

# **SUBJECT OUTLINE**

Subject Name: Subject Code:

# Clinical Pathophysiology and Pharmacology 3

**BIOP311** 

SECTION 1 -	GENERAL	INFORM	<b>ATION</b>
	SENENAL		

Award/s:

Bachelor of Health Science (Chinese Medicine)

Bachelor of Health Science (Acupuncture Therapies)

Duration:

1 Semester

Subject is:

Core

Subject Credit Points:

Level:

2nd Year

2nd Year

2nd Year

Student Workload:					
No. timetabled hours	s per week:	No. personal 4	study hours per	week:	Total hours per week: 10
Delivery Mode*:					
☐ On campus		nline / Digital	⊠ Blenc	led	☐ Intensive
Weekly Session <sup>^</sup> Forn	nat/s - 2 sessio	ons per week:			
Sessions except 1 - 21					
☑ Livestream lectures:			☐ 3 hours	2 x 2-h	our lectures per week
⊠ eLearning modules /	i	Tutorials: 2 x include learning judased resources			ine learning modules that clinical cases or other web-
Sessions 22 - 26					
	ps:	☐ 2 hours	⊠ 3 hours	1 x 3- session	hour practical workshop per n
*All modes are supported by the online learning management system which will include subject documents such as handouts, readings and assessment guides.					
^A 'session' is made up of 3 hours of timetabled / online study time per week unless otherwise specified. Each subject has a set number of sessions as outlined above.					
Study Pattern:	Full Time	□ Part Time			
Pre-requisites: BIC	DP221				
Co-requisites: Nil					



### **SECTION 2 – ACADEMIC DETAILS**

#### **Subject Rationale**

This subject builds on the knowledge gained in Clinical Pathophysiology and Pharmacology 1 and 2. It covers disorders related to the nervous, integumentary, lymphatic and haematological systems. This subject further considers neoplasia and disorders that affect the ear, nose, throat, and paediatric disorders as well as multisystem disorders. These systems are taught with respect to their pathophysiology, clinical presentation, medical red flag symptoms, diagnostic tests, clinical examination, and pharmacological treatments. Upon successful completion of this subject, the students should be able to demonstrate a thorough understanding of pathophysiology and disease states and their pharmacological treatments.

#### **Learning Outcomes**

- 1. Describe the aetiologies and pathophysiological processes of various diseases and how they contribute to the development of signs and symptoms.
- 2. Identify laboratory and other diagnostic test results as applied to various disease conditions.
- 3. Discuss common drug classes, indications, actions, main adverse effects and contraindications as applied to various disease states.
- 4. Perform a range of clinical examination techniques to examine relevant systems.

## **Assessment Tasks**

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Туре	Learning Outcomes Assessed	Session Content Delivered	Due	Weighting
Attendance (Attendance at 100% of indicated sessions is required)	4	22-26 (On campus practical workshops)	Sessions 22- 26	P/F
Written Assignment 1 (750 words)	1-3	1-8	Week 6	20%
Written Assignment 2 (1000 words)	1-3	9-19	Week 12	40%
Practical Exam (30 minutes)	4	22-26	Week 15	40%

All written assessments and online quizzes are due at 11:55 p.m. and submitted through the LMS.

To achieve a passing grade in this subject, students must:



- have a cumulative mark of at least 50%, and
- have submitted all assessment items with a value greater than 15%, and
- meet attendance requirements. Absences require approved attendance waivers and subsequent makeup activity to be completed.

#### **Prescribed Readings:**

Penman, I. D., Ralston, S. H., Strachan, M. W. J., & Hobson, R. P. (Eds.). (2023). *Davidson's principles and practice of medicine* (24th ed.). Elsevier.

#### **Recommended Readings:**

Bryant, B., & Knights, K. (2022). Pharmacology for health professionals (6th ed.). Elsevier. [ebook available].

Jarvis, C., & Eckhardt, A. (2023). Physical examination & health assessment (9th ed.). Elsevier.

Norris, T. L. (2019). Porth's pathophysiology: Concepts of altered health states (10th ed.). Wolters Kluwer.

