BIOH12012 *Pathophysiology and Pharmacology 2*
Term 3 - 2022

Profile information current as at 12/10/2024 07:41 pm

All details in this unit profile for BIOH12012 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student).The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

In this unit, you will build on your introductory knowledge of the science of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems to explore fundamental pathophysiology (alteration in function as seen in disease) of these body systems and the pharmacology of drugs used in the treatment and management of diseases. Throughout this unit, you will develop your knowledge of body systems in both healthy and disease states, and how these disease states may be managed therapeutically. The unit concentrates on common major diseases of these body systems which facilitates a comprehensive study of the pathophysiology encountered in these disease states, as well as gaining an understanding of normal physiology. This is complemented by the study of the treatment and management of these diseases, whilst also focusing on the professional and legal responsibilities that underpin the use of medicines in the treatment of human disease.

Details

Career Level: *Undergraduate*
Unit Level: *Level 2*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Pre-requisite: BIOH12011 Pathophysiology and Pharmacology 1
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 3 - 2022

- Online
- Rockhampton

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Online Test**
Weighting: 30%
2. **Case Study**
Weighting: 40%
3. **Online Test**
Weighting: 30%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student unit and teaching evaluation.

Feedback
Students enjoyed having a variety of lecturers for different topics throughout the term.

Recommendation
Academics who are specialists in their field will be invited to record lectures they are updated.

Feedback from Direct student feedback at the tutorial.

Feedback
Contextualising the weekly content through case studies and questions presented by a nurse in the final tutorial of the week helped students understand the relevance of the content to the nursing profession.

Recommendation
Continue to have a nurse provide a weekly case study / question and answer tutorial to identify the relevance of the content to the nursing profession.

Feedback from Student unit and teaching evaluation.

Feedback
Students requested more examples of the written component to help them understand the level of information required in the assessment.

Recommendation
Further examples and explanation of the requirements will be provided to the students via Moodle.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Apply knowledge of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems to discuss pathophysiological processes, signs and symptoms of various relevant diseases.
2. Evaluate appropriate pharmacological interventions in disease processes of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems.
3. Apply knowledge of pharmacokinetics, pharmacodynamics and pharmacotherapeutics to the evaluation of appropriateness of various pharmacological interventions.
4. Discuss the nurse’s professional and legal responsibilities in the quality use of medicines.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | • Introductory Level | • Intermediate Level | • Graduate Level | ∘ Professional Level | ∘ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Online Test - 30%	•	•	•	•
2 - Case Study - 40%	•	•	•	
3 - Online Test - 30%	•	•		•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication	•	•		•
2 - Problem Solving	•	•	•	•
3 - Critical Thinking	•	•	•	•
4 - Information Literacy				
5 - Team Work				
6 - Information Technology Competence	•		•	
7 - Cross Cultural Competence	•	•		•
8 - Ethical practice	•	•		•
9 - Social Innovation				
10 - Aboriginal and Torres Strait Islander Cultures				

Textbooks and Resources

Textbooks

BIOH12012

Prescribed

Pathophysiology and Pharmacology for Nurses (Volume 1 and 2 - Custom Value Pack)
Edition: 1st (2021)
Authors: Shane Bullock, Elizabeth Manias, Majella Hales, Elaine Marieb, Katja Hoehn, Suzanne Keller, Michael Adams, Matthew Sorenson
Pearson
Australia
ISBN: 9780655798767
Binding: Paperback

Additional Textbook Information
Students who have purchased the textbook for BIOH12011 do not need to purchase the textbook for BIOH12012, the textbooks for both units are packaged together.

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: American Psychological Association 7th Edition (APA 7th edition)
For further information, see the Assessment Tasks.

Teaching Contacts

Debra Carlson Unit Coordinator
d.carlson@cqu.edu.au
Rebecca Vella Unit Coordinator
r.vella@cqu.edu.au

Schedule

Week 1 - 07 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
Neoplasia, Stress and Immune Disorders	Modules 1 and 2: Neoplasia and immune system pathophysiology and associated pharmacology Chapters 1 to 3.	

