, Two (2) Tests (30 minutes each), 20%. Test, One Test (Pharmacology), 30%. Examination, Written assessment (2 hours), 50%. To gain an overall pass in this unit, students must achieve an aggregate score of 50%, and attain a score of 50% for the Pharmacology Test (Hurdle).

## RBM2104 Pathophysiology & Quality Use of Medicines 1

**Locations:**St Abans.

**Prerequisites:**RBM1203 - Bioscience 2: Human Body Structure & FunctionHNB1202 - Health Priorities & Nursing 1HNB1203 - Clinical Practicum 1

**Description:**The aim of this unit is to present major concepts and principles of pathophysiology, illustrating their relationship to a range of common/important acute and chronic illnesses. This unit supports the topics in concurrent nursing units by: providing a scientific basis for understanding disease processes such as cellular injury, inflammation, infection, and shock; by elucidating the underlying mechanisms which result in clinical manifestations; and by presenting the rationale for therapeutic interventions. In particular, students will be introduced to pharmacokinetics, pharmacodynamics and pharmacological interventions related to the pathophysiology studied. Microbiology will also be discussed with reference to the growth and physiology of micro-organisms, their pathogenic potential, infection control and antibiotic treatment. In this unit, major disorders of the cardiovascular, respiratory, renal and nervous systems will be examined, as well as fluid and electrolyte imbalances, acid/base imbalances and shock. The pathophysiological principles underlying disorders of major body systems and subsystems will also be discussed - for example, in cardiovascular pathophysiology, hypertension and atherosclerosis will be examined. However, specific systems in this subject may be interchanged with those in the fourth semester subject based on the relevant National Health Priorities studied in the associated nursing unit.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Explain the fundamentals of microbiology and infection control;
2. Explain the relevance of microbiology in the work of health professionals;
3. Describe the major pathophysiological processes, which underlie commonly encountered diseases/conditions;
4. Describe the major pathophysiological concepts of disease and how diseases progress such as: aetiology, risk factors;
5. Identify the environmental influences, which contribute to various pathophysiological processes, and relate these to disease prevention as well as pathogenesis;
6. Describe severe and life-threatening complications, which may develop in particular disease conditions;
7. Describe the scientific basis for preventative interventions, diagnosis and management of important pathophysiological conditions;
8. Apply all of the above concepts to commonly encountered diseases/conditions of the: cardiovascular system, respiratory system, renal system, nervous system and acid/base imbalances and fluid/electrolyte imbalances;
9. Discuss the principles of pharmacodynamics and pharmacokinetics as they apply to specific drugs or drug classifications;
10. Discuss medication administration and nursing management of the client receiving medications including legal and ethical issues;
11. Accurately calculate drug dosages; and
12. Demonstrate skills in the safe practice of medication management.

**Class Contact:**Sixty (60) hours for one semester comprising lectures, tutorials and laboratories.

**Required Reading:**Australian Government Department of Health and Ageing. (2005). National Medicines Policy: Quality use of medicines. Canberra: Author. (<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/nmp-quality.htm>) McCance, K.L., & Huether, S.E. (2009). (6th ed.). Pathophysiology: The Biologic Basis for Disease in Adults and Children Missouri, Mosby. Shane Bullock and Elizabeth Manias (2010) 6th ed Fundamentals of Pharmacology Pearson Australia McKenna, L, Mirkov L (2010) 5th ed Nursing and Midwifery Drug Handbook Australia & New Zealand

**Assessment:**Students must achieve an aggregate score of 50% and pass the assignment (Pharmacology 1000 words) in order to pass this unit. Test, 2 Tests 10

% each based on lectures and laboratory work, 20%. Assignment, Pharmacology (1000 words), 30%. Examination, 3 hour written final examination, 50%.

## RBM2109 Bioscience for Paramedics 3

**Locations:**St Abans.

**Prerequisites:**RBM1208 - Bioscience for Paramedics 2

**Description:**This unit continues on from Bioscience 1 & 2 and covers the anatomy and physiology of the musculoskeletal, digestive, male and female reproductive systems. Additionally, major physiological processes including the following, will be introduced: pregnancy/birth, cellular response to injury, inflammation, wound healing, neoplasia and immunopathology.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the anatomy and physiology of the musculoskeletal system;
2. Describe the anatomy and physiology of the digestive system;
3. Explain the processes of inflammation and neoplasia;
4. Explain the anatomy and physiology of the reproductive systems, pregnancy and human development;
5. Describe cellular changes in response to injury, wound healing and immunopathological processes; and
6. Discuss basic pathophysiological processes within each system listed above and their relationship to paramedic practice.

**Class Contact:**Lecture1.0 hrTutorial1.0 hrForty-eight (48) hours for one semester comprising lectures and tutorials.

**Required Reading:**Marieb, E., and K. Hoehn (2013). (9th ed.) Human anatomy and physiology. Benjamin Cummings

**Assessment:**Test, Three (3) multiple choice tests (10% each, approximately 1000 words), 30%. Report, Two (2) tutorial worksheets, approximately 500 words each, 10%. Examination, Multiple choice & written, 2.5 hrs (approximately 2000 words), 60%. The total combined assessment word equivalence is approximately 4000 words. To pass this unit, students must achieve an aggregate score of 50%.

## RBM2123 Pathophysiology in Midwifery

**Locations:**St Abans.

**Prerequisites:**RBM1121 - Anatomy & Physiology 1RBM1222 - Anatomy & Physiology 2

**Description:**This unit of study will introduce pathophysiological concepts, principles and disease processes, illustrating their relationship to a range of common and important acute and chronic disease conditions, relevant to midwifery practice. The aims of the unit are: to provide a scientific basis for understanding disease processes such as cellular injury, inflammation and neoplasia; to elucidate the underlying mechanisms which result in clinical manifestation; and to present the rationales for therapeutic interventions. Microbiology will be discussed with reference to the pathogenic potential and infection control of microorganisms. The pathophysiological principles underlying disorders of body systems will be discussed with an emphasis on midwifery; for example, in cardiovascular pathophysiology: hypertensive disorders of pregnancy and shock associated with blood loss will be examined. Other topics to be covered will include disorders of: blood (eg. anemias) and body defences (eg. incompatibilities), the renal system, fluid and electrolytes, the reproductive system (eg. sexually transmitted diseases, infertility), labour, endocrinology, metabolism (eg. diabetes) and nutrition associated with pregnancy. Genetic and developmental abnormalities of the foetus will also be examined.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Describe the pathogenic potential and infection control of micro-organisms;
2. Demonstrate knowledge and understanding of normal embryonic and fetal



development; 3. Demonstrate knowledge and understanding of abnormal embryonic and foetal development, including genetic and developmental abnormalities and causes of foetal distress and death; 4. Discuss metabolic disorders especially gestational diabetes; 5. Explain disorders of blood and immunity such as anaemia and blood group incompatibility; 6. Describe cardiovascular changes and abnormalities such as hypertension; 7. Describe disorders of fluid and electrolyte balance including pre-eclampsia and eclampsia; 8. Describe abnormalities of placental and membrane development and function; and 9. Identify the problems encountered during labour and apply knowledge and understanding of labour in a practical setting.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Sixty (60) hours for one semester comprising lectures, laboratories and tutorials.

**Required Reading:** Stables, D and Rankin, J, 2010 3rd ed. Physiology in Childbearing with Anatomy and related Biosciences Elsevier

**Assessment:** Test, Written, 15%. Report, Laboratory, 15%. Examination, 3 hour written theory, 70%. Assessment 1- Test- assessors learning outcomes-1, 2,3,4,8,9 Graduate Capabilities- 4-6 Assessment 2- Report- Learning Outcomes -1 Graduate Capabilities- 4-6 Assessment 3- Final Exam- Learning Outcomes-1-9 Graduate Capabilities- 1-6.

### RBM2133 Cell and Molecular Biology

**Locations:** St Abans.

**Prerequisites:** RBM2560 - Medical Biochemistry

**Description:** This unit focuses on the investigation of the human body at the molecular and cellular levels. It builds on notions and concepts previously explored in foundation physiology units. The unit considers the components of cells, how they are regulated, where they are located and how they interact to produce an entity that can live and reproduce with a particular focus on biomedicine. The lecture series will cover topics such as the molecular structure, organisation and functioning of the eukaryotic cell and make explicit links to the molecular basis of health and disease - particularly as it emerges in contemporary medical research.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Describe the components of a cell, their organization and their significance to the normal functioning of eukaryotic cells; 2. Critically review and analyse current scientific literature relating to cell and molecular biology; 3. Identify and explain potential molecular alterations that occur within the cell that contribute to human disease; 4. Conceptually map experimental approaches, both current and historical, to examining cell and molecular biology in both normal and diseased cells.

**Class Contact:** Lecture 1.0 hr PC Lab 1.0 hr Tutorial 1.0 hr Workshop 1.0 hr Seventy-two (72) hours per semester, consisting of three (3) hours of lectures each week and three (3) hours of tutorials/workshops/practical's/self-directed learning each week for one semester. Students should expect to spend three to four (3-4) hours in additional independent study each week.

**Required Reading:** Lodish, H., Berk, A., Kaiser, C.A., Krieger, M., Bretscher, A., Ploegh, H., Amon, A., Scott, M.P. (2013). 7th Molecular Cell Biology W. H. Freeman; New York.

**Assessment:** Assignment, Part A Summary (500 words), 10%. Assignment, Part B Assignment (1300 words), 30%. Test, Mid Semester Topic Test - Multiple Choice Questions (45 min, 300 words), 10%. Examination, Written Exam (2 hours) consisting of multiple choice questions and short answer questions (equivalent to 2000 words), 50%.

### RBM2141 Pharmacology and Nutrition

**Locations:** St Abans.

**Prerequisites:** Nil.

**Description:** This unit covers the nutritional roles of functional foods; the classification of prescription drugs and their therapeutic uses and contra-indications; pharmacodynamics; polypharmacy; psychonutrition; drug-nutrient interactions.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Recall the functional foods commonly encountered in foodstuffs, and their nutritional roles; 2. Recall the major classes of prescription drugs, their therapeutic roles and contra-indications; 3. Explain the principles of pharmacodynamics; 4. Be aware of the potential for specific drug-nutrient interactions and be able to demonstrate ability to retrieve such published information; 5. Be aware of the potential effects of polypharmacy; and 6. Recall the effects of selected psychonutrients.

