



# MPAT12001 *Medical Pathophysiology*

## Term 1 - 2023

Profile information current as at 10/04/2024 10:14 am

All details in this unit profile for MPAT12001 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

This unit builds upon prerequisite units in human anatomy and physiology to develop a conceptual understanding of disease and dysfunction, with emphasis on the effects of disease upon normal physiological systems. The unit content is presented in a way that fosters (a) an understanding of the widespread effects that dysfunction of a particular organ or system of the human body has upon other systems and (b) the ability to critically evaluate symptoms of dysfunction and predict the outcome. Topics include altered cells and tissues, altered cellular proliferation and differentiation, inflammation and tissue repair, and alterations of human body systems.

#### 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

Prerequisites: ALLH11005 Anatomy and Physiology for Health Professionals 1 OR BMSC11001 Human Body Systems 1 OR BMSC11007 Medical Anatomy and Physiology 1 OR BMSC11010 Human Anatomy and Physiology 1 AND ALLH11004 Anatomy and Physiology for Health Professionals 2 OR BMSC11002 Human Body Systems 2 OR BMSC11008 Medical Anatomy and Physiology 2 OR BMSC11011 Human Anatomy and Physiology 2 This unit is NOT available to students who have only completed BIOH11005 Introductory Anatomy and Physiology AND BIOH11006 Advanced Anatomy and Physiology

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 1 - 2023

- 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. **Written Assessment**

Weighting: 50%

#### 2. **Online Test**

Weighting: 50%

### 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 SUTE

##### **Feedback**

Students appreciated the multiple learning resources (worksheets, practice quizzes, H5P activities, further readings) provided throughout the term.

##### **Recommendation**

Continue provision of various learning resources to support student learning.

#### Feedback from SUTE

##### **Feedback**

The weekly revision emails were a useful resource for exam revision.

##### **Recommendation**

Continue provision of recap emails to assist in exam revision.

#### Feedback from SUTE

##### **Feedback**

The unit content needs more clinical application.

##### **Recommendation**

Continue provision of additional clinical and practical applications of clinical models to students' course of study.

## Unit Learning Outcomes

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

1. Argue the physiological consequences, symptoms and effects on health of specific dysfunction of organs and systems
2. Explain how the interdependence of human physiological systems can result in disease of one organ having widespread effects
3. Explain the mechanisms that cause altered cells and tissues, altered cellular proliferation and differentiation, inflammation and the consequences of these changes upon health
4. Describe the major causes, symptoms and consequences of dysfunction of the human body systems.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
<b>1 - Written Assessment - 50%</b>	•	•		
<b>2 - Online Test - 50%</b>	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

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

## Textbooks and Resources

### Textbooks

MPAT12001

#### Prescribed

##### **Applied Pathophysiology: A Conceptual Approach**

4th edition (2022)

Authors: Nath, Judi & Braun, Carie

Wolters Kluwer

Philadelphia, PA, USA

ISBN: 9781975179199

Binding: Paperback

#### **Additional Textbook Information**

Copies can be purchased at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code).

[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

**Romeo Batacan** Unit Coordinator

[r.j.batacan@cqu.edu.au](mailto:r.j.batacan@cqu.edu.au)

## Schedule

### **Week 1 - 06 Mar 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Pathophysiology Altered Cells and Tissues	Chapter 1 Chapter 2	Case study online selection site opens on Week 1, Monday 9:00am AEST (closes on Week 4, Friday, 5:00 pm AEST)

### **Week 2 - 13 Mar 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Inflammation and Tissue Repair	Chapter 3	

### **Week 3 - 20 Mar 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Cellular Proliferation and Differentiation	Chapter 7	

**Week 4 - 27 Mar 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Fluid, Electrolyte Balance Altered Acid-Base Balance	Chapter 8 Chapter 9	Case study online selection site closes on Week 4, Friday, 5:00 pm AEST

**Week 5 - 03 Apr 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Neuronal Transmission	Chapter 10	

**Vacation Week - 10 Apr 2023**

Module/Topic	Chapter	Events and Submissions/Topic
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**Week 6 - 17 Apr 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Somatic and Special Sensory Function	Chapter 12	

