

SUBJECT OUTLINE



Subject Name:

Pathology and Clinical Science 3

Subject Code:

BIOC313

SECTION 1 – GENERAL INFORMATION

Award/s:	Total course credit points:	Level:
Bachelor of Health Science (Acupuncture)	128	3 rd Year
Bachelor of Health Science (Musculoskeletal Therapy)	96	3 rd Year
Duration: 1 Semester		
Subject Coordinator: Dr Manisha Thakkar (Adelaide campus)		
Subject is: Core	Subject Credit Points: 2	

Student Workload:

No. timetabled hours per week: 3	No. personal study hours per week: 2	Total hours per week: 5
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Delivery Mode:

Face to face	2 hour lecture	1 hour tutorial
E-Learning	Details: Narrated Powerpoint presentations Asynchronous tutor moderated discussion forum and activities Student handouts, web-based resources	
Full Time		
Part Time		

Pre-requisites: BIOC222

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

Pathology and Clinical Science 3, the most advanced pathology subject, deals with the pathophysiology, clinical presentations, investigation tests, and management of systemic disorders related to the endocrine, neurological and reproductive systems as well as multisystem disorders such as Hypertension, Diabetes, Chronic Fatigue, Depression, and Multiple Sclerosis. 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 above disorders.

Learning Outcomes

1. Distinguish between the different pathological processes involved in the development of various endocrine, reproductive, paediatric and nervous systems disorders and analyse how these pathological processes contribute to the signs and symptoms of any particular disease.
2. Analyse and critically evaluate clinical features and investigation tests and to understand the basis for differential diagnosis of disease.
3. Appraise the effect of pathological processes on multiple systems of the body and on overall health of a patient.
4. Evaluate how disease pathology influences patient management.
5. Validate the disease diagnosis with reference to clinical findings and evaluate management options.

Assessment Tasks				
Type	Learning Outcomes Assessed	Week Content Delivered	Week Due	Weighting
Online Quiz Multiple choice, Image related questions (45 minutes)	1-3	1-4	Sunday following Week 7	25%
Case Study Assignment (1500 words)	1-5	5-9	Sunday following Week 11	25%
Final Exam Case-based, extended response questions (2 hours)	1-5	1-13 (maximum 50% weighting on sessions 1-9)	Final Exam period	50%

Prescribed readings:

- Grossman, S. C., & Porth, C. M. (2014). *Porth's pathophysiology: Concepts of altered health states* (9th ed.). Philadelphia, PA: Wolters Kluwer Health.
- 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:

- Crowley, L. V. (2013). *An introduction to human disease: Pathology and pathophysiology correlations* (9th ed.). Burlington, MA: Jones & Bartlett Learning.
- Hinson, J., Raven, P., & Chew, S. (2010). *The endocrine system: Basic science and clinical conditions* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
- Jamison, J. R. (2006). *Differential diagnosis for primary care: A handbook for health care practitioners* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
- Jarvis, C. (2016). *Physical Examination & Health Assessment* (7th ed.). St Louis, MO: Elsevier. [ebook available]
- Kumar, P., & Clark, M. L. (2016). *Kumar and Clark's Clinical Medicine* (9th ed.). London, England: Elsevier Health Sciences. [ebook available]
- Kumar, V., Abbas, A. K., & Aster, J. C. (2015). *Robbins & Cotran pathologic basis of disease* (9th ed.). Philadelphia, PA: Elsevier Saunders. [ebook available]
- Lee, G., & Bishop, P. (2013). *Microbiology and infection control for health professionals* (5th ed.). Frenchs Forest, NSW: Pearson Australia.
- 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]
- Michael-Titus, A., Revest, P., & Shortland, P. (2010). *The nervous system: Basic science and clinical conditions* (2nd ed.). Edinburgh, Scotland: Churchill Livingstone Elsevier.
- O'Toole, M. T. (Eds.). (2013). *Mosby's dictionary of medicine, nursing and health professions* (9th ed.). St. Louis, MO: Elsevier.
- Tortora, G. J., & Derrickson, B. (2014). *Principles of anatomy and physiology* (14th ed.). Danvers, MA: Wiley.
- 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
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1.	Introduction: Subject Outline/Subject Aims/Assessment/Teaching Resources 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.
2.	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.
3.	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.
4.	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.
5.	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 disease • Delayed puberty • Turners syndrome • Menstrual Disorders • Hirsutism • Urogenital Disorders 	Revision of the diseases related to female reproductive system through the use of case studies.
6.	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.
7.	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 	Revision of the disorders related to pregnancy through the use of case studies.

	<ul style="list-style-type: none"> • Pregnancy related disorders 	
	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.	Contraception and infertility <ul style="list-style-type: none"> • Contraception • Infertility • Sexually transmitted infections 	Revision of the concepts of contraception and infertility through the use of case studies.
9.	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.
10.	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.
11.	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.
12.	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.
13.	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/Practical Exam Week 1. Note that make-up classes may be scheduled in this week	
15.	Non-Teaching Week/Practical Exam 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 <i>Examination Policy - Higher Education</i> . The Exam Week for subjects offered online is identified in the Online Calendar.	
17.	Final Exam Week 2 Please refer to your Exam Timetable for the exact time and day of the final exam	