Week 2 - 14 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic

Antimicrobial and Antibacterial Agents and Psychopharmacology	Modules 1 and 2: Neoplasia and immune system pathophysiology and associated pharmacology Chapters 4 to 6 Pathophysiology and Pharmacology for Nurses 1 Modules 11 and 12: Neurological pathophysiology and associated pharmacology Chapters 57 to 60	

Week 3 - 21 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
Renal Anatomy and Physiology	Modules, 3, 4 and 5: Renal pathophysiology and associated pharmacology Chapters 7, 8, 10 and 11	**Case Study Topic Selection** Due: Week 3 Monday (21 Nov 2022) 5:00 pm AEST

Week 4 - 28 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
Renal Anatomy & Physiology and Pathophysiology	Modules 3, 4 and 5: Renal pathophysiology and associated pharmacology Chapters 8, 9 and 12	

Vacation Week - 05 Dec 2022

Module/Topic	Chapter	Events and Submissions/Topic

Week 5 - 12 Dec 2022

Module/Topic	Chapter	Events and Submissions/Topic
Renal Pathophysiology and Pharmacology	Modules 3, 4 and 5: Renal pathophysiology and associated pharmacology Chapters 13 to 16	**Case Study Online Quiz Component** Due: Week 5 Friday (16 Dec 2022) 5:00 pm AEST

Week 6 - 19 Dec 2022

Module/Topic	Chapter	Events and Submissions/Topic
Integumentary Pathophysiology and Pharmacology	Modules 11 and 12: Integumentary pathophysiology and associated pharmacology Chapters 46 to 51	**Assessment 1 - Online Test 1** Due: Week 6 Wednesday (21 Dec 2022) 11:00 am AEST

Vacation Week - 26 Dec 2022

Module/Topic	Chapter	Events and Submissions/Topic

Week 7 - 02 Jan 2023

Module/Topic	Chapter	Events and Submissions/Topic
Musculoskeletal Pathophysiology and Pharmacology Part 1	Modules 9 and 10: Musculoskeletal pathophysiology and associated pharmacology Chapters 32 to 36, 38, 42 and 45	

Week 8 - 09 Jan 2023

Module/Topic	Chapter	Events and Submissions/Topic
Musculoskeletal Pathophysiology and Pharmacology Part 2	Modules 9 and 10: Musculoskeletal pathophysiology and associated pharmacology Chapters 37 to 41, 43 and 44	**Assessment 2 - Case Study** Due: Week 8 Monday (9 Jan 2023) 5:00 pm AEST

Week 9 - 16 Jan 2023

Module/Topic	Chapter	Events and Submissions/Topic

Gastrointestinal Pathophysiology and Pharmacology Part 1	Modules 6 and 7: Gastrointestinal pathophysiology and associated pharmacology Chapters 17 to 19, 21 and 22	

Week 10 - 23 Jan 2023

Module/Topic	Chapter	Events and Submissions/Topic
Gastrointestinal Pathophysiology and Pharmacology Part 2	Modules 6 and 7: Gastrointestinal pathophysiology and associated pharmacology Chapters 19, 20, 22 and 23	

Week 11 - 30 Jan 2023

Module/Topic	Chapter	Events and Submissions/Topic
Reproductive Anatomy & Physiology and Pathophysiology Part 1	Module 8: Reproductive pathophysiology and associated pharmacology Chapters 24 to 27	

Week 12 - 06 Feb 2023

Module/Topic	Chapter	Events and Submissions/Topic
Reproductive Anatomy & Physiology and Pathophysiology Part 2	Module 8: Reproductive pathophysiology and associated pharmacology Chapters 28 to 31	

Exam Week - 13 Feb 2023

Module/Topic	Chapter	Events and Submissions/Topic
		Assessment 3 - Online Test 2 Due: Exam Week Thursday (16 Feb 2023) 11:00 am AEST

Term Specific Information

The best way to contact the unit coordinator is Email: bioh12012@cqu.edu.au

The lectures in BIOH12012 are pre-recorded and primarily delivered by Dr Debra Carlson and Roslyn Clapperton. These pre-recorded lectures will be released progressively throughout the term on Moodle. It is expected that students will review the weekly content, including the assigned readings and pre-recorded lectures prior to attending the tutorials.