**Class Contact:** 3 hrs/wk, made up of lectures, and tutorials/workshops

**Required Reading:** Bryant B, Knights K; Pharmacology for Health Professionals. 2007. 2nd ed. Elsevier, NSW

**Assessment:** Exam 60% assignments (2) 40%

### RBM2200 Functional Anatomy of the Head and Back

**Locations:** St Abans.

**Prerequisites:** RBM1100 - Functional Anatomy of the Trunk RBM1200 - Functional Anatomy of the Limbs

**Description:** Students study gross and histological anatomy of the head, neck and back. The following regions are studied in detail: skull and cranial cavity; brain; scap and face; eye and ear; nasal and oral cavities; arteries, veins, lymphatics, nerves and major structures of the neck; vertebral column; back muscles; and spinal cord and nerves. The relevance of anatomy to medicine is highlighted via common clinical scenarios. Practical classes involve exposure to bones, models and human cadaver dissected/prosected specimens.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate anatomical literacy and relate structures to basic anatomical principles; 2. Identify the bones and bony markings of the head, neck and back; 3. Explain movements of the joints and muscles of the head, neck and back; 4. Appraise the role of the arteries, veins and lymphatics of the head, neck and back; 5. Examine and integrate the visceral and somatic nerve supply of the head, neck and back; 6. Outline the gross and histological structure of the viscera of the head, neck and back; 7. Demonstrate observational and descriptive skills in relation to histological slides, anatomical models, and human cadaver specimens.

**Class Contact:** Lab 2.0 hrs Lecture 1.0 hr Sixty (60) hours per semester, five (5) hours per week comprising of three (3) hour lectures two (2) hour tutorial/practical and five (5) hours independent study.

**Required Reading:** Moore, K.L., Dalley, A.F., & Aqr, A.M.R., (2014) 7th Edition Clinically Oriented Anatomy Lippincott Williams & Wilkins, Philadelphia, USA

**Assessment:** Test, Two (2) Semester Tests - Multiple Choice (10 minutes each), 10%. Examination, Theory Examination (3 hours), 45%. Examination, Final Practical Flag Examination (2 hours), 45%.

### RBM2202 Pathophysiology & Quality Use of Medicines 2

**Locations:** St Abans.

**Prerequisites:** RBM2101 - Pathophysiology & Quality Use of Medicines 1

**Description:** This unit furthers student's understanding of pathophysiological principles

and disease processes introduced in RBM2101 Pathophysiology & Quality Use of Medicines 1 and supports components in concurrent nursing units. Topics will include neoplasia, disorders of the endocrine, musculoskeletal and haematological systems and the gastrointestinal tract and the quality use of medicines. Disorders of the reproductive tract including infertility will be presented. Genetic disorders and their modes of inheritance will also be examined. Students will further develop their knowledge of pharmacology in clients with a mental illness, diabetes mellitus, cancer, arthritis and musculoskeletal conditions and related co-morbidities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the major pathophysiological concepts, processes, progression and complications of endocrine, musculoskeletal, haematological, gastrointestinal, neoplastic, genetic and reproductive diseases/conditions; 2. Identify the environmental influences, which contribute to various pathophysiological processes, and relate these to disease prevention as well as pathogenesis; 3. Discuss the principles of pharmacodynamics and pharmacokinetics as they apply to specific drugs or drug classifications; 4. Discuss medication administration and nursing management of the client receiving medications including legal and ethical issues.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs Forty-eight (48) hours for the semester comprising of lectures, on-line activities, tutorials and practical laboratories.

**Required Reading:** McCance, K.L., & Huether, S.E. (2014) (7th ed.)

Pathophysiology: The Biologic Basis for Disease in Adults and Children St Louis, Missouri, US: Elsevier Bullock, S., & Manias, E. (2014) (7th ed.) Fundamentals of Pharmacology Frenchs Forest, NSW: Pearson Australia OR McKenzie, G., Page, R., Pleunik, S., Reiss, B., Broyles, B., Evans, M. (2012) (1st ed.) Pharmacology in Nursing Melbourne, VIC: Cengage Learning Australia

**Assessment:** Test, Two (2) tests (30 minutes each), 20%. Test, One test (pharmacology, one hour), 30%. Examination, Written examination (2 hours), 50%. Students must achieve an aggregate score of 50% and pass the pharmacology test (Hurdle) in order to pass this unit.

## RBM2205 Pathophysiology & Quality Use of Medicines 2

**Locations:** St Abans.

**Prerequisites:** RBM2104 - Pathophysiology & Quality Use of Medicines 1

**Description:** This unit furthers the understanding of pathophysiological principles and disease processes introduced in Pathophysiology & Quality Use of Medicine 1 and supports the content in concurrent nursing units. Topics will include neoplasia, disorders of the endocrine, musculoskeletal and haematological systems and the gastrointestinal tract and the quality use of medicines. Disorders of the reproductive tract including infertility will be presented. Important genetic disorders and their modes of inheritance will also be examined. Specific systems in this subject may be interchanged with those in the third semester subject based on the relevant National Health Priorities studied in the associated nursing unit. Students will further develop their knowledge of medications, their administration and management with a particular focus on drugs used in clients with a mental illness, diabetes mellitus, cancer, arthritis and musculoskeletal conditions and related co-morbidities.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Understand the fundamentals of microbiology and infection control; 2. Appreciate the relevance of microbiology in the work of health professionals; 3. Describe the major pathophysiological processes, which underlie commonly encountered diseases/conditions; 4. Understand the major pathophysiological concepts of disease and how diseases progress such as: aetiology, risk factors; pathogenesis, acute and chronic conditions, and complications; 5. Identify the

environmental influences, which contribute to various pathophysiological processes, and relate these to disease prevention as well as pathogenesis; 6. Discuss severe and life-threatening complications, which may develop in particular disease conditions; 7. Discuss the scientific basis for preventative interventions, diagnosis and management of important pathophysiological conditions; 8. Apply all of the above concepts to commonly encountered diseases/conditions of the: cardiovascular system, respiratory system, renal system, nervous system and acid/base imbalances and fluid/electrolyte imbalances; 9. Discuss the principles of pharmacodynamics and pharmacokinetics as they apply to specific drugs or drug classifications; 10. Discuss medication administration and nursing management of the client receiving medications including legal and ethical issues; 11. Accurately calculate drug dosages; and 12. Demonstrate skills in the safe practice of medication management.

**Class Contact:** A total of 60 hours; comprising 3-4 hours of lectures (total = 40 hours) and 1-2 hours of tutorial/laboratory or equivalent (total = 20 hours). Class contact hours per week may vary according to clinical placement allocations.

**Required Reading:** Australian Government Department of Health and Ageing. (2005). National Medicines Policy: Quality use of medicines. Canberra: Author.

(<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/nmp-quality.htm>) McCance, K.L., & Huether, S.E. (2005). Pathophysiology: The Biologic Basis for Disease in Adults and Children (5th ed.). Missouri, Mosby. Prosser, S., Worster, B. & Dewar, K. (2000) Applied Pharmacology for Nurses and Other Health Care Professionals. Sydney: Mosby

**Assessment:** 1. Written test (10%) Week 4 or 5 2. Written test (10%) Week 8 or 9 3. Written assessment (1000 words) (30%) Week 12 4. Written examination (2.5 hours) (50%) Exam period Students must achieve an aggregate score of 50% and pass the written assessment to pass this subject. Supplementary assessment in the form of a supplementary theory exam will normally be offered to students achieving an N (45-49%) grade where they have also scored at least 40% for the end of semester theory exam and 50% for the written assessment. Students must achieve at least 50% on the supplementary exam to be granted a pass (P 50) as a final grade for the unit. Students who achieve a grade of 40 to 44% will be allocated L (not yet assessed) until after the supplementary exam period is over, when the grade will be converted to N (fail).

## RBM2260 Diet and Nutrition

**Locations:** St Abans.

**Prerequisites:** RBM1528 - Human Physiology 2

**Description:** This unit will demonstrate the relationships between gastrointestinal function, diet, nutrition and human health. The unit examines the gastrointestinal structure and function; chemical nature of the nutrients, and their roles in body structure and function; energy intake and regulation; body composition and anthropometry; metabolism of nutrients; nutritional requirements under various environmental and physiological states; diet and disease; dietary guidelines; vitamins as antioxidants; nutrition and prevention of disease.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Evaluate different classes of nutrients, e.g. carbohydrates, lipids, proteins, vitamins and minerals; 2. Examine the composition and role of these nutrients within a range of different diets, and impact and regulation within the body; 3. Analyse the experimental data and discuss the results; and 4. Recommend and emphasize the importance of digestion, metabolism, nutrition and energy balance to the wellbeing of an individual.

**Class Contact:** Lab 2.0 hrs Lecture 3.0 hrs PC Lab 2.0 hrs Sixty (60) hours (five (5)

hours per week) for one semester comprising lectures and labs.

**Required Reading:** Whitney, E., Rolles, S.R., Crowe, T., Cameron-Smith, D., & Walsh, A. (2013) 2nd Understanding Nutrition, Australian and New Zealand Cengage Learning

**Assessment:** Test, Mid-Semester Test, MCQ's (300 words, 30 minutes), 10%. Laboratory Work, Laboratory/LiWC work and 3 x Lab Reports (up to 500 words each), 30%. Examination, Theory Exam (2,500 words, 2.5 hours), 60%.

## RBM2365 Medical Microbiology

**Locations:** St Albans.

**Prerequisites:** RBM1528 Human Physiology 2 or equivalent.

**Description:** This unit of study introduces students to the nature and classification of micro-organisms and their growth requirements, microbial genetics, normal flora, host defence mechanisms, immuno-response and host microbe interaction. The principles of infection control, sources and mode of transfer of infectious agents, safe clinical practice, antibiotics, epidemiology, analytical methods and food safety will be explored. The application of microorganisms in medicine, industry and biological work products will also be investigated.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Identify and describe the differences of main groups of micro-organisms, including bacteria, viruses, fungi, protozoa and helminths;
2. Describe the microflora associated with the human body and in various environments;
3. Discuss the transmission and infection control of microorganisms;
4. Explain microbial genetics;
5. Describe the chemotherapeutic agents and the importance of epidemiology, and their relevance to a health practitioner.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs Forty-eight (48) hours or equivalent for one semester comprising of lectures and laboratories.

**Required Reading:** Tortora, G.J., Fuuke, B.R. and Case, C.L., (2007) 9th ed. Microbiology: an Introduction Redwood City, California

**Assessment:** Test, Topic test, 10%. Report, Laboratory reports, 30%. Examination, End of semester examination, 60%.

## RBM2530 Pathophysiology 1

**Locations:** Footscray Park, St Albans.

**Prerequisites:** RBM1518 - Human Physiology 1 RBM1528 - Human Physiology 20r: RBM1174 Human Physiology and AHE2104 Exercise Physiology for students enrolled in the Clinical Exercise stream of the Human Movement and Education degree or equivalent. Or: RBM1103 Bioscience 1 and RBM1202 Bioscience 2 for students enrolled in HBHL Bachelor of Health Science.