**Week 7 - 24 Apr 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Hormonal and Metabolic Regulation	Chapter 13	

**Week 8 - 01 May 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Reproductive Function	Chapter 14	<b>Case Study</b> Due: Week 8 Friday (5 May 2023) 5:00 pm AEST

**Week 9 - 08 May 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Ventilation and Diffusion	Chapter 15	

**Week 10 - 15 May 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Perfusion	Chapter 16	

**Week 11 - 22 May 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Nutrition	Chapter 17	

**Week 12 - 29 May 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Altered Elimination	Chapter 18	

**Review/Exam Week - 05 Jun 2023**

Module/Topic	Chapter	Events and Submissions/Topic
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**Exam Week - 12 Jun 2023**

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

The unit coordinator is Dr. Romeo Batacan Jr. Dr. Batacan is a medical doctor (MD) who later completed a PhD in Biomedical Science. You can contact Dr. Batacan through phone (07 49309278) or email (r.j.batacan@cqu.edu.au). There will be weekly tutorials for this unit delivered by Dr. Batacan. Tutorials are delivered at the North Rockhampton campus and via Zoom. These sessions will be recorded and posted on the Moodle site. You will get the most benefit from the tutorials if you watch the weekly recorded lectures beforehand and attempt the weekly study resources available on your Moodle page. You are strongly encouraged to participate in tutorials. More information regarding tutorial schedule will be available on the Moodle site for students.

## Assessment Tasks

### 1 Case Study

#### Assessment Type

Written Assessment

#### Task Description

##### Rationale

In the clinical context, health professionals are expected to have in-depth knowledge and understanding of pathophysiology processes and their interrelationship. Population demographics demonstrate increased ageing and concomitant complex morbidities in healthcare. This assessment requires you to construct links between pathophysiology, etiology, risk factors, clinical manifestations, diagnosis and treatment which reflect the level of understanding you will be required to articulate clinically. You must be able to give evidence based advice, within your scope of practice, which serves to educate the patient and close gaps in health care.

##### Task

You will be provided with an authentic clinical case study on the Moodle site. You are required to identify information about the case study relevant to the aspects of disease process. You are then required to complete a written response to four questions related to your case study, in which you will demonstrate your understanding of the links between pathophysiology, etiology, risk factors, clinical manifestations, diagnosis and treatment.

Guidelines to complete the written response and the marking rubric will be available on the Moodle site.

#### Assessment Due Date

Week 8 Friday (5 May 2023) 5:00 pm AEST

#### Return Date to Students

Week 10 Friday (19 May 2023)

#### Weighting

50%

#### Minimum mark or grade

To pass this unit, you are required to attain a minimum of 50% of the marks available for this assessment.

#### Assessment Criteria

The case study assessment task equals 50% of your total unit marks.

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

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

All extension applications must be made through the extension request system on Moodle. 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

The submitted final written assessment must be pdf or MS word format.

#### Learning Outcomes Assessed

- Argue the physiological consequences, symptoms and effects on health of specific dysfunction of organs and systems

- Explain how the interdependence of human physiological systems can result in disease of one organ having widespread effects

## 2 Online Test

### Assessment Type

Online Test

### Task Description

An end of term online test will be conducted to assess your knowledge and understanding of the content covered in this unit throughout the term (Weeks 1-12). Details regarding the date, time and structure of the online test will be provided on Moodle during the term.

### Assessment Due Date

The online test will be conducted during the exam period. More information regarding the online test will be made available to students on Moodle towards the end of term.

### Return Date to Students

Marks will be available after certification of grades.

### Weighting

50%

### Minimum mark or grade

To pass this unit, you are required to attain a minimum of 50% of the marks available for this assessment.

### Assessment Criteria

Each question will be allocated a specific number of marks.

Assessment criteria will be based on:

Knowledge of theory

Application of pathophysiological concepts and processes

Correct use of terminology

### Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

### Submission

Online

### Learning Outcomes Assessed

- Argue the physiological consequences, symptoms and effects on health of specific dysfunction of organs and systems
- Explain how the interdependence of human physiological systems can result in disease of one organ having widespread effects
- Explain the mechanisms that cause altered cells and tissues, altered cellular proliferation and differentiation, inflammation and the consequences of these changes upon health
- Describe the major causes, symptoms and consequences of dysfunction of the human body systems.



## 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