Dr Debra Carlson is a remedial therapist with a Bachelor of Health Science, Bachelor of Science (Honours) in physiology, conducted cardiovascular research for her PhD in exercise physiology and has a Graduate Certificate in Tertiary and Adult Education. Roslyn Clapperton has completed a Bachelor of Science (Sports and Exercise) and a Bachelor of Science (Honours) in exercise physiology. Roslyn is currently in the final stages of a PhD on skeletal muscle capillarisation in patients with peripheral arterial disease.

As per Australian educational standards, you are expected to commit:

- 2-3 hours per week watching lectures and revising content through study notes.
- 2-3 hours per week attending the weekly tutorials and reflecting on your answers to the weekly study questions.
- 2-3 hours per week revising content from the current week and previous weeks.
- 2-3 hours per week preparing for your assessments or studying for the online tests.

Assessment Tasks

1 Assessment 1 - Online Test 1

Assessment Type
Online Test

Task Description
The purpose of the online test is to challenge your knowledge and understanding of the anatomy and physiology, pathophysiology and pharmacology content as you progress through the unit, and the application of these to various diseases.

Online test 1 details:

- Opens: Week 6, Tuesday, at 11:00 am AEST.
- Closes: Week 6, Wednesday at 11:00 am AEST.
- Topics examined: Weeks 1 to 5 inclusive.
- Attempts allowed: one (1).
- The online test will contribute 30% to your final grade.
- There is a minimum requirement for the assessment task: 50% of the available marks.
- In the absence of an approved extension, there will be no opportunity to complete the task after the assigned date.

Assessment Due Date
Week 6 Wednesday (21 Dec 2022) 11:00 am AEST

The online test will be open for a 24 hour period on Tuesday 20 December 2022 at 11:00 am AEST and will close on Wednesday 21 December 2022 at 11:00 am AEST.

Return Date to Students
Week 6 Wednesday (21 Dec 2022)

Results will be returned automatically via Moodle once the online test has closed.

Weighting
30%

Minimum mark or grade
50%

Assessment Criteria
Questions will be automatically marked as correct or incorrect.
A variety of question styles similar to those used in the formative quizzes on Moodle, as well as application questions, will be used in the online test to assess the content in a variety of contexts.
The online test assessment equals 30% of the total unit marks, and the minimum requirement for this assessment task is 50% of the available marks.

Referencing Style

- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

assessmentOutcome

- Apply knowledge of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems to discuss pathophysiological processes, signs and symptoms of various relevant diseases.
- Evaluate appropriate pharmacological interventions in disease processes of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems.
- Apply knowledge of pharmacokinetics, pharmacodynamics and pharmacotherapeutics to the evaluation of appropriateness of various pharmacological interventions.
- Discuss the nurse’s professional and legal responsibilities in the quality use of medicines.

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2 Assessment 2 - Case Study

Assessment Type
Case Study

Task Description
You will need to select a case study topic from those provided on the Moodle page and research this topic. You will then be provided with an authentic clinical case study on the Moodle site in the form of a quiz which you are required to complete and gather information about the case study to use in the written component of this assessment.

There are three (3) stages to completing the case study assessment:

Stage 1 requires you to **choose your case study topic** from those provided in the link **in the assessment tile of the Moodle site.**

Stage 2 requires you to complete an **online quiz which contains an online clinical case study of your patient.** You will need to take notes about the patient in your case study to use when completing stage 3.

The following information will be made available to you throughout the case study: clinical presentation, patient history, physical examination, pathophysiology, diagnosis and treatment. As you progress through the case study you will be required to answer questions relating to the information provided in the case study to demonstrate your understanding of the underlying pathophysiology and pharmacology of the case study.

The quiz component is worth twenty (20/100) of the marks allocated for this assessment.

Stage 3 is a **written component** which requires you to **submit written responses to questions** about the case study and your patient, as well as a **completed self-reflection activity.** Assessments that do not contain both documents will be marked as incomplete.

The questions related to your case study are located on the template for your specific case study in the assessment tile of the Moodle page. In your written response you will be required to demonstrate your understanding of the links between the aetiology, pathophysiology, risk factors, clinical manifestations, diagnosis and treatment.The assessment requires you to develop the level of understanding required to give evidence based advice within your scope of practice, to manage / educate your patients and close the gaps in healthcare.

