

SUBJECT OUTLINE



Subject Name:

Pathology and Clinical Sciences 2 and 3

Subject Code:

BIOS222

SECTION 1 – GENERAL INFORMATION

Award/s:	Total course credit points:	Level:
Bachelor of Health Science (Naturopathy)	128	2 nd Year
Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	2 nd Year
Bachelor of Health Science (Myotherapy)	96	2 nd Year
Duration: 1 Semester		
Subject Coordinators: Dr Manisha Thakkar (Adelaide campus) and Jenny Yeeles (Adelaide Campus)		
Subject is: Core	Subject Credit Points: 4	

Student Workload:

No. timetabled hours per week: 6	No. personal study hours per week: 4	Total hours per week: 10
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Delivery Mode:

Face to face	2 X 2 hour lectures	2 x 1 hour tutorials
E-Learning	Details:	Narrated Powerpoint presentations Tutorials - Asynchronous tutor moderated discussion forum and activities Student handouts, web-based resources
Intensive Delivery	Details:	Summer school - offered 5.25 hours per day, 3 days per week for 5 weeks combination lecture and tutorial activities. Quiz offered in Week 3. Case study assignment for intensive delivery is due to be uploaded by 11.55pm Sunday AEST in Week 5. Final exam conducted in Week 6 of Summer School.
Full Time		
Part Time		

Pre-requisites: BIOC211

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This advanced pathology subject expands on the knowledge gained in Pathology and Clinical Science 1 (BIOC211), and considers disorders related to sensory organs such as eyes, ears, nose, and throat, and other systems of the human body including the blood, skin, musculoskeletal, endocrine, nervous and reproductive systems. This subject further considers disorders that affect more than one body system, giving students an opportunity to look at multisystem disorders and their management. Upon successful completion of this subject, students should be able to apply the knowledge of basic pathological processes to analyse and critically evaluate clinical features and investigation tests and to understand the basis for differential diagnosis of the relevant disorders covered in this subject.

Learning Outcomes

1. Define and classify the different pathological processes involved in the development of disease.
2. Critically evaluate the role that clinical features and symptomatology play in the process of differential diagnosis of these diseases.
3. Appraise the effect of pathological processes on multiple systems of the body and on the overall health of a patient.
4. Evaluate and apply appropriate diagnostic investigation tests to the differential diagnosis of disease.

5. Conceptualise how the knowledge of disease pathology within individual and multiple body systems dictates patient management.
6. Validate the disease diagnosis with reference to clinical findings and evaluate management options.

Assessment Tasks

Type	Learning Outcome Assessed	Session Content Delivered	Session Due	Weighting
Forum Discussion Posts (up to 200 words per post)	1-6	4, 8, 11, 15, 19	4, 8, 11, 15, 19 (Sunday following each session)	10%
Online Quiz Multiple choice, Image related questions (45 minutes)	1-3	1-9	Sunday following Session 13	15%
Case Study Assignment (1500 words)	4-6	10-16	Sunday following Session 24	30%
Final Exam Case-based, extended response (2 hours)	1-6	1-26 (maximum of 50% weight on material from sessions 1-16)	Final Exam Period	45%

Prescribed readings:

1. Grossman, S. C., & Porth, C. M. (2014). *Porth's pathophysiology: Concepts of altered health states* (9th ed.). Philadelphia, PA: Wolters Kluwer Health.
2. Walker, B. R., Colledge, N. R., Ralston, S. H., & Penman, I. D. (Eds.). (2014). *Davidson's principles and practice of medicine* (22nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier. [ebook available]

Recommended readings:

1. Crowley L. V. (2013). *An introduction to human disease: Pathology and pathophysiology correlations* (9th ed.). Burlington, MA: Jones & Bartlett Learning.
2. Hinson, J., Raven, P., & Chew, S. (2010). *The endocrine system: basic science and clinical conditions* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
3. Jamison, J. R. (2006). *Differential diagnosis for primary care: A handbook for health care practitioners* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
4. Jarvis, C. (2016). *Physical Examination & Health Assessment* (7th ed.). St Louis, MO: Elsevier. [ebook available]
5. Kumar, P., & Clark, M. L. (2016). *Kumar and Clark's Clinical Medicine* (9th ed.). London, England: Elsevier Health Sciences.
6. Kumar, V., Abbas, A. K., & Aster, J. C. (2015). *Robbins & Cotran pathologic basis of disease* (9th ed.). Philadelphia, PA: Elsevier Saunders. [ebook available]
7. Lee, G., & Bishop, P. (2013). *Microbiology and infection control for health professionals* (5th ed.). Frenchs Forest, NSW: Pearson Australia.
8. McCance, K. L., & Huether, S. E. (Eds.). (2014). *Pathophysiology: The biologic basis for disease in adults and children* (7th ed.). St. Louis, MO: Elsevier. [ebook available]
9. Michael-Titus, A., Revest, P., & Shortland, P. (2010). *The nervous system: basic science and clinical conditions* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
10. O'Toole, M. T. (Eds.). (2013). *Mosby's dictionary of medicine, nursing and health professions* (9th ed.). St. Louis, MO:

Elsevier. [ebook available]

11. Tortora, G. J., & Derrickson, B. (2014). *Principles of anatomy and physiology* (14th ed.). Danvers, MA: Wiley.

12. VanMeter, K. C., & Hubert, R. J. (2014). *Gould's pathophysiology for the health professions* (5th ed.). St Louis, MO: Saunders Elsevier. [ebook available]

Subject Content		
Week	Lecture	Tutorial
1.	Session 1 Introduction Subject Outline / Subject Aims / Assessment / Teaching Resources Disorders of the Ear, Nose and Throat <ul style="list-style-type: none"> • Overview of the human ear • Presenting problems in ear disorders • Disorders of the Ear: <ul style="list-style-type: none"> ○ Otitis media ○ Meniere's disease • Overview of the the human ear and URT • Presenting problems in URT disorders • Disorders of the Nose and Throat 	Revision of the diseases related to Ear, Nose and Throat through the use of case studies.
	Session 2 Ocular Disorders <ul style="list-style-type: none"> • Overview of the human eye • Disorders of the Eye <ul style="list-style-type: none"> ○ The red eye ○ Lumps and bumps ○ Cataracts ○ Glaucoma ○ Age related macular degeneration ○ Retinal detachment 	Revision of the diseases related to eyes and visual disturbances through the use of case studies.
2.	Session 3 Lymphatic and Haematological Disorders 1 <ul style="list-style-type: none"> • Overview of the lymphatic and haematological system • Examination and investigation of the haematological system • Presenting problems in haematological diseases 	Revision of the principles of haematology through videos and review questions.
	Session 4 Lymphatic and Haematological Disorders 2 <ul style="list-style-type: none"> • The Anaemias: <ul style="list-style-type: none"> ○ Iron deficiency anaemia ○ Megaloblastic anaemia ○ Anaemia of chronic disease ○ Haemolytic anaemia ○ Haemoglobinopathies 	Revision of the diseases related to anaemia through the use of case studies.
3.	Session 5 Lymphatic and Haematological Disorders 3	Revision of the diseases related to haematological cancers through the use of case studies.

	<ul style="list-style-type: none"> • Aplastic Anaemia • Haematological Malignancies: <ul style="list-style-type: none"> ○ Leukaemias ○ Lymphomas ○ Paraproteinaemias 	
	Session 6 Lymphatic and Haematological Disorders 4 <ul style="list-style-type: none"> • Myeloproliferative Disorders • Bleeding Disorders • Thrombotic disorders 	Revision of the diseases related to myeloproliferative disorders and bleeding disorders through the use of case studies and online videos.
4.	Session 7 Integumentary System Disorders 1 <ul style="list-style-type: none"> • Overview of the integumentary system • Examination and investigation of the integumentary system • Presenting problems in integumentary diseases 	Revision of the principles related to integumentary system through the use of case studies.
	Session 8 Integumentary System Disorders 2 <ul style="list-style-type: none"> • Eczema • Psoriasis • Lichen planus • Skin infections and infestations 	Revision of the diseases related to integumentary system through the use of case studies.
5.	Session 9 Integumentary System Disorders 3 <ul style="list-style-type: none"> • Acne and Rosacea • Acne vulgaris • Rosacea • Pressure sores • Skin tumours 	Revision of the diseases related to integumentary system through the use of case studies.
	Session 10 Musculoskeletal System Disorders 1 <ul style="list-style-type: none"> • Overview of the musculoskeletal system • Examination and investigation of the musculoskeletal system • Presenting problems in musculoskeletal diseases • Principles of management of musculoskeletal disorders 	Revision of the diseases related to joints through the use of case studies.
6.	Session 11 Musculoskeletal System Disorders 2 <ul style="list-style-type: none"> • Osteoarthritis • Inflammatory Joint Diseases: <ul style="list-style-type: none"> ○ Rheumatoid arthritis ○ Seronegative Spondyloarthritis • Gout 	Revision of the diseases related to joints through the use of case studies.
	Session 12 Musculoskeletal System Disorders 3	Revision of the diseases related to bones through the use of case studies.

	<ul style="list-style-type: none"> • Bone and joint Infection: • Diseases of Bone: <ul style="list-style-type: none"> ○ Osteoporosis ○ Osteomalacia and rickets ○ Paget's disease ○ Bone tumours • Fibromyalgia 	
7.	Session 13 Musculoskeletal System Disorders 4 <ul style="list-style-type: none"> • Neuromuscular disorders <ul style="list-style-type: none"> ○ Gait disorders ○ Involuntary movement ○ Disorders of the spine and spinal cord ○ Diseases of nerve ○ Diseases of the neuromuscular junction 	Revision of the diseases related to muscles through the use of case studies.
	Session 14 Endocrine System Disorders 1 <ul style="list-style-type: none"> • Overview of the endocrine system • Presenting problems in endocrine diseases • Investigations of endocrine diseases • Thyroid diseases • Parathyroid diseases 	Revision of the diseases related to endocrine system through the use of case studies.
NON-TEACHING WEEK (note that make-up classes may be scheduled in this week) Semester 1 - This aligns with the week after Easter so it may fall between weeks 6 to 8. Semester 2 & Online students - The break week falls between Weeks 7 and 8.		
8.	Session 15 Endocrine System Disorders 2 <ul style="list-style-type: none"> • Adrenal disease • Hypothalamic and pituitary disease 	Revision of the diseases related to endocrine system through the use of case studies.
	Session 16 Endocrine System Disorders 3 <ul style="list-style-type: none"> • The endocrinal pancreatic disease <ul style="list-style-type: none"> ○ Overview of the Pancreas ○ Diabetes Mellitus 	Revision of the diseases related to endocrine system through the use of case studies.
9.	Session 17 Male Reproductive Disorders <ul style="list-style-type: none"> • Overview of the male reproductive system • Examination and investigation of the male reproductive systems • Presenting problems in male reproductive diseases • Hypogonadism • Gynaecomastia • Klinefelter's syndrome • Prostate disorders • Penile and testicular disorders 	Revision of the concepts related to male reproductive system disorders through the use of case studies.
	Session 18	Revision of the diseases related to female reproductive

	Female Reproductive Disorders 1 <ul style="list-style-type: none"> • Overview of the female reproductive system • Examination and investigation of the female reproductive systems • Presenting problems in female reproductive diseases • Delayed puberty • Turners syndrome • Menstrual Disorders • Hirsutism • Urogenital Disorders 	system through the use of case studies.
10.	Session 19 Female Reproductive Disorders 2 <ul style="list-style-type: none"> • Uterine disorders • Gynaecological Cancers • Disorders of the fallopian tubes and ovaries • Pelvic Inflammatory Disease 	Revision of the diseases related to female reproductive system through the use of case studies.
	Session 20 Female Reproductive Disorders 3 <ul style="list-style-type: none"> • Breast Disorders: <ul style="list-style-type: none"> ○ Mastitis ○ Fibrocystic changes ○ Benign neoplasms ○ Breast cancer • Pregnancy related disorders 	Revision of the disorders related to pregnancy through the use of case studies.
11.	Session 21 Contraception and infertility <ul style="list-style-type: none"> • Contraception • Infertility • Sexually transmitted infections 	Revision of the concept of contraception and infertility through the use of case studies.
	Session 22 Paediatric Disorders <ul style="list-style-type: none"> • Childhood infections • Congenital /Genetic disorders • Hormonal imbalances 	Revision of the paediatric disorders through the use of case studies. Research epidemiology activity for the commonly occurring childhood infections and Notifiable diseases in Australia
12.	Session 23 Nervous System Disorders 1 <ul style="list-style-type: none"> • Overview of the central nervous system • Presenting problems in nervous system diseases • Disorders of the cerebro spinal fluid • Cerebrovascular Diseases 	Revision of the disorders related to nervous system through the use of case studies.
	Session 24 Nervous System Disorders 2 <ul style="list-style-type: none"> • Inflammatory Diseases • Degenerative Diseases • Infections • CNS tumours 	Revision of the disorders related to nervous system through the use of case studies.

13.	Session 25 Nervous System Disorders 3 <ul style="list-style-type: none"> • Psychological medicine • Mood disorders • Anxiety disorders • Schizophrenia • Eating disorders • Drug abuse and misuse 	Revision of the disorders related to nervous system through the use of case studies.
	Session 26 Multi system Disorders <ul style="list-style-type: none"> • Hypertension • Chronic fatigue syndrome • SLE • Marfan's Disease 	Revision of the multisystem diseases through the use of case studies.
14.	Non-Teaching Week 1. Note that make-up classes may be scheduled in this week.	
15.	Non-Teaching Week 2. Note that make-up classes may be scheduled in this week.	
16.	Final Exam Week 1 On campus enrolled students: please refer to the Exam Timetable for your local campus for the exact day and time of exam. Online enrolled students: You are required to sit examinations on campus per the Examination Policy - Higher Education . The Exam Week for subjects offered online is identified in the Online Calendar.	
17.	Final Exam Week 2 Please refer to the Exam Timetable for your local campus for the exact day and time of exam.	