**Description:** This unit provides students with an understanding of the control and co-ordination of body systems and the effects of disturbances to body functions. The mental status and some psychosocial factors associated with these processes will be discussed. Students are introduced to major pathologic processes which may affect all parts of the body. Topics include tissue injury, inflammation and repair, normal immune function and deviations from normal, cancer from the molecular level to the whole person, neural and endocrine dysfunction including impaired cognition such as dementia and impaired co-ordination and control. In the laboratory, students will be introduced to basic laboratory techniques and apply scientific principles to the assessment of dysfunction in humans. Students are also introduced to the research literature, research techniques and the communication of scientific information by a series of presentations.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate the ability to locate and critically analyse scientific data relevant to pathophysiology utilising a range of materials and report findings effectively in oral and written formats;
2. Explain how homeostatic imbalances may progress to disease;
3. Describe and explain a range of pathologic processes including injury, inflammation and immunopathology, neoplasia, genetic, endocrine and neurological disorders;
4. Utilise knowledge of pathophysiology to solve problems and analyse case studies of disease;
5. Discuss the scientific basis for preventative interventions and management of important pathophysiological conditions; and
6. Apply basic scientific principles in the laboratory investigation of disease, analysis of laboratory data or case reports.

**Class Contact:** Lab 1.0 hr Lecture 3.0 hrs Online 1.0 hr Tutorial 1.0 hr Seventy-two (72) hours per semester, comprising three (3) hours of lectures per week and the equivalent of three (3) hours of workshops per week comprising tutorials, laboratory practicums and online learning activities.

**Required Reading:** McCance KL and Huether SE, (2014) 7th ed. Pathophysiology: the biologic basis for disease in adults and children Mosby Elsevier, Maryland heights, Missouri Strayer D and Rubin E. (2014) 7th ed. Rubin's Pathology: clinicopathologic foundations of medicine Wolters Kluwer / Lippincott Williams and Wilkins, Philadelphia NOTE: Students require only ONE of the above texts.

**Assessment:** Presentation, Oral presentation (five (5) minutes, 400 words), 5%. Laboratory Work, Lab reports (800 words), 20%. Examination, Multiple choice and SA test (1.0 hours, 800 words), 25%. Examination, Multiple choice and SA exam (2.5 hours, 2000 words), 50%. Students must attend a minimum of 80% of all labs to pass the unit; Acquisition of laboratory skills is an integral part of the learning outcomes for this unit and for students to achieve GC1, in terms, of working collaboratively with others.

## RBM2540 Pathophysiology 2

**Locations:** Footscray Park, St Albans.

**Prerequisites:** RBM2530 - Pathophysiology 1

**Description:** Pathophysiology involves the study of disordered physiological processes associated with disease or injury and can therefore be considered core to any degree in biomedicine or health science. RBM2540 examines the effects of dysfunction in particular human body systems, building on students' knowledge of basic pathological processes and overall regulation of the human body (RBM2530 Pathophysiology 1). Overall organ and system dysfunction such as hepatic, renal, cardiovascular and respiratory failure will be covered as well as specific disorders of the following systems: cardiovascular, renal, respiratory, blood, reproductive, gastrointestinal and musculoskeletal. Major disease types and processes such as circulatory shock, atherosclerosis, disorders of acid-base balance, sexually transmitted diseases and the psychosocial effects of such disorders will be addressed. Students are introduced to techniques for assessment of disorders, which may include physical assessments, spirometry, electrocardiography and various biochemical analyses. There will be an integration of topic material relating to specific body systems between RBM2530 and RBM2540 and the specific diseases chosen to illustrate major processes may vary to reflect facilitator sub-discipline expertise. Students will have the opportunity to investigate and apply their knowledge of pathophysiology in professional and community situations; this will be exemplified by the LiWC group project where students will study the pathophysiology of a disease in consultation with health professionals and patients to gain a holistic understanding of the public health system.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate the ability to locate and critically analyse a range of peer reviewed

literature including case studies, reviews and primary research articles 2. Critically assess the main types of physical examination and laboratory tests employed to investigate the causes of disease and articulate the scientific basis for preventative interventions 3. Compare and contrast a range of disease processes with reference to specific organ systems and their interplay 4. Utilise and apply scientific principles and protocols to the investigation of pathological conditions, especially with respect to appropriate controls and accurate measurement of physiological parameters 5. Utilise knowledge of pathophysiology to solve moderately complex problems and analyse case studies of disease including writing a case study based on patient and health practitioners perspectives 6. Determine how psychosocial, social and cultural issues may contribute to disease processes, and apply this knowledge to understand how different strategies may be necessary to prevent the development or worsening of disease in a context of social diversity 7. Critically reflect on and analyse processes and data collected with peers in a laboratory setting.

**Class Contact:** Lab 3.0 hrs Lecture 3.0 hrs Tutorial 1.0 hr Seventy (70) hours per semester, comprising of lectures, laboratory sessions and formal tutorials, as follows: Three (3) hours of lectures each week; Ten (8) Laboratory sessions of three (3) hours duration each and; Ten (10) hours of formal tutorials. Students are expected to undertake ten (10) hours of independent study per week which should be sub-divided as follows: LiWC project data collection and research (4 hours), tutorial and pre-lab exercises (3 hours), and weekly revision of lecture notes and reading of the textbook (3 hours).

**Required Reading:** Students will need either Pathophysiology by McCance et al (2015) OR Rubin's Pathology et al (2015) McCance KL and Huether SE. (2015) 7th ed. Pathophysiology: the Biologic Basis for Disease in Adults and Children Maryland Heights, Missouri, Mosby Elsevier Rubin R, Strayer D and Rubin E. (2015) 7th ed. Pathology: Clinicopathologic Foundations of Medicine Philadelphia, Wolters Kluwer / Lippincott Williams and Wilkins

**Assessment:** Test, Mid semester test (1 hour, MCQ only), 20%. Assignment, LiWC team project- Assignment (2000 words), 20%. Presentation, LiWC team project - Oral Presentation (10 minutes, 300 words), 10%. Examination, Final Exam (3 hours, MCQ only), 50%. Laboratory attendance is compulsory and is a hurdle requirement. In order to complete laboratory based learning outcomes students must attend a minimum 80% of labs to pass the subject because lab skills are an essential part of the unit and overall course given that industry expects science graduates to have basic laboratory and analytical skills. This unit is also a pre-requisite for several 3rd year units where students will need to have learnt these basic lab skills to scaffold their learning into more advanced laboratory skills.

### RBM2560 Medical Biochemistry

**Locations:** Footscray Park, St Albans.

**Prerequisites:** RBM1528 - Human Physiology 2RCS1120 - Chemistry for Biological Sciences B

**Description:** The aim of this unit is to provide a foundation in biochemical principles with special emphasis on medical and nutritional applications. Firstly, foundations of biochemistry will be covered, including biological buffers and structures of biological macromolecules such as proteins, carbohydrates, lipids and nucleic acids. Other topics covered include enzymes, bioenergetics, carbohydrate metabolism pathways, the molecular basis of gene expression, protein synthesis and modification. The clinical significance of various metabolic disorders will be discussed from a biochemical perspective.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Exhibit knowledge through examination of biochemical fundamentals including the structure and function of biological macromolecules and how buffers work;
2. Discriminate between the various levels of structure in proteins and describe the processes by which proteins are purified and analysed;
3. Identify and analyse the nature and behaviour of enzymes, mechanisms including the clinical applications of enzymes;
4. Articulate the principles and mechanisms of bioenergetics;
5. Explain the molecular basis of gene expression and regulation;
6. Identify and explain the biochemical bases of diseases caused by various defects.

**Class Contact:** Lab 3.0 hrs Lecture 2.0 hrs Workshop 1.0 hr Seventy-two (72) hours for one (1) semester comprising of lectures, practicals and tutorials.

**Required Reading:** One of the following texts may be purchased and the other used as a reference. Baynes, J.W. & Dominiczak, M.H., (2014) 4th ed. Medical Biochemistry Saunders Nelson, D.L., & Cox, M.M., (2012) 6th ed. Lehninger Principles of Biochemistry W.H. Freeman.

**Assessment:** Workshop, Formative assessment: in-class workshops with review and online questions (500 words), 10%. Laboratory Work, Reports on practicals and answers to workshop questions (1000 words), 30%. Test, One mid-semester test (500 words), 10%. Examination, Final Examination (2 hours), 50%.

### RBM2800 Cardiorespiratory and Renal Physiology

**Locations:** Footscray Park, St Albans.

**Prerequisites:** RBM1518 Human Physiology 1 and RBM1528 Human Physiology 2.

**Description:** This unit aims to provide students with an understanding of the function, control and co-ordination of the cardiovascular, respiratory and renal systems.

Students will examine cardiac, pulmonary and renal function and normal circulatory, respiratory and renal dynamics. An overview of the co-ordination of these systems will be achieved through an examination of the mechanisms involved in maintaining fluid, electrolyte, and acid-base balance, and the integration of neural and endocrine function in the control of cardiovascular, respiratory and renal systems. Homeostatic control of the cardiac, pulmonary and renal systems will also be examined by investigating their responses to stresses, including exercise, high altitude, and increased temperature.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically reflect on cardiac function and predict changes in ECG, cardiac work and the pulse pressure wave in order to understand physiological responses to exercise;
2. Evaluate the characteristics of obstructive and restrictive diseases and interpret how these alter lung volumes;
3. Interrogate kidney control and feedback mechanisms, including molecular transport in each nephron segment, in order to forecast fluid, electrolyte and acid-base imbalance;
4. Interpret cardiorespiratory responses to exercise and outline exercise limitation in normal and extreme environments;
5. Evaluate and analyse data from human participants to illustrate basic properties of cardiorespiratory and renal function;
6. Appraise results of experimental procedures and report in a clear and concise scientific manner consistent with discipline expectations.

**Class Contact:** Lab 3.0 hrs Lecture 1.0 hr Sixty (60) hours per semester comprising of lectures, practical and/or tutorials per week.

**Required Reading:** Beachey, W. (2013) 3rd ed, Respiratory Care Anatomy and Physiology: Foundations for a Clinical Practice Mosby Silverthorn, D.U. (2016) 7th ed, Human Physiology: An Integrated Approach Pearson Powers, S.K., & Howley, E.T. (2015) 9th ed, Exercise Physiology McGraw-Hill

**Assessment:** Laboratory Work, Laboratory Reports (four (4) reports, 1000 words total), 20%. Test, Two (2) Online Tests (800 words total), 20%. Test, Two (2) Mid-

semester tests (500 words total), 10%. Examination, End of semester Examination (2.5 hours), 50%.

## RBM2850 Nutritional Therapeutics A

**Locations:**St Albans.

**Prerequisites:**RBM1110 - Nutritional Biochemistry 1RBM1820 - Nutrition, Society and CommunicationRBM1830 - Diet Therapy 1

**Description:**Students will be introduced to normal gastrointestinal (GIT) function; signs and pathophysiology of GIT dysfunction; lifestyle effects on normal function; effects of stress on function; pathogenesis of untreated signs and symptoms; nutritional support of liver function; clinical evaluation of GIT; nutrients required for normal GIT function; contraindications to the use of food supplements.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Describe normal and abnormal signs of GIT function; 2. Explain abnormal GIT function from a pathophysiological perspective; 3. Discuss normal and abnormal liver function; 4. Describe nutrient requirements and dietary supplementation for support of normal GIT function; and 5. Discuss contraindications to the use of food supplements.

**Class Contact:**Total of 34 hours for the semester (12 x 1 hour lectures, 11 x 2 hour tutorials)

**Required Reading:**Whitney (2014). 2nd Understanding Nutrition. Centage Learning

**Assessment:**Assignment, Lit review & patient education pamphlet; 2000 words, 50%. Examination, Final exam (2 hrs), 50%. Total word count = 4,000 words (approximate).

## RBM2855 Nutritional Therapeutics B

**Locations:**St Albans.

**Prerequisites:**RBM1830 - Diet Therapy 1RBM2850 - Nutritional Therapeutics ARBM1830 Diet Therapy 1; RBM 2850 Nutritional Therapeutics A

**Description:**This unit provides students with the knowledge and skills needed to conduct the three major types of nutrition assessment: dietary, biochemical and anthropometric assessments. Students will learn how to use the most recent Nutrient Reference Values and Australian Dietary Guidelines (including the Australian Guide to Healthy Eating), and the FoodWorks dietary assessment computer program. In addition, students will learn these skills in the context of cultural competency.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Describe how to conduct basic anthropometry (i.e. weights, height, length, girths, skinfolds) and apply these measurements to known reference ranges and growth charts; 2. Describe the strengths and limitations of commonly used anthropometric, biochemical, clinical and dietary assessment tools; 3. Demonstrate basic skills in conducting diet and recipe analyses in FoodWorks; 4. List and explain the most common pathology tests and how to use them in the assessment of patient health; and 5. Articulate how to develop Nutrition Management Goals and Objectives in the Nutrition Care Process.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs A total of 46 hrs comprised of lectures (2 hrs x 12 weeks) and tutorials (2 hrs x 11 weeks).

**Required Reading:**Gibson, R.S. (2005). 2nd ed. Principles of Nutritional Assessment. Melbourne: Oxford University Press.

**Assessment:**Case Study, Maltese Recipe Modification (2,000 words), 50%. Examination, Final Examination (2 hrs; approx. equal to 2,000 words), 50%. Total word count 4,000 words (approximate).

## RBM3122 Nutrition for Performance

**Locations:**St Albans.

**Prerequisites:**RBM2260 - Diet and NutritionRBM2220 - Nutritional Biochemistry 2

**Description:**The importance of nutrition and specific ergogenic aids to enhancing physical performance will be demonstrated. This unit integrates nutrition, biochemistry and intermediary metabolism with the physiology of exercise, allowing the student to apply this knowledge to the designing of nutritional advice to enhance human performance. The macro-nutrient and micro-nutrient needs of different sport and exercise types, will be discussed with the aim of arriving at the skills to provide appropriate practical dietary and nutritional therapeutic advice for athletes.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Integrate knowledge of biochemistry and physiology of exercise with the nutritional and ergogenic needs to optimize performance; 2. Assess the nutritional needs of different exercise modalities; 3. Discuss the parameters influencing the nutrient and fluid availability before, during and recovery after exercise; and 4. Prescribe nutritional supplements and ergogenic aids to enhance exercise performance.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs Forty-eight (48) hours for one semester, comprising of lectures, tutorials/laboratory classes. During lectures, students will be exposed to the underlying principles of performance nutrition. Tutorial and laboratory sessions will serve to reinforce their knowledge of performance nutrition and to allow them to apply this body of knowledge in problem solving and case studies. These interactive sessions will provide students with an opportunity to work both independently and collaboratively as students are expected to participate in class activity and to learn mutual respect. Laboratory sessions will provide a useful hands-on activity to learn the power of observation, proper data collection and processing, and critical analysis. Mid-term student assessments will be carried out serving as feedback mechanisms to students to manage and negotiate learning.

**Required Reading:**Jukendrup, A; Gleeson, M. (2010) 2nd ed. Sports Nutrition. An introduction to energy production and performance Human Kinetics.

**Assessment:**Assignment, Review current nutrition program for a particular athlete/sport. Refer to the Assignment Handout (1500 words), 20%. Test, 2 x 5 short answer questions (35 minutes) Weeks 5 and 12., 20%. Examination, 12 Short Answer/Long Answer questions (2 hours), 60%. Total combined assessment word equivalence is approximately 5,000 words.

## RBM3264 Advanced Nerve and Muscle Physiology

**Locations:**Footscray Park, St Albans.

**Prerequisites:**RBM2800 - Cardiorespiratory and Renal Physiology

**Description:**This unit examines in detail the mechanisms of nerve and muscle function, including behaviour of excitable cells; mechanisms of muscle contraction; muscle fibre types; metabolic processes in active muscle; neuromuscular fatigue; and muscle plasticity. Students are also introduced to current research techniques in nerve and muscle physiology.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically reflect on the experimental evidence describing ionic movement, the action potential and its synaptic transmission at the neuromuscular junction; 2. Interpret the basic chemical and mechanical steps of muscle contraction, including the concepts of twitch, recruitment and tetanus, and the force-velocity relationship; 3. Discriminate between the structural and functional properties of skeletal, cardiac and smooth muscles; 4. Interrogate the regulation of intracellular calcium and its effects on muscle fatigue and damage processes; 5. Investigate muscle fibre

types, metabolism and fatigue with different exercise intensities; 6. Analyse the immense plasticity of skeletal muscle and produce a coherent scientific argument on a current topic of interest in skeletal muscle in health, disease and ageing; and 7. Experiment according to ethical protocols on both animal tissue and human subjects to illustrate basic properties of nerve/muscle function.

**Class Contact:** Lab 4.0 hrs Tutorial 1.0 hr Sixty (60) hours in total per semester, consisting of two (2) hours of lectures, one (1) hour tutorial and two (2) hours of practical work each week.

**Required Reading:** Nerve and muscle physiology sections of any basic physiology textbook. MacIntosh, B.R., Gardiner, P.F., & McComas, A.J. (2006) 2nd Edition, Skeletal Muscle: Form and Function Human Kinetics Jones, D., Round, J.M., & De Haan, A. (2004) 1st Edition, Skeletal Muscle: From Molecules to Movements Churchill Livingstone

**Assessment:** Laboratory Work, Laboratory reports (Five (5) reports - 1000 words total), 24%. Assignment, Question of current interest in neuromuscular physiology (2000 words), 15%. Other, Pre-submission of a tutorial question each week for discussion (500 words in total), 16%. Examination, End of Semester Examination (3 hours), 45%.

### **RBM3265 Exercise Biochemistry and Integrated Metabolism**

**Locations:** St Albans.

**Prerequisites:** RBM2800 - Cardiorespiratory and Renal Physiology RBM2560 - Medical Biochemistry

**Description:** This Capstone unit further expands students understanding of biochemical and molecular changes in the human system in response to various models of exercise stress. The integrated nature of the biochemical, molecular and physiological responses of different organs and systems in homeostatic responses to exercise will be examined. Students will also be introduced to aspects of current research literature in exercise metabolism which are also assisting with positive clinical and general health benefits. Current research literature in the area will be analysed and human research and evaluation will be presented throughout the series of lectures. A practical component will be delivered to expand on basic concepts of metabolism via indirect testing methods and to expose the students to a variety of modern testing techniques.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to: 1. Evaluate and explain changes in physiological systems with different and varied exercise challenges; 2. Critically review and explain the physiological and biochemical interaction between the muscle and other tissues following different and varied exercise challenges; 3. Conceptually map the biochemical events in the muscle during different and varied exercise conditions and the interpretation of such events via direct and indirect scientific techniques; 4. Design, develop and draft a scientific literature review relevant to exercise metabolism; and 5. Exhibit a satisfactory level of competency in administering practical exercise and metabolic testing.

**Class Contact:** Lab 3.0 hrs Lecture 2.0 hrs Tutorial 2.0 hrs Forty-eight (48) hours for one semester comprising lectures, tutorials and practicals.

**Required Reading:** Mougios, V. (2006) Human Kinetics Champaign, IL, US

**Assessment:** Assignment, Assignment (2000 words), 30%. Test, Test (50 minutes), 20%. Examination, Final Examination (2.5 hours), 50%.

### **RBM3550 Growth and Early Development**

**Locations:** St Albans.

**Prerequisites:** RBM2540 - Pathophysiology 2

**Description:** This subject builds on the work of first and second year Human Bioscience. The overall concept to be studied is the process of human development and aging and the physiological and pathological changes that occur throughout the life cycle. This subject presents the major regulating systems of the body and thus involves advanced study in the areas of neurological, hormonal and reproductive changes. Life stages from the embryo to senescence will be studied and environmental, societal, psychological and cultural influences will also be discussed. The subject allows exposure to a range of scientific techniques through the laboratory component and may include a minor project.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the major physiological changes that occur throughout the life cycle from conception to neonatal life; 2. Identify the environmental influences that contribute to various disease processes; 3. Gain an understanding of the relationship between embryonic phases of life, the development of the major systems of the body and their subsequent degeneration; 4. Gain an understanding of the inter-relationship between the individual and psychosocial and environmental influences on health and development; and 5. Be introduced to various scientific techniques and methodologies through reading and practise, including research design and ethical consideration.

**Class Contact:** Lecture 1.0 hr Sixty (60) hours per semester, consisting of five (5) hours per week, comprising two (2) hours of lectures and up to three (3) hours of workshop/laboratory/tutorial work per week.

**Required Reading:** A selection of readings compiled by the lecturers.

**Assessment:** Laboratory Work, Embryology Laboratory Workbook: Open book, Q&A-style revision booklet, 5%. Test, Test Series: In-Lecture test of short answer (5) questions based on the content of the previous two weeks of lecture content, 10%. Assignment, Major Research Assignment Part 1: Abstract (~500 words; partnered), 10%. Assignment, Major Research Assignment Part 2: Conference Presentation (partnered; 10 mins + 5 mins question time), 15%. Assignment, Major Research Assignment Part 3: Peer-review critique of presentations + question (individual), 5%. Examination, Final Theory Examination, 55%. Students are required to obtain a satisfactory grade in all components of the assessment to obtain a pass grade.

### **RBM3560 Growth, Development and Ageing**

**Locations:** St Albans.

**Prerequisites:** Nil.

**Description:** This unit continues on the theme of human development and ageing and the physiological processes that occur, building on RBM3550 Growth and Early Development. This includes the exploration of changes that occur throughout the life cycle and interaction with the environment. The subject allows exposure to a range of scientific skills and techniques through the laboratory/workshop component and includes a major research project that can be undertaken either individually or collaboratively.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Appraise and investigate the anatomical and physiological changes that occur as the body ages including major diseases; 2. Analyse the inter-relationship between individual behaviours, life experience, environmental, psychosocial and cultural factors which affect development, health, wellbeing, life satisfaction and aging; and 3. Investigate and practice various scientific techniques and methodologies through reading and practise, including research design and ethical consideration. 4. Work independently and collaboratively to complete a major research project.

**Class Contact:** Lab 2.0 hrs Lecture 3.0 hrs Sixty (60) hours or equivalent for one

semester comprising of two (2) to three (3) hours of lectures and up to three (3) hours of workshop/laboratory/tutorial work per week.

**Required Reading:**A selection of readings will be compiled and distributed by the lecturer.

**Assessment:**Laboratory Work, Laboratory Workbook (~500 words), 5%. Test, Test (30 minutes), 10%. Project, Research Project (~1500 words), 30%. Examination, End of Semester Examination (3 hours), 55%.

### **RBM3590 Advanced Experimental Techniques**

**Locations:**St Abans.

**Prerequisites:**RBM2800 - Cardiorespiratory and Renal Physiology

**Description:**The aim of this unit is to teach students how to think and perform as a scientist. It introduces students to a variety of experimental techniques and the role they play in medical research. There will be a particular emphasis on students receiving practical skills in a laboratory setting. Students will obtain skills in scientific thought; experimental design; animal surgery; sterile technique; tissue preparation and staining; immunohistochemistry; electrophoresis; PCR; and measurement of cell, organelle and molecular functions. This unit is recommended for students wishing to complete a laboratory based RBM3910 Project in Semester 2 and a laboratory based RBM4000 Honours project.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically analyse scientific literature;
2. Design novel experiments to test scientific questions;
3. Collect and statistically analyse and interpret data;
4. Plan and skilfully perform a sterile operation on a rat;
5. Generate good quality data using a range of laboratory techniques (e.g. PCR);
6. Actively participate in group work; and
7. Present information both visually and orally.

**Class Contact:**Lab 6.0 hrsLecture 2.0 hrsPC Lab 3.0 hrsSeminar 10.0 hrsForty-eight (48) hours for one semester comprising lectures, tutorials and practicals.

**Required Reading:**A selection of readings compiled by the lecturer.

**Assessment:**Semester Competency/Reports/Assignments and Tests: Total 100% Laboratory Work, Competency, 20%. Other, Grant Application, 20%. Journal, Article, 20%. Assignment, Test, 20%. Report, Laboratory Report/Test, 20%. Word equivalence: 5000.

### **RBM3610 Biomedical Science, Ethics and Values**

**Locations:**St Abans.

**Prerequisites:**Nil.

**Description:**In this unit students will look at ethical issues in the Biomedical Sciences focussing on critical awareness of current controversies and dilemmas arising from recent Biomedical Advances. The unit will explore ethical questions in reproductive technology, genetic engineering, stem cell research, intellectual property and pharmaceutical trials. Students will develop an understanding of how scientists carry out medical research within an ethical framework from both a theoretical and practical perspective; including how research involving human or animal subjects is regulated. This unit provides the opportunity for students to evaluate current global health challenges from an ethical perspective.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Critically review past biomedical practices that have shaped current ethical principles;
2. Critically assess the ethical practice of scientists in medical research and the underlying policies and codes of conduct;
3. Critically reflect on ethical issues arising from new biomedical advances - including: reproductive technology, genetic engineering, stem cell research and the human genome project;
- 4.

Contextualize how ethics based decisions in biomedical science impact at both the individual level and in a global context.

**Class Contact:**Lecture 2.0 hrsTutorial 2.0 hrsForty-eight (48) hours per semester, consisting of a combination of lectures and tutorials. Students will need to spend three (3) hours per week in self-directed study.

**Required Reading:**Beauchamp TL and Childress JF. (2013). Principles of biomedical ethics. (7th Ed). Oxford University Press, New York. A range of references, journal articles, film and other relevant material will be provided by lecturing staff throughout the semester.

**Assessment:**Essay, Essay (2000 words), 40%. Report, VU animal or human ethics proposal (1,500 words), 35%. Presentation, Team debate (1,000 words), 25%.

### **RBM3640 Advanced Neurosciences**

**Locations:**St Abans.

**Prerequisites:**RBM2540 - Pathophysiology 2HBM2203 - Clinical PhysiologyRBM2800 - Cardiorespiratory and Renal PhysiologyRBM2100 - Rehabilitation AnatomyAny of the above is suitable.

**Description:**In this unit, students will build on fundamental endocrine and nervous system knowledge and learn about the neurophysiology of memory, learning and cognition, language, behaviour and emotions, addiction, circadian rhythms, sleep and principles of endocrine function. Students will study brain regulation of motor, sensory and autonomic functions, pathways, disorders and the latest research related to specific disorders. This subject provides an advanced series of lectures in specialised areas of neuroscience research.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:

1. Discuss the nervous system structure and functioning, understand the neurophysiology of higher human brain functions: memory, learning, cognition, behaviour, emotions, language;
2. Examine the major disorders of the nervous system including neurodegenerative diseases, mechanisms of addiction and sleep disorders;
3. Evaluate brain regulation of muscle functions, neuronal pathways from brain centers to effector organs, pathophysiological mechanisms underlying disorders of neuromuscular transmission;
4. Describe the neuronal sensory pathways from the special sense organs (visual, auditory, smell, taste), and from somatic sensory receptors (touch, pressure, pain) to cortical centers;
5. Interpret the regulation of autonomic functions by the central and peripheral nervous system; mechanisms underlying dysfunctions of the autonomic nervous system;
6. Explain principles of endocrinology and understand the mechanisms underlying endocrine disorders;
7. Demonstrate effective communication and interpersonal skills through oral presentations.

**Class Contact:**Lecture 3.0 hrsTutorial 1.0 hrForty-eight (48) hours per semester of lectures and tutorials/workshops; It is estimated that each student will need to spend an additional six (6) hours per week engaged in independent learning tasks relating to outcomes of the subject.

**Required Reading:**Purves, D., et al. (2012) 5th ed. Neuroscience Sinauer Associates, Sunderland, MA, USA. A range of text references, journal articles, and other material will be provided by lecturing staff throughout the semester.

**Assessment:**Test, Two (2) Multiple Choice Tests (10% each and 1000 words total), 20%. Presentation, Presentation (15 minutes) (1500 words), 25%. Examination, End of Semester Theory Examination (2 hours), 55%.

### **RBM3650 Advanced Reproduction and Development**

**Locations:**St Abans.

**Prerequisites:**RBM2540 Pathophysiology.

**Description:** This unit provides an advanced series of lectures examining current research questions in the area of reproduction and development. Topics include: maternal recognition of pregnancy via foetal signalling and the resultant maternal response during the period of implantation; development of the embryonic neural crest, including epithelial-mesenchymal transformation, migration, and contribution to mature differentiated cell types; the role of steroid hormones in placental function; the role of autocrine and paracrine growth factors in the development of the foetal lung; the role of various extracellular matrix cytokines in the breakdown of the foetal membranes at birth. The content of this subject may vary with the expertise and research interests of the lecturing staff.

**Credit Points:** 12

**Class Contact:** Three hours of lectures per week for one semester

**Required Reading:** Various scientific journals

**Assessment:** Theory examination 55%, practical examination/assignment 45%

### RBM3660 Human Developmental and Clinical Genetics

**Locations:** St Abans.

**Prerequisites:** RBM2540 Pathophysiology 2 and either RBM2560 Medical Biochemistry or RBM2133 Cell and Molecular Biology

**Description:** The unit is designed to introduce students to clinical genetics with a specifically human focus. The major emphasis is on the organisation of the human genome and its components; gene expression in normal development, variation and the contribution of genetic abnormalities to disease. Topics may include: The structure of the human genome and function of its various components; role of genes in development; differentiation and congenital malformation; gene regulation including epigenetics; human genetic principles such as assortment and segregation of genes, genetic variation and genetic defects, the importance of genetic heterogeneity, Mendelian inheritance and gene frequencies in populations; diagnosis and classification of genetic disorders; mutations and their detection; prenatal screening and diagnosis; disorders with genetic and environmental associations.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the structure of the human genome and the explain the function of its various components;
2. Explain the differences between protein-coding genes and non-coding repeat sequence elements;
3. Demonstrate how genes are organised into clusters and families, and how they are related;
4. Describe the different types of gene maps: how they are made, the information given by each type and how they differ from each other;
5. Explain molecular processes involved in gene expression, regulatory molecules and the levels of control, including epigenetics;
6. Describe the development of the embryo and genetics of development;
7. Explain the chromosomal and molecular basis of sex determination;
8. Describe the nature of mutations and how genetic instability contributes to mutation;
9. Identify inheritance patterns of genetic disease in humans and the molecular defects involved in particular disease states at the chromosomal or individual gene level; and
10. Describe methods used to detect mutations and diagnose genetic diseases; explain advantages and limitations of each method.

**Class Contact:** Lab 3.0 hrs Lecture 3.0 hrs Tutorial 1.0 hr Seventy-two (72) hours per semester, consisting of three hours of lectures each week and three hours practicals or tutorials/workshops in alternate weeks for one semester.

**Required Reading:** One of the following textbooks is required: Strachan, T. & Read, A. (2011) 4th Edition Human Molecular Genetics Garland Science, 2011. Lewis, R. (2012) 3rd Edition Human Genetics Concepts and Applications McGraw-Hill, 2012.

**Assessment:** Workshop, Tutorial/Workshop participation (Equivalent to 1,000 words), 20%. Laboratory Work, Laboratory work and reports (Equivalent to 1500

words), 30%. Examination, Three-hour final examination (Equivalent to 3,000 words), 50%.

### RBM3720 Immunology

**Locations:** St Abans.

**Prerequisites:** RBM2540 - Pathophysiology 2 HBM2105 - Medical Microbiology and Immunity RBM2540 (Pathophysiology 2)- for HBBM degree HBM2105 Medical Microbiology and Immunity- for HBBS degree

**Description:** The aim of this unit is to provide students with an understanding of the theoretical and practical knowledge of immunology. Students will learn of the importance of the immune system in maintaining good health and preventing disease. Subject topics include: innate and adaptive immunity, the immune response to viruses and bacteria, T and B lymphocyte development, cytokines, biology of hypersensitivities (allergies and autoimmunity), tumour immunology, transplantation immunology and molecular diagnostics including the use of monoclonal antibodies. The subject will be explored as a basic science with applications in the pharmaceutical industry, agriculture industry, food science, environmental science, medical science and as a preparatory course for pathology and haematology careers.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Critically review the importance of the immune system in the maintenance of good health and disease prevention;
2. Describe and appraise the innate and adaptive immune response to various pathogens;
3. Conceptually map all stages of the immune response from infection to immunity with a focus on explaining the function of T lymphocytes and antibodies;
4. Apply scientific processes to the investigation of immunological disorders especially with respect to hypersensitivities;
5. Collaborate in group tasks and reflect critically on processes, specifically in the context of laboratory exercises where data is collected and analysed.

**Class Contact:** Lab 3.0 hrs Lecture 3.0 hrs Tutorial 1.0 hr Fifty-six (56) contact hours in total, per semester. Average contact hours will be 4.67 hours per week comprising of: Twelve (12) weeks of lectures (3 hours per week); Five (5) lab sessions (3 hours per lab), and; Five (5) tutorial sessions (1 hour per tutorial). Students are expected to undertake at least five (5) hours of independent study per week.

**Required Reading:** Abbas, A.K., Lichtman, A.H., & Pillai, S. (2016) 5th ed. Basic Immunology Elsevier

**Assessment:** Laboratory Work, Proforma (Four (4) proformas, 150 words each), 10%. Test, Mid semester MCQ test (1 hour), 20%. Examination, Practical examination (1.5 hours, 1500 words), 20%. Examination, Final Examination (2 hours, 2000 words), 50%. Students must attend a minimum of 80% of all labs to pass the unit; Acquisition of laboratory skills is an integral part of the learning outcomes for this unit and for students to achieve GC1, in terms, of working collaboratively with others.

### RBM3800 Pharmacology

**Locations:** St Abans.

**Prerequisites:** RBM2540 - Pathophysiology 2 RBM2560 - Medical Biochemistry RBM2540 and RBM2560 for HBBM; RBM2560 and RBM2800 for HBBS

**Description:** The unit begins with an introduction to the general principles of pharmacokinetics and pharmacodynamics. A wide range of drug groups will then be studied with attention focused on the pharmacokinetics, pharmacodynamics, clinical uses, and side effects of each drug. Aspects relating to medicinal chemistry, toxicity testing, clinical trials and requirements for the admission of new drugs are covered in topics that relate to new drug development. Pharmacokinetics, pharmacogenetics,



sensitivity and resistance to drug therapies are further topics that address variation in drug outcomes. Social drug abuse and types of drug dependence are also discussed in this unit.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe the general principles of pharmacokinetics and pharmacodynamics;
2. Identify the major drug groups used to target the autonomic nervous system and cardiorespiratory system, and analyse the mechanism of action;
3. Review the major drug groups used to target the blood, kidney, gastrointestinal system, and endocrine system, and explain the mechanism of action;
4. List and elaborate the major groups of chemotherapeutic agents and anti-microbials and describe the mechanism of action;
5. Articulate and apply the principles of psychopharmacology;
6. Elaborate on the mechanism of action of anaesthetics, analgesics, and anti-inflammatory drugs and provide relevant examples; and
7. Conceptually map the processes involved in new drug development and requirements for the admission of new drugs.

**Class Contact:** Lab 2.0 hrs Lecture 2.0 hrs PC Lab 1.0 hr Sixty (60) hours or equivalent for one (1) semester, comprising of lectures and laboratories.

**Required Reading:** Bullock, S., & Manias, E. (2013) 7th ed. Fundamentals of Pharmacology Pearson Education Australia

**Assessment:** Review, Mini Review (1000 words), 10%. Test, Five (5) Theory and One (1) Practical Test (1500 words), 40%. Examination, End of semester examination (2.5 hours, 2500 words), 50%.

## RBM3810 Wellness 1

**Locations:** St Abans.

**Prerequisites:** RBM2530 - Pathophysiology 1 RBM2540 - Pathophysiology 2 RBM2800 - Cardiorespiratory and Renal Physiology

**Description:** Module A: This unit introduces the concepts of mind, body and spirit. These areas are explored from psychological, physiological, philosophical and sociological perspectives. Current literature will be used to introduce the areas of psychophysiology and psychoneuroimmunology and their connections to the mind/body/spirit paradigm. The ethics of human research and evaluation will be discussed throughout the series of lectures. In addition, students will be introduced to basic methods of information gathering with respect to the mind-body-spirit paradigm including the evaluation of its status in individuals. Further, aspects of psychophysiology and psychoneuroimmunology such as stress and disease, sexuality and the impact of environment on the health of the mind, body and spirit are examined. Current research literature in the area will be analysed. Module B: Students will be introduced to fundamental concepts of health and wellness. The difference between professional/scientific concepts and lay concepts will be explored. Wellness promotion will be presented primarily in the context of established public health approaches utilised in health education, promotion and prevention including medical, behavioural, educational, social and empowerment strategies. Some of the dilemmas and pitfalls in health promotion will be canvassed. Students will also be introduced to basic concepts of occupational health and safety and workplace health promotion. Risk assessment, material safety, manual handling and relevant legislation will be discussed. Context will be provided by guest speakers from relevant organisations.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Compare and contrast what is understood by 'wellness', including its various dimensions (physical, emotional/psychological, spiritual, environmental, social, occupational), from a range of perspectives (eg. individual, community, national);

2. Describe the complex interaction of factors that impact on the health of individuals including biology, genetics, diet, environmental conditions and social factors;
3. Contribute creative ideas and apply problem-solving skills to a major global problem that will impact on wellness of communities, that of climate change;
4. Describe the social determinants of health and wellness, including socioeconomic status, education, and employment;
5. Critically appraise published literature, including scientific literature, relating to wellness and argue the evidence-base upon which concepts of 'wellness' are based;
6. Define how wellness is measured at international, national, community and individual levels and critically evaluate the advantages and limitations of these;
7. Apply a range of perspectives to identify and examine the relationships between mind, body and spirit;
8. Describe the basic elements of a safe working environment including the individual's right to a safe working environment, how Occupational Health and Safety risk is measured, managed and legislated, and how disease surveillance is conducted in particular occupations;
9. Evaluate various models upon which public health promotion and disease prevention activities are based (including models of behavioural change), using illustrative examples of successful public health campaigns locally and internationally;
10. Plan, execute, present and document an activity or strategy that promotes wellness, including justifying the approach taken and describing any ethical issues that need to be considered; and
11. Critically reflect on issues that arise when working within teams, and appraise self and others' engagement in teamwork.

**Class Contact:** Seventy-two (72) hours for one semester comprising lectures, tutorials and project work.

**Required Reading:** Journal articles related to the topics will be provided via the University's Learning Management System.

**Assessment:** Assignment, written assignment (1500 words), 50%. Project, group written report (2000 words) and oral presentation (10 minutes), 50%. Assignment will assess Learning Outcomes: 1,2,3,5,6,7,8 Project will assess Learning Outcomes: 4,5,6,8,9,10,11 Assignment will assess Graduate Capabilities: 1, 2, 3, 4 Project will assess Graduate Capabilities: 1, 2, 3, 4, 5, 6 LWC is linked to the Project (50% of assessment for unit).

## RBM3820 Wellness 2

**Locations:** St Abans.

**Prerequisites:** RBM3810 Wellness 1.

**Description:** Module A: The unit extends the material covered with respect to Mind, Body and Spirit, and explores complimentary therapies, techniques, treatments and strategies that are used to promote and maintain health and well-being as well as treat disease. Module B: Students will be introduced to the systematic planning of health and wellness education and promotion. Examples and discussion will be provided in the context of relevant issues, for example, community participation, the role of professionals, young people and STD's/AIDs, alcohol use, and the role of the media in health. Guest speakers from health-promoting organisations will be provided to explore health education and promotion issues. Examples include the local government planning process/healthy cities approach, Alzheimers Disease, Eating disorders and the Quit campaign. Other relevant speakers/issues may be discussed as appropriate. An individual health promotion project within the unit requires students to assess their own health/wellness needs, then design, implement and evaluate an appropriate program for themselves over the semester. Students are further strongly encouraged to take the third year project in conjunction with this unit, and to apply their skills to the development of the project as a health promotion and education exercise oriented to the workplace or conducted within an organisation that promotes health.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Describe complementary and alternative medicine (CAM) approaches, therapies and techniques used to improve and/or maintain health and well-being;
2. Compare and contrast the principles and foundations upon which a range of complementary and alternative health therapies and modalities are based;
3. Critically analyse and evaluate evidence in the literature including research evidence about CAM therapies and modalities used to improve and/or maintain health and well-being;
4. Reflect on your own a personal approach to wellness gained through group and individual inquiry into forms of CAM;
5. Describe and apply the approaches and interventions employed to prevent illness and promote health at the individual, workplace and community level;
6. Apply and evaluate strategies relating to issues of social and cultural diversity in health promotion;
7. Develop, implement and evaluate a personal health promotion program;
8. Individually, and in conjunction with peers, reflect in depth on processes used in health promotion and on methods of evaluation; and
9. Synthesise complex material from the literature relating to health and health promotion and communicate at a novice professional level.

**Class Contact:** Module A: Three hours per week for one semester, comprising lectures and tutorials. Module B: Three hours per week for one semester comprising of lectures and tutorials.

**Required Reading:** To be advised by lecturers.

**Assessment:** Examination, Written Examination (1.5 hours), 40%. Assignment, Written assignment Module A (equivalent to 1000 words), 30%. Assignment, Written assignment Module B (1500 words), 30%. Written examination assesses Learning Outcomes 1-3, 5, 6, 9 and Graduate Capabilities 1-4. Written assignment Module A assesses Learning Outcomes 1-4 and Graduate Capabilities 1-4. Written assignment Module B assesses Learning Outcomes 7,8,9 and Graduate Capabilities 1-4. Graduate Capabilities This unit will focus on the development of Graduate Capability 1- Problem solving in a range of settings; Graduate Capability 2- locate, critically evaluate, manage and use written, numeric and electronic information; Graduate Capability 3: communicate in a variety of contexts and modes, and Graduate Capability 4: work both autonomously and collaboratively, all at Matrix level 5. .

### RBM3850 Nutritional Therapeutics C

**Locations:** St Albans.

**Prerequisites:** RBM2850 - Nutritional Therapeutics ARB2855 - Nutritional Therapeutics BRBM2540 - Pathophysiology 2RBM2850 and RBM2855 Nutritional Therapeutics A and B. RBM2540 Pathophysiology 2

**Description:** In this Unit of Study, students will learn about energy metabolism and energy balance, and their relationships to conditions such as obesity, diabetes, cardiovascular disease, cancer and hypertension. Students will also learn about diet and its relationship to various other health conditions, including mental health. An understanding of food labelling and safe food handling will also be covered.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Articulate the concept of energy balance and explain its role in obesity, heart disease, diabetes, and hypertension;
2. List and describe various parts of the food labelling system on packaged foods, and describe the regulations for nutritional claims and ingredient lists;
3. Describe the clinical symptoms of various health conditions and how they may be managed via dietary interventions; and
4. Articulate the BMI classifications for obesity, and current dietary treatment approaches.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs A total of forty-six (46) hours comprised

of lectures (2 hrs x 12 weeks) and tutorials/workshops (2 hrs x 11 weeks).

**Required Reading:** Nil Texts are required for this unit. Lecturer will provide reading material as required.

**Assessment:** Project, Supermarket survey of 50 grocery products and 1500 word summary, 25%. Literature Review, Literature review of a specific health condition and its dietary management (2000 words), 25%. Examination, Final exam (3 hrs), 50%.

### RBM3855 Nutritional Therapeutics D

**Locations:** St Albans.

**Prerequisites:** RBM2540 - Pathophysiology 2RBM3850 - Nutritional Therapeutics C

**Description:** In this Unit of Study, students will be introduced to the principles of health promotion, and concepts such as cultural competence, social justice, and the role of policy in promoting health among populations. An emphasis will be placed on understanding the public health implications of nutrition related chronic disease in Australia and how the health policy framework and national and state health systems address nutrition issues in Australia.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Demonstrate an understanding of the determinants of health in a diverse population;
2. Recognise differing health service needs of clients with different social and cultural backgrounds;
3. Examine the Australian health system and where the practice of public health and community nutrition is placed within the system;
4. Describe the way nutrition problems contribute to the disease burden in Australia; and
5. Describe national and state policies and strategies that promote nutritional health at different stages of the lifecycle.

**Class Contact:** Lecture 2.0 hrs Tutorial 2.0 hrs A total of 46 hours comprised of lectures (2 hrs x 12 weeks) and tutorials (2 hrs x 11 weeks).

**Required Reading:** n/a

**Assessment:** Case Study, Written case study (2,000 words), 50%. Examination, Final examination (3 hrs; equivalent to 3,000 words), 50%. Total word equivalence is 5,000 words (approximate).

### RBM3910 Project

**Locations:** Werribee, Footscray Park, St Albans.

**Prerequisites:** RBM2133 - Cell and Molecular Biology RBM2800 - Cardiorespiratory and Renal Physiology RBM2200 - Functional Anatomy of the Head and Back

**Description:** This unit provides third year students with an opportunity to select and undertake either (a) a brief research project in an area of interest with staff members of the Biomedical Sciences, Nutrition and Dietetics or an established research institution; or (b) a work-based placement in the industry he/she intends to enter. Both the research and work-based placements enable the student to undertake a structured work experience program as an integral part of their degree course. Gaining practical experience in their chosen field enables students to test interest and ability in these areas.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Work independently or part of a team with minimal supervision on a work-based or laboratory project, and demonstrate time management and project-related organisational skills;
2. Articulate and justify research questions/project objectives and methods;
3. Demonstrate proficiency in writing a research/work-based project final report, including a rationale and a summary of strengths and limitations;
4. Demonstrate proficiency in presenting the findings of a research/work-based project to peers and supervisors.

**Class Contact:**Lecture 2.0 hrs Seventy-two (72) hours per semester, consisting of six (6) hours per week of Laboratory or work-based placement which investigates a research question.

**Required Reading:**There are no texts for this unit.

**Assessment:**Project, Project Proposal (500 words), 15%. Practicum, Supervisor assessment of practical skills (500 words), 15%. Thesis, Project Report (4,000 words), 70%.

### **RBM3950 Nutritional Therapy in Practice 1**

**Locations:**Werribee, St Albans.

**Prerequisites:**RBM2855 - Nutritional Therapeutics BRBM2540 - Pathophysiology 2 RBM2855 Nutritional Therapeutics B. RBM2540 Pathophysiology 2

**Description:**The unit is designed to enable students to demonstrate their nutrition knowledge and practice their skills in communication and in providing general nutritional guidance to groups/clients in student-led clinic/group sessions. Students will also demonstrate professional behaviour and learn to keep confidential client records.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Develop an understanding of the nutritional requirements of a group/client; 2. Undertake a dietary analysis of an individual or group; 3. Practice and develop communication skills for working with the community; 4. Develop and educate individuals/groups on healthy lifestyle interventions; 5. Develop an understanding of referral pathways and inter-professional practice; and 6. Demonstrate professional conduct and manage client records to ensure they are accurate, legible and complete, and that confidentiality is assured.

**Class Contact:**Minimum of ninety (90) hours of supervised practical experience. Attendance should be maintained for the full 12 weeks of the semester, regardless of the minimum requirements. Students may be required to complete tasks at other university locations (such as Werribee or city campus), or community locations as required.

**Required Reading:**Bauer, K. D., & Liou, D. (2016) 3rd Nutrition counselling and education skill development Boston, MA : Cengage Learning

**Assessment:**Students are required to attend the nutrition clinic for a minimum of 90 hrs (hurdle requirement #1) and to participate in community interactions while demonstrating professional behaviour (hurdle requirement #2). Students are required to attend their assigned clinical activity for each of the 12 weeks of the semester, even if the minimum 90 hours has been completed. Whilst in attendance, students are required to participate in community interactions and documentation, peer reflection, case studies, administrative duties and other activities as instructed by the clinic supervisor. Students are expected to conduct themselves in a professional manner, be punctual and maintain confidentiality at all times. Attire should also be professional and include the prescribed uniform and name badge. Case Study, Major case study with literature review (2,500 words), 50%. Case Study, Two short problem based learning activities (approx. 1000 words or equivalent each), 30%. Assignment, Nutrition and Health Promotion Education material A4 page, 20%. Participation & Professional Behaviour is aligned with Learning Outcome 6 Graduate Capabilities 2 and 3. Total word equivalence = 5,000 words (approximate).

### **RBM3955 Nutritional Therapy in Practice 2**

**Locations:**St Albans.

**Prerequisites:**RBM3950 - Nutritional Therapy in Practice 1 RBM3850 - Nutritional Therapeutics CRBM2540 - Pathophysiology 2

**Description:**The unit is designed to enable students to demonstrate their nutrition knowledge and practice their skills in communication and in providing general nutritional guidance to groups/clients in student-led clinic/group sessions. Students will also demonstrate professional behaviour and learn to keep confidential client records.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Develop an understanding of the nutritional requirements of a group/client; 2. Undertake a dietary analysis of an individual or group; 3. Further develop communication skills for working in the community; 4. Develop and educate individuals/groups on healthy lifestyle interventions; 5. Develop an understanding of referral pathways and inter-professional practice; and 6. Demonstrate professional conduct and manage client records to ensure they are accurate, legible and complete, and that confidentiality is assured.

**Class Contact:**Minimum of ninety (90) hours of supervised practical experience.

**Required Reading:**Bauer, K, Liou, D. & Sokolik, C. (2012) 2nd edition Nutrition Counseling and Education Skill Development Wadsworth Cengage learning

**Assessment:**Students are required to attend the nutrition clinic for a minimum of 90 hrs (hurdle requirement #1) and to participate in community interactions while demonstrating professional behaviour (hurdle requirement #2). Whilst in attendance, students are required to participate in community interactions and documentation, peer reflection, case studies, administrative duties and other activities as instructed by the clinic supervisor. Students are expected to conduct themselves in a professional manner, be punctual and maintain confidentiality at all times. Attire should also be professional and include the prescribed uniform and name badge. Case Study, Major Case Study with Literature Review (2500 words), 50%. Presentation, Oral Presentation (20 min), 25%. Presentation, Development of a 1hr community education presentation for a specific target group, 25%. Participation & Professional Behaviour is aligned with Learning Outcome 6 and Graduate Capabilities 2 and 3. Total word equivalence is 5,000 words (approximate).

### **RBM3960 Nutritional Frontiers**

**Locations:**Footscray Park, St Albans.

**Prerequisites:**RBM2260 - Diet and Nutrition HHN2402 - Diet & Disease Either RBM2260 or HHN2402

**Description:**Students will examine advances in nutrition research in selected topics, including cardiovascular, metabolic, mental, reproductive health, public health, cancer, infectious disease and nutrigenomics. Evidence for and against the effectiveness of various therapies and non-invasive solutions will be evaluated.

**Credit Points:** 12

**Learning Outcomes:**On successful completion of this unit, students will be able to:  
1. Evaluate recent research in the area of nutrition; 2. Examine nutritional therapies in a clinical setting; 3. Evaluate the roles of micronutrients in biochemical signalling; 4. Justify the importance of perinatal nutrition on adult health; and 5. Extrapolate the role of nutrition in metabolic and other disease states.

**Class Contact:**Lecture 2.0 hrs Tutorial 2.0 hrs Forty-eight (48) hours per semester, comprising of a total of four (4) hours per week: - Two (2) hours of lectures, and; - Two (2) hours of tutorials/seminars.

**Required Reading:**There are no required texts. Students will be provided with an up-to-date reading list via the VU Collaborate system.

**Assessment:**Case Study, Includes short literature review on selected nutrition topic (1200 words), 25%. Literature Review, Major literature review on selected nutrition topic (1800 words), 25%. Examination, Final Exam (2 hours, 2000 words), 50%.

## RBM3970 Operating a Clinical Practice

**Locations:**St Albans.

**Prerequisites:**Nil.

**Description:** Factors in establishing and operating a clinical practice; legal, professional and insurance issues, including personal and professional indemnity and OHS regulations; business banking and accountancy, including taxation laws and essential business record keeping and reporting requirements; basic marketing techniques; codes of ethics and practice; using media in practice; to find appropriate employment.

**Credit Points:** 12

**Class Contact:**Lecture2.0 hrsTutorial2.0 hrsFour hours per week for one semester comprising two hours lecture, two hours workshop.

**Required Reading:** Jones, G., 1999, How to Start Business from Home, 4th edn, How To Books. Brown, R. and Barrow, C., 2001, The Business Plan Workbook, 4th edn, Kogan Page, London.

**Assessment:**Examination (3 hours), 40%; assignment 2500 words each, 40%; written application and interview, 20%.

## RBM4002 Science Honours 2

**Locations:**Werribee, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Honours program consists of a research project and coursework. The research project will be undertaken in one of the research areas of the School of Biomedical and Health Sciences and may, subject to approval, be undertaken at an external location. The coursework components cover a range of information including advanced areas of medical research, literature analysis and critical appraisal, ethics in research, scientific writing, oral presentation, methodological techniques, research design, statistics and data analysis, computer applications and software data presentation. The literature review will provide the scientific background and rationale for the research project, while the design will inform the methodology to be applied in the research project. Students will conduct a research project under supervision. The project will comprise a novel scientific investigation in an area of expertise of the approved supervisor(s). The results of the project will be reported in an oral presentation and a written thesis.

**Credit Points:** 48

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Plan, implement, conduct and communicate a research project; 2. Critically evaluate research papers; 3. Interpret a body of knowledge leading to innovative research questions and testable hypotheses; 4. Design an appropriate research project and undertake appropriate data analyses; 5. Conduct research sufficient to obtain a substantial body of work; 6. Produce a written research thesis; 7. Critically evaluate one's own findings and their impact on current knowledge; 8. Demonstrate clear, concise and precise communication, both oral and written; and 9. Demonstrate aptitude and ability to work without close supervision and with a high degree of responsibility.

**Class Contact:**The normal full-time load is a minimum of 20 (twenty) hours per week for each of the two semesters and will be determined in negotiation with the supervisor. Regular meetings with the student's approved supervisor are required and will be determined by negotiation with that supervisor.

**Required Reading:**To be advised by the supervisor and searched by student as part of research training

**Assessment:**The nature of the coursework assessment will vary and may be based on written assignments, seminar presentations and a written statistics or research design examination. The research project assessment will consist of a written literature

review, submission of a research design, and the quality of the research and its presentation in the written thesis as well as the ability to answer questions regarding the research work undertaken. Assignment, Statistics and Research Design, 10%. Other, Research Plan (not more than 10 pages), 5%. Literature Review, Literature Review (not more than 6,000 words), 15%. Presentation, Oral Presentation, 5%. Research Thesis, Research Thesis (not more than 12,000 words), 55%. Presentation, Oral Presentation and Thesis Defence, 10%. The Honours course is a one year (full-time) course in which the students receive one final mark and grade for the whole year. Thus, students will submit/undertake items 1 - 4 in their 1st semester of enrolment, and submit/undertake items 5 - 6 in their 2nd semester of enrolment, after which a single, final mark and grade will be awarded.

## RBM4011 Science Honours (Part Time)

**Locations:**Werribee, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Honours program consists of a research project and coursework. The research project will be undertaken in one of the research areas of the School of Biomedical and Health Sciences and may, subject to approval, be undertaken at an external location. The coursework components cover a range of information including advanced areas of medical research, literature analysis and critical appraisal, ethics in research, scientific writing, oral presentation, methodological techniques, research design, statistics and data analysis, computer applications and software data presentation. The literature review will provide the scientific background and rationale for the research project, while the design will inform the methodology to be applied in the research project. Students will conduct a research project under supervision. The project will comprise a novel scientific investigation in an area of expertise of the approved supervisor(s). The results of the project will be reported in an oral presentation and a written thesis.

**Credit Points:** 24

**Learning Outcomes:**On successful completion of this unit, students will be able to: 1. Plan, implement, conduct and communicate a research project; 2. Critically evaluate research papers; 3. Interpret a body of knowledge leading to innovative research questions and testable hypotheses; 4. Design an appropriate research project and undertake appropriate data analyses; 5. Conduct research sufficient to obtain a substantial body of work; 6. Produce a written research thesis; 7. Critically evaluate one's own findings and their impact on current knowledge; 8. Demonstrate clear, concise and precise communication, both oral and written; and 9. Demonstrate aptitude and ability to work without close supervision and with a high degree of responsibility.

**Class Contact:**The normal part-time load is a minimum of 10 (ten) hours per week for each of the four semesters and will be determined in negotiation with the supervisor. Regular meetings with the student's approved supervisor are required and will be determined by negotiation with that supervisor.

**Required Reading:**To be advised by the supervisor and searched by student as part of research training

**Assessment:**The nature of the coursework assessment will vary and may be based on written assignments, seminar presentations and a written statistics or research design examination. The research project assessment will consist of a written literature review, submission of a research design, and the quality of the research and its presentation in the written thesis as well as the ability to answer questions regarding the research work undertaken. Assignment, Statistics and Research Design, 10%. Other, Research Plan (not more than 10 pages), 5%. Literature Review, Literature Review (not more than 6,000 words), 15%. Presentation, Oral Presentation, 5%. Research Thesis, Research Thesis (not more than 12,000 words), 55%.

Presentation, Oral Presentation and Thesis Defence, 10%. The Honours course is a two year (part-time) course in which the students receive one final mark and grade. Thus, students will submit/undertake items 1 - 2 in their 1st semester of enrolment, items 3 - 4 in their 2nd semester of enrolment, and submit/undertake items 5 - 6 after their 3rd and 4th semesters of enrolment, after which a single, final mark and grade will be awarded.

### **RBM8001 Research Thesis 1 Full Time**

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below./

**Credit Points:** 48

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1.expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field 2.intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem 3.expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the

College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### **RBM8002 Research Thesis 2 Full Time**

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:**Nil.

**Description:**The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 48

**Learning Outcomes:**On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field. 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem. 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:**To be determined in consultation with the supervisors.

**Assessment:**The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

### **RBM8011 Research Thesis 1 Part Time**

**Locations:**Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field. 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem. 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem.
- develop, adapt and implement research methodologies to extend and redefine existing knowledge.
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature.

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## RBM8012 Research Thesis 2 Part Time

**Locations:** Werribee, Industry, Footscray Park, St Albans.

**Prerequisites:** Nil.

**Description:** The Doctor of Philosophy (PhD) at Victoria University is VU's Doctoral Degree (Research) program, and qualifies individuals who acquire and apply a substantial body of knowledge to research, investigate and develop new knowledge, in one or more fields of investigation or scholarship. This unit contributes to the

research student's progress towards the production of a thesis in an approved thesis format for independent examination by at least two external expert examiners of international standing. In this unit of study the student will be expected to demonstrate progress towards thesis completion as per the Learning Outcomes below.

**Credit Points:** 24

**Learning Outcomes:** On successful completion of this unit, the student will be able to demonstrate significant progress towards demonstration of: 1. expert understanding of a substantial body of theory and its practical application at the frontier of a field of work or learning, including substantial expert knowledge of ethical research principles and methods applicable to the field. 2. intellectual independence and cognitive skills to undertake a systematic investigation, reflect critically on theory and practice and evaluate existing knowledge and ideas, including identifying, evaluating and critically analysing the validity of research studies and their applicability to a research problem. 3. expert cognitive, technical and creative skills to:

- design, develop and implement a research project/s to systematically investigate a research problem
- develop, adapt and implement research methodologies to extend and redefine existing knowledge
- manage, analyse, evaluate and interpret data, synthesising key ideas and theorising within the context of key literature

4. expert communication skills to explain and critique theoretical propositions, methodologies and conclusions; to disseminate and promote new insights; and to cogently present a complex investigation of originality, or original research, both for external examination and to specialist (eg. researcher peers) and non-specialist (industry and/or community) audiences through informal interaction, scholarly publications, reports and formal presentations. 5. capacity to reflect on, develop and evaluate strategies for achieving their own learning and career goals. 6. intellectual independence, initiative and creativity in new situations and/or for further learning. 7. ethical practice and full responsibility and accountability for personal outputs. 8. autonomy, authoritative judgment, adaptability and responsibility as an expert and leading scholar.

**Required Reading:** To be determined in consultation with the supervisors.

**Assessment:** The student will demonstrate substantial progress towards completion of the research thesis through formal meetings with their thesis supervisors, who will provide formative feedback. The unit will be assessed by the supervisory team, the College and University through 6-monthly progress reports. Thesis, Research Thesis, Pass/Fail.

## RNH2110 Disease and Health

**Locations:** Werribee, St Albans.

**Prerequisites:** There are no pre-requisites for this unit.

**Description:** The unit will study inflammatory and immune responses and pathogenic processes of common disorders. Inflammatory and immune responses, essentials of the pathologic process of the common disorders with nutritional involvement, including; anaemia, alimentary dysfunction, cardiovascular disease, cancer, obesity, diabetes, inborn errors of metabolism and well as diagnostic and therapeutic modalities will be examined.

**Credit Points:** 12

**Learning Outcomes:** On successful completion of this unit, students will be able to:

1. Explain what is disease, terminology, classifications of disease and how diseases

are diagnosed; 2. Indicate how disturbances cause the clinical manifestations of the various diseases; 3. Describe diseases of the gastrointestinal (GI) tract, their pathology and treatment; 4. Explain what disturbances can occur in the accessory organs of the GI tract such as the liver and pancreas; 5. Discuss the pathologic processes of common disorders with nutritional involvement and strategies for their diagnosis and treatment; 6. Describe haematopoietic system disorders such as the various types of anaemias that can occur as well as their underlying bases; 7. Describe the inflammatory and immune responses and disturbances thereof; 8. Describe how genetic abnormalities can lead to disease and inborn errors of metabolism; 9. Demonstrate an understanding of various types of benign and malignant tumours and leukemias, their underlying causes and treatment strategies; and 10. Describe various types of cardiovascular diseases and their treatment.

**Class Contact:** Forty-eight (48) hours for one semester comprising lectures, tutorials and workshops.

**Required Reading:** Crowley, L. V. (8th edition). An introduction to human disease: Pathology and pathophysiology correlations Boston: MA: Jones and Bartlett Publishers. 2010.

**Assessment:** Tutorial Participation, Contribution of answers and participation in discussions., 20%. Test, 2 x online tests, 20%. Examination, 3-hour final examination, 60%.

