



# SUBJECT OUTLINE

Subject Name:

**Clinical Examination**

Subject Code:

**BIOE221**

## SECTION 1 – GENERAL INFORMATION

Award/s:	Total Course Credit Points:	Level:
Bachelor of Health Science (Acupuncture)	128	3 <sup>rd</sup> Year
Bachelor of Health Science (Naturopathy)	128	3 <sup>rd</sup> Year
Bachelor of Health Science (Myotherapy)	96	2 <sup>nd</sup> Year
Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	2 <sup>nd</sup> Year

**Duration:** 1 Semester

**Subject Coordinator:** Tirtha Goradia (Perth Campus)

**Subject is:** Core **Subject Credit Points:** 2

### Student Workload:

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

### Delivery Mode:

Face to Face (On Campus) 1 x 1 hour lecture / Continuous Skill Development 1 x 2 hour practical

Intensive Delivery (Summer School) Contact hours are delivered over 5 weeks with 2 x 4 hour days delivered per week  
Content: Combination lecture and practical activities

Assessment: Continuous Skill Development (Sessions 1-5, 7-8 & 10-13); Practical Exam 1 - Week 2; Practical Exam 2 - Week 3; Practical Exam 3 - Week 5; Clinical Approach Assignment - Week 6

Full Time

Part Time

**Pre-requisites:** BIOH122

**Co-requisites:** BIOC211

### Special Resource Requirements:

Bath-sheet sized towel per student (Clinic towels must not be used)

Clinical Equipment Kit items including:

- Measuring tape
- Otoscope
- Pen torch



- Percussion reflex hammer
- Sphygmomanometer
- Stethoscope
- Thermometer

## SECTION 2 – ACADEMIC DETAILS

### Subject Rationale

This subject teaches students the theory and practical skills for clinical examination and assessment of the client using conventional medical diagnostic techniques with common examination tools. These skills are essential to the clinical competence of health professionals regardless of discipline. Students are required to practice examination procedures on each other in a supervised setting, learning appropriate regard for privacy and personal boundaries as well as appropriate work, health and safety practices. The subject supports students to develop their interpersonal and communication skills for the clinical setting and consolidates all previous bioscience learning.

### Learning Outcomes

1. Identify different physical examination techniques used for gathering clinical information as well as for monitoring progress.
2. Accurately perform a variety of physical examination techniques including use of appropriate equipment.
3. Interpret results of history taking, physical and mental state examination and investigations and identify correct physical examination technique for diagnosis.
4. Apply general principles and specific knowledge of clinical examination techniques to a variety of clinical situations.

### Assessment Tasks

Type	Learning Outcomes Assessed	Session Content Delivered	Due	Weighting
<b>Continuous Skill Development</b> (attendance at 9 out of 11 teaching sessions and active participation required)	1-4	1-5, 7-8 & 10-13	Sessions 1-5, 7-8, 10-13	Pass/Fail
<b>Practical Exam 1</b>	2-4	1-4	Session 6	20%
<b>Practical Exam 2</b>	2-4	5 & 7	Session 9	20%
<b>Practical Exam 3</b>	2-4	10-12	Session 14	20%



<b>Clinical Approach Assignment</b> (1500 words)	1, 3 & 4	1-13	Week 15	40%
All written assessments and online quizzes are due at 11:55 p.m. Sunday and submitted through the LMS				
The overall passing mark for this subject is 50% Attempt at all practical exams is required				

### Prescribed Readings:

- Jarvis, C. (2019). *Physical examination & health assessment* (8th ed.). Elsevier.

### Recommended Readings:

- Douglas, G., Nicol, F., & Robertson, C. (2013). *MacLeod's clinical examination* (13th ed.). Churchill Livingstone Elsevier. [ebook available]
- Jamison, J. R. (2006). *Differential diagnosis for primary practice: A handbook for health care practitioners* (2nd ed.). Churchill Livingstone Elsevier.
- Jarvis, C. (2016). *Pocket companion for physical examination & health assessment* (7th ed.). Elsevier Saunders. [ebook available]
- Talley, N. J. & O'Conner, S. (2013). *Clinical examination: A systematic guide to physical diagnosis* (7th ed.). Churchill Livingstone Elsevier. [ebook available]
- Ralston, S. H., Penman, I. D., Strachan, M. W. J., & Hobson, R. P. (Eds.). (2018). *Davidson's principles and practice of medicine* (23rd ed.). Elsevier
- Reisner, E. G., & Reisner, H. M. (2016). *Crowley's an introduction to human disease: Pathology and pathophysiology correlations* (10th ed.). Jones & Bartlett Learning.
- Tortora, G. J., Derrickson, B., Burkett, B., Peoples, G., Dye, D., Cooke, J., Diversi, T., McKean, M., Samalia, L., & Mellifont, R. (2019). *Principles of anatomy and physiology* (2nd Asia-Pacific ed.). Wiley. [ebook available]
- VanMeter, K. C., & Hubert, R. J. (2014). *Gould's pathophysiology for the health professions* (5th ed.). Saunders Elsevier. [ebook available]

## Subject Content

Week	Lectures	Practicals
1.	The Interview and Health History; Assessment techniques and the ethical approach to the clinical examination ● General examination ● Measurement ● Weight and height Demonstration of appropriate techniques	Supervised practice of demonstrated techniques ● Anthropometrics ● General examination



	<ul style="list-style-type: none"> <li>➤ Inspection and palpation</li> </ul>	
2.	<p><b>Vital Signs</b></p> <ul style="list-style-type: none"> <li>➤ Temperature</li> <li>➤ Pulses</li> <li>➤ Respirations</li> <li>➤ Blood Pressure lying and standing</li> </ul>	<p>Supervised practice of demonstrated techniques</p> <ul style="list-style-type: none"> <li>➤ Temperature</li> <li>➤ Pulses</li> <li>➤ Respirations</li> <li>➤ Blood pressure</li> </ul>
3.	<p><b>Vital Signs &amp; Peripheries</b></p> <ul style="list-style-type: none"> <li>➤ Skin, hair and nails capillary refill</li> <li>➤ Peripheral vascular system mobility, turgor and oedema</li> </ul> <p>Demonstration of appropriate techniques</p> <ul style="list-style-type: none"> <li>➤ Inspection palpation and auscultation</li> </ul>	<p>Supervised practice of demonstrated techniques and ongoing testing of prior material</p> <ul style="list-style-type: none"> <li>➤ Blood pressure lying and standing</li> <li>➤ Examination of skin, hair, nails, capillary refill peripheral vascular system mobility, turgor and oedema</li> </ul>
4.	<p><b>Examination of the Head and Neck</b></p> <ul style="list-style-type: none"> <li>➤ Eyes</li> <li>➤ Mouth, throat, thyroid, lymph nodes and ears</li> </ul> <p>Demonstration of appropriate techniques</p> <ul style="list-style-type: none"> <li>➤ Inspection, palpation, and auscultation</li> </ul>	<p>Supervised student practice of demonstrated techniques</p> <ul style="list-style-type: none"> <li>➤ Eye examination – external</li> <li>➤ Examination of the head and neck including mouth, throat, thyroid, lymph nodes and ears</li> </ul>
5.	<p><b>Thoracic Examinations</b></p> <p>Lower respiratory tract – lungs and bronchi</p> <ul style="list-style-type: none"> <li>➤ Respiratory examination</li> </ul> <p>Demonstration of appropriate techniques</p> <ul style="list-style-type: none"> <li>➤ Inspection palpation, percussion and auscultation</li> </ul>	<p>Supervised student practice of demonstrated techniques</p> <ul style="list-style-type: none"> <li>➤ Respiratory examination</li> </ul>
6.	<p><b>Practical Exam 1</b></p> <ul style="list-style-type: none"> <li>➤ Vital signs, all pulses, peripheries and skin</li> <li>➤ Head and neck</li> </ul>	
7.	<p><b>The Abdomen Examination</b></p> <p>Demonstration of appropriate techniques</p> <ul style="list-style-type: none"> <li>➤ Inspection</li> <li>➤ Palpation</li> <li>➤ Percussion</li> <li>➤ Auscultation</li> </ul>	<p>Supervised practice of demonstrated techniques</p>
<p><b>NON-TEACHING WEEK</b> (note that make-up classes may be scheduled in this week)</p> <p><b>Semester 1</b> – This aligns with the week after Easter so it may fall between Weeks 6 to 8</p> <p><b>Semester 2</b> – The non-teaching week falls between Weeks 7 and 8</p>		
8.	<p><b>Workshop: The clinical approach through case studies</b></p> <ul style="list-style-type: none"> <li>➤ Common symptomology</li> <li>➤ Developing differential diagnosis</li> <li>➤ Selecting examination techniques</li> </ul>	



9.	<b>Practical Exam 2</b> <ul style="list-style-type: none"> <li>➤ Abdominal examination</li> <li>➤ Thoracic examination</li> </ul>	
10.	<b>Neurological Examination – Part 1</b> Demonstration of appropriate techniques <ul style="list-style-type: none"> <li>➤ Inspection, palpation and special tests</li> <li>➤ Cranial nerve tests</li> </ul>	Supervised practice of demonstrated techniques and ongoing testing of prior material <ul style="list-style-type: none"> <li>➤ Neurological assessment</li> <li>➤ Case studies</li> </ul>
11.	<b>Neurological Examination – Part 2</b> Demonstration of appropriate techniques <ul style="list-style-type: none"> <li>➤ Reflex testing</li> </ul>	Supervised practice of demonstrated techniques <ul style="list-style-type: none"> <li>➤ Reflex assessment</li> </ul>
12.	<b>Musculoskeletal Examinations</b> Demonstration of appropriate techniques <ul style="list-style-type: none"> <li>➤ Inspection</li> <li>➤ Palpation</li> <li>➤ Range of motion</li> <li>➤ Muscle testing</li> </ul>	Supervised practice of demonstrated techniques <ul style="list-style-type: none"> <li>➤ Musculoskeletal examinations</li> </ul>
13.	<b>Clinical Examination in Practice: Putting it all together</b> Use of case studies to critical analyse and identify the most appropriate examinations <ul style="list-style-type: none"> <li>➤ The Primary system(s) and relevant examinations to be performed</li> <li>➤ The Secondary system(s) and relevant examinations to be performed</li> </ul> <b>Supervised student practice for a case study and the performance of the relevant clinical examinations</b>	
14.	<b>Practical Exam 3</b> <ul style="list-style-type: none"> <li>➤ Neurological examination</li> <li>➤ Musculoskeletal examination</li> </ul>	
15.	<b>Non-Teaching Week/Practical Examination Week 2</b> Note that make-up classes may be scheduled in this week <b>Clinical Approach Assignment is due this week</b>	
16.	<b>Final Examination Week 1</b> There is no final exam for this subject	
17.	<b>Final Examination Week 2</b> There is no final exam for this subject	