Sub	ject Content	
Week	Lecture	Tutorial
1.	Session 1	Case related activities on nervous system disorders
	Nervous System Disorders 1	
	Presenting problems in nervous system diseases	
	Disorders of the cerebral spinal fluid	
	Cerebrovascular diseases	
	Session 2	Case related activities on nervous system disorders
	Nervous System Disorders 2	
	Inflammatory diseases	
	Degenerative diseases	
	CNS infections	
2.	Session 3	Case related activities on nervous system disorders
	Nervous System Disorders 3	
	Psychological medicine	
	Mood disorders	
	Anxiety disorders	
	Session 4	Case related activities on nervous system disorders
	Nervous System Disorders	



	Schizophrenia	
	Eating disorders	
	Substance abuse	
3.	Session 5	Interactive tutorial activities for revision purposes
	Revision of previous topics	
	Session 6	Case related activities on integumentary system disorders
	Integumentary System Disorders 1	
	Overview of the integumentary system	
	Presenting problems in integumentary diseases	
	Examination and investigation of the integumentary system (includes skin, hair, and nails)	
4.	Session 7	Case related activities on integumentary system disorders
	Integumentary System Disorders 2	
	Eczema	
	Psoriasis	
	Lichen planus	
	Skin infections and infestations	
	Session 8	Case related activities on integumentary system disorders
	Integumentary System Disorders 3	
	Acne and Rosacea	
	Acne vulgaris	
	Rosacea	
	Pressure sores	
5.	Session 9	Interactive tutorial activities on lymphatic and
	Lymphatic and Haematological Disorders 1	haematological disorders
	Presenting problems in haematological diseases	
	Examination and investigation of the haematological system	
	Session 10	Case related activities on lymphatic and haematological
	Lymphatic and Haematological Disorders 2	disorders



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	Iron deficiency anaemia	
	Megaloblastic anaemia	
	Anaemia of chronic disease	
	• Haemolytic anaemia	
	Sickle cell anaemia, Thalassemia	
6.	Session 11	Case related activities on lymphatic and haematological
	Lymphatic and Haematological Disorders 3	disorders
	Aplastic anaemia	
	Multiple myeloma	
	Session 12	Case related activities on lymphatic and haematological
	Lymphatic and Haematological Disorders 4	disorders
	Myeloproliferative disorders	
	Bleeding disorders	
	Thrombotic disorders	
7.	Session 13	Interactive tutorial activities on neoplasia
	Neoplasia	
	Cancer development	
	Epidemiology	
	Malignant vs. benign cancer: Patterns of presentation and prognosis	
	Session 14	Interactive tutorial activities on cancer diagnosis
	Cancer Diagnosis	
	Cancer staging	
	Diagnostic techniques in cancer	
	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 non-to	eaching week falls between Weeks 7 and 8
8.	Session 15	Interactive tutorial activities on drugs used in neoplastic
	Drugs used in Neoplastic Disease	disease
	Alkylating agents	
	Antimetabolites	
	Antimitotics	



Antibiotics cytotoxics Hormonal antineoplastics  Session 16 Haematological Malignancies Leukaemias Lymphomas  Leukaemias Lymphomas  Session 17 Ear, Nose, and Throat Disorders Otitis media Meniere's disease Upper respiratory infections Allergic rhinitis  Session 18 Ocular Disorders / Diseases of the Eye Conjunctivitis, Blepharitis, Keratitis Cysts, Styes, Malignancies, Pterygium, Xanthelasma, Molluscum Glaucoma, Cataract, AMD, Retinal detachment  Case related activities on eye disorders  Case related activities on paediatric disorders  Presenting problems in paediatric disorders  Session 20 Multisystem Disorders 1 Multiple Sclerosis SLE Disheles Type 1 and Type 2		T	•
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Otitis media Meniere's disease Upper respiratory infections Allergic rhinitis  Session 18  Case related activities on eye disorders  Case related activities on paediatric disorders  Case related activities on multisystem disorders  Multisystem Disorders 1  Multiple Sclerosis SLE	9.	Session 17	Case related activities on ear, nose, and throat disorders
<ul> <li>Meniere's disease</li> <li>Upper respiratory infections</li> <li>Allergic rhinitis</li> <li>Session 18</li> <li>Ocular Disorders / Diseases of the Eye</li> <li>Conjunctivitis, Blepharitis, Keratitis</li> <li>Cysts, Styes, Malignancies, Pterygium, Xanthelasma, Molluscum</li> <li>Glaucoma, Cataract, AMD, Retinal detachment</li> <li>Session 19</li> <li>Paediatric Disorders</li> <li>Presenting problems in paediatric disorders</li> <li>Session 20</li> <li>Multisystem Disorders 1</li> <li>Multiple Sclerosis</li> <li>SLE</li> </ul>		Ear, Nose, and Throat Disorders	
<ul> <li>Upper respiratory infections</li> <li>Allergic rhinitis</li> <li>Session 18</li> <li>Ocular Disorders / Diseases of the Eye</li> <li>Conjunctivitis, Blepharitis, Keratitis</li> <li>Cysts, Styes, Malignancies, Pterygium, Xanthelasma, Molluscum</li> <li>Glaucoma, Cataract, AMD, Retinal detachment</li> <li>Session 19</li> <li>Paediatric Disorders</li> <li>Presenting problems in paediatric disorders</li> <li>Session 20</li> <li>Multisystem Disorders 1</li> <li>Multiple Sclerosis</li> <li>SLE</li> </ul>		Otitis media	
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Session 18  Ocular Disorders / Diseases of the Eye  Conjunctivitis, Blepharitis, Keratitis  Cysts, Styes, Malignancies, Pterygium, Xanthelasma, Molluscum  Glaucoma, Cataract, AMD, Retinal detachment  Case related activities on eye disorders  Case related activities on paediatric disorders  Case related activities on paediatric disorders  Case related activities on multisystem disorders  Multisystem Disorders 1  Multiple Sclerosis  SLE		Upper respiratory infections	
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<ul> <li>Conjunctivitis, Blepharitis, Keratitis</li> <li>Cysts, Styes, Malignancies, Pterygium, Xanthelasma, Molluscum</li> <li>Glaucoma, Cataract, AMD, Retinal detachment</li> <li>Session 19         <ul> <li>Paediatric Disorders</li> <li>Presenting problems in paediatric disorders</li> </ul> </li> <li>Session 20         <ul> <li>Multisystem Disorders 1</li> <li>Multiple Sclerosis</li> <li>SLE</li> </ul> </li> </ul>		Session 18	Case related activities on eye disorders
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Xanthelasma, Molluscum Glaucoma, Cataract, AMD, Retinal detachment  Case related activities on paediatric disorders  Paediatric Disorders Presenting problems in paediatric disorders  Session 20 Case related activities on multisystem disorders  Case related activities on multisystem disorders  Multisystem Disorders 1  Multiple Sclerosis SLE		Oconjunctivitis, Blepharitis, Keratitis	
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Session 20 Case related activities on multisystem disorders  Multisystem Disorders 1  Multiple Sclerosis  SLE		Paediatric Disorders	
Multisystem Disorders 1  Multiple Sclerosis  SLE			
<ul><li>Multiple Sclerosis</li><li>SLE</li></ul>		Session 20	Case related activities on multisystem disorders
● SLE		Multisystem Disorders 1	
		Multiple Sclerosis	
Dishetes Type 1 and Type 2		● SLE	
Diabetes Type 1 and Type 2		Diabetes Type 1 and Type 2	
11. Session 21 Case related activities on multisystem disorders	11.	Session 21	Case related activities on multisystem disorders
Multisystem Disorders 2		Multisystem Disorders 2	
Chronic Fatigue syndrome		Chronic Fatigue syndrome	
Cystic Fibrosis		Cystic Fibrosis	
Metabolic Syndrome		Metabolic Syndrome	
• Hypertension		Hypertension	



	Session 22	Practice of neurological examination techniques	
	Neurological examination		
12.	Session 23	Practice of neurological examination techniques	
	Neurological examination (continued)		
	Session 24	Practice of ear, nose and throat examination techniques	
	Ear, Nose, Throat		
13.	Session 25	Practice of head and neck examination techniques	
	Head and Neck (Lymph nodes)		
	Session 26		
	Practice for Practical Exam Assessment		
14.	Non-Teaching Week / Practical Examination Week 1		
	Clinical Examination Practical Final scheduled in this week		
	Note that make-up classes may be scheduled in this week		
15.	Non-Teaching Week / Practical Examination Week 2		
	Note that make-up classes may be scheduled in this week		
16.	Final Examination Week 1		
	There is no final exam for this subject		
17.	Final Examination Week 2		
	There is no final exam for this subject		