The written component and self-reflection activity combined, are worth eighty (80/100) of the marks allocated for this assessment.

Guidelines to complete the written response and the marking rubric will be available on the Moodle site. Due dates for each task are located in the table below.

Case Study Assessment Task	Date / Time the Assessment Task Opens	Date / Time the Assessment Task Closes
Topic selection	Week 1, Monday 09:00 AEST	Week 3, Monday 17:00 AEST
Online quiz component	Week 3, Tuesday 17:00 AEST	Week 5, Friday 17:00 AEST
Written component	Week 4, Monday 17:00 AEST	Week 8, Monday 17:00 AEST

Assessment Due Date
Week 8 Monday (9 Jan 2023) 5:00 pm AEST

There are two separate due dates as per the table above. The case study online quiz closes on Friday of week 5 and the answers will be automatically saved in Moodle. The written response is to be submitted online by 5pm on Monday of week 8.

Return Date to Students
Week 11 Friday (3 Feb 2023)

The assessment marks and feedback will be available by close of business on Friday of week 11.

Weighting
40%

Minimum mark or grade
50%

Assessment Criteria
The case study assessment equals 40% of the total unit marks, and the minimum requirement for this assessment task if 50% of the available marks.

Your submission will be assessed according to a detailed marking rubric, which will be available on the BIOH12012 Moodle site.

Please note that all late submissions will be penalised 5% per calendar day unless an application for an extension has been approved.

All extension requests must be made through the extension request system on Moodle with appropriate documentation that complies with the Assessment Policy and Procedure. Assessments that have been submitted more than 20 calendar days late will not be marked unless an extension request has been approved.

Referencing Style

- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

Submission Instructions
Each student must submit two documents. The first document should be the written response and the second should be their self-reflection activity that will be completed using the rubric for the written response.

assessmentOutcome

- Apply knowledge of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems to discuss pathophysiological processes, signs and symptoms of various relevant diseases.
- Evaluate appropriate pharmacological interventions in disease processes of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems.
- Apply knowledge of pharmacokinetics, pharmacodynamics and pharmacotherapeutics to the evaluation of appropriateness of various pharmacological interventions.

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3 Assessment 3 - Online Test 2

Assessment Type
Online Test

Task Description
The purpose of the online test is to challenge your knowledge and understanding of the anatomy and physiology, pathophysiology, and pharmacology content as you progress through the unit, and the application of these to various diseases.

Online test 2 details:

- Opens: Exam week, Wednesday at 11:00 am AEST.
- Closes: Exam week, Thursday at 11:00 am AEST.
- Topics examined: Weeks 6 to 12 inclusive.
- Attempts allowed: one (1).
- The online test will contribute 30% to your final grade.
- There is a minimum requirement for the assessment task: 50% of the available marks.
- In the absence of an approved extension, there will be no opportunity to complete the task after the assigned date.

Assessment Due Date
Exam Week Thursday (16 Feb 2023) 11:00 am AEST

The online test will open for a 24 hour period on Wednesday 15 February 2023 at 11:00 am AEST and will close on Thursday 16 February 2023 at 11:00 am AEST.

Return Date to Students

Marks will be available upon certification of grades.

Weighting
30%

Minimum mark or grade
50%

Assessment Criteria
Questions will be a combination of automatically marked as correct and incorrect, and manually marked.
A variety of question styles similar to those in the formative quizzes on Moodle, as well as written application questions, will be used in the online test to assess the content in a variety of contexts.
The online test assessment equals 30% of the total unit marks, and the minimum requirement for this assessment task is 50% of the available marks.

Referencing Style

- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

assessmentOutcome

- Apply knowledge of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems to discuss pathophysiological processes, signs and symptoms of various relevant diseases.
- Evaluate appropriate pharmacological interventions in disease processes of the musculoskeletal, renal, immune and lymphatic systems, gastrointestinal, integumentary and reproductive systems.
- Discuss the nurse’s professional and legal responsibilities in the quality use of medicines.

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Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?
A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?
A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?
For academic advice and guidance, the Academic Learning Centre (ALC) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?

Be Honest
If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

Seek Help
If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

Produce Original Work
Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem