

1. General Course Information

1.1 Course Details

Course Code:	1017MSC
Course Name:	Anatomy & Physiology Systems II
Trimester:	Trimester 1, 2022
Program:	Diploma of Health Sciences
Credit Points:	10
Course Coordinator:	Dr Katherine Lee
Document modified:	23-12-2021

Course Description

Anatomy & Physiology Systems II is a 10 Credit Point course situated within the second trimester of the Diploma of Health Science. The Diploma of Health Science is designed to provide students with a pathway to:

- further university studies in the Health Sciences, or
- direct employment.

Within Anatomy & Physiology Systems II a number of major body systems will be discussed, integrating structure (anatomy) with function (physiology). This is a companion course to Anatomy and Physiology Systems I. With the cardiovascular, respiratory, renal and digestive systems, description of human anatomy will precede physiological study, drawing on experience in laboratories as well as lectorials. The functions of blood, and the anatomy and functions of the immune system will be covered. This course will provide the necessary experience and learning for students destined to undertake advanced studies in anatomy and in physiology, and will develop (knowledge of) analytical laboratory skills.

Assumed Knowledge

To successfully enrol in this Course, you must provide evidence that you have completed the following Courses:

- 1014MSC Cells, Tissues & Regulation
- 1016MSC Anatomy & Physiology Systems 1

1.2 Teaching Team

Your teacher can be contacted via the email system on the portal.

Name	Email
Dr Katherine Lee	katherine.lee@staff.griffithcollege.edu.au

1.3 Staff Consultation

Your teacher is available each week for consultation outside of normal class times. Times that your teacher will be available for consultation will be given in the first week of learning experiences. A list of times and rooms will be published on the Griffith College Portal under the "Support and Services/Teacher Consultation Times" link.

1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

1.5 Technical Specifications

All students must have access to a computer or suitable mobile device.

2. Aims, Outcomes & Generic Skills

2.1 Course Aims

- address functional anatomy of the cardiovascular system and broad aspects of basic cardiovascular physiology, including anatomical and experimental laboratory investigation
- address basic respiratory system anatomy and physiology, incorporating blood and gas transport, including anatomical and experimental laboratory investigation
- address basic renal and urinary system anatomy and physiology and its role in water balance and homeostasis
- address the basic structure of the gastrointestinal tract and the physiology of digestion and absorption
- address basic blood physiology, lymphatics & immune systems In addition to learning about normal structure and function, and although a comprehensive account would not be appropriate at this level, the course also aims to discuss basic pathophysiology of some of the major societal problems, including atherosclerosis and myocardial infarct, asthma and other obstructive disorders.

A related but separate course aim is to provide students with the opportunity to investigate the function of major body systems in the laboratory, gaining practical and analytical skills in experimental physiology, and in histology and related disciplines.

2.2 Learning Outcomes



After successfully completing this course you should be able to:

- 1. Correctly use anatomical and physiological terms as they relate to the human body;
- 2. Identify and describe the anatomical features and physiological functions of various systems of the body;
- 3. Demonstrate knowledge in laboratory procedures including human tissue handling and identification of anatomical structures on human cadaveric material, and understanding the basic function test in relations to the human physiological systems covered in this course

2.3 Generic Skills and Capabilities

For further details on the Generic Skills please refer to the <u>Graduate Generic Skills and Capabilities policy</u>.

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills and Capabilities		Taught	Practised	Assessed
Acquisition of discipline knowledge and skills with critical judgement	o	<	>	~
Communication and collaboration		<	✓	
Self-directed and active learning		~	✓	
Creative and future thinking	5	~	✓	
Social responsibility and ethical awareness	ΣŢΛ	~	✓	
Cultural competence and awareness in a culturally diverse environment	###	~	✓	~

3. Learning Resources



3.1 Required Learning Resources

Marieb, E.N. & Hoehn, K. Human Anatomy & Physiology Global + A Brief Atlas of the Human Body + Mastering A&P with eText 10th edition (ISBN 9781488689109) or 11th edition (ISBN 9781488657719).

The online version for the above textbook can be found at https://www.pearson.com.au/9781292260938

- Marieb, E.N. & Mitchell, S. Laboratory Manual for Foundation Year Health Custom Edition 2nd edition (ISBN 9781488609954) or 3rd ed. (ISBN 9781488626050)

Both of these texts above are available in a value package.

 Lab Workbook and Workshop workbook - available on the 1017MSC-course site in the Griffith College Student Portal

Laboratory Rules document is part of the lab workbook, which is available on the course site via the Griffith College Student Portal.

3.2 Recommended Learning Resources

- Pearson Online course environment 'Mastering Anatomy and Physiology'.

3.3 College Support Services and Learning Resources

The College provides many facilities and support services to assist students in their studies. Links to information about College support resources that are available to students are included below for easy reference.

<u>Digital Library</u> – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy - there is a dedicated website for this course via MyStudy on the Griffith College Portal.

Griffith College is committed to ensuring academic integrity is understood and maintained by all staff and students. All students learn about academic integrity through engagement with the weighted Epigeum modules within the suite of Academic and Professional Studies courses.

Services and Support provides a range of services to support students throughout their studies including academic advice and assignment help from Student Learning Advisors, and personal and welfare support from Student Counsellors.

Jobs and Employment in the <u>Student Hub</u> can assist students with career direction, resume and interview preparation, job search tips, and more.

<u>IT Support</u> provides details of accessing support, information on s numbers and internet access and computer lab rules.

3.4 Other Information about your Learning

Attendance

You are expected to actively engage in all learning experiences and learning activities which underpin the learning content in this course. You are expected to engage with the learning content and learning activities outside of timetabled class times. This requires you to be an active agent of your learning. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you are encouraged to BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

Preparation and Participation in Learning

In order to enhance your learning, you need to prepare before participating in the learning experiences. Absorb the learning content and complete the learning activities that are provided online before you attend the scheduled learning experiences. Make sure you complete the learning activities set each week, they are designed to support your learning. Active participation in your learning will enhance your success. Ask questions when something is unclear or when you want to bring some issue to your teacher's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

Consultation Sessions

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

Course Learning Materials

Learning materials are made available to you in MyStudy on the Griffith College Portal. The learning materials are arranged in Modules. In each Module you will find Learning Content, Learning Experiences and Learning Activities. Learning Content will be engaged with prior to the scheduled Learning Experience (your weekly class). This will ensure you are prepared for the scheduled Learning Experience by being aware of the content to be covered and therefore will be able to actively participate in the session. Learning Activities are accessed after the scheduled session for purposes of review, consolidation of learning, and preparation for the Evidence of Learning tasks (assessment) in the course.

In addition, **Anytime Anywhere** learning material is provided in the course. This learning material provides support, interactive tools and directions for students who occasionally cannot attend the weekly scheduled Learning Experience (either in person or on Zoom) perhaps due to illness or other commitments. The Anytime Anywhere learning material should also be used in conjunction with Learning Content and Learning Activities resources.

Self-Directed Learning

You will be expected to learn independently. This means you must organise and engage with the course learning content even when you are not specifically asked to do so by your teacher. The weekly guide will be helpful to organise your learning. This involves revising the weekly course learning material and completing the learning activities. It also means you will need to find additional information to evidence your learning (assessment) beyond that given to you, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

Program Progression

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program Progression Policy - for more information].

Teacher and Course Evaluation

Your feedback is respected and valued by your teachers. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your teacher or by completing course and teacher evaluations via Griffith College's evaluation tool whenever these are available.



4. Learning Content, Learning Experiences and Learning Activities

4.1 Modules for Learning and Weekly Learning Content, Learning Experiences and Learning Activities

	Learning Content	Learning Experiences	Learning activities	Evidence of learning	Learning outcome
	<u>.</u>				
	Module 1: Card	liovascular System ar	nd Heart	·	
1	-Introduction to the course and assessment, delivery method -Functional anatomy of the heart -Cardiovascular system overview -ECGs and myocardial contraction	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions		1 & 2
2	-Review cardiovascular system -Anatomy and function of arteries and veins -Overview: blood vessels	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -		1 & 2
3	-Review blood vessels - Functional anatomy of capillary networks -Cardiac output and Resistance -Determinants of blood pressure	Zoom) Lectorials: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions	Post- module assessm ent (1%)	1 & 2
	Module 2: Lym	phatic System and Bl	ood		
4	-Review Cardiac output and resistance -Lymphatics system	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions		1 & 2
5	-Review Lymphatics system	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Zoom quizzes	-Complete workbook exercises -Watch the mini lecture(s), additional videos and	Post- module assessm ent	1 & 2

_	-Composition and function of blood Module 3: Resp.	-Completing the electronic lectorial workbook activities	resources (incl. the course textbook) -Complete Review Questions	(1%)	
6	-Review of Lymphatics system and blood -Organisation of the respiratory system	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions		1 & 2
7	-Partial pressures -Function of bronchi and alveoli -Gas transport	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions	Post- module assessm ent (1%) Lab exam 1 (15%)	1 & 2
	Module 4: Rena				
8	-Review Respiratory -System Renal / Urinary system -filtration, reabsorption, secretion -(regulation of) GFR -Intrinsic control mechanisms	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -Complete Mastering Assignment	Mid Tri Exam 1 (Module 1-3) (30%)	1 & 2
9	-Functional anatomy urinary tract -Kidney, glomerular function -Extrinsic control mechanisms	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -Complete Mastering Assignment	Post- module assessm ent (1%)	1 & 2
	Module 5: GIT	(7)	Operation III		4.9.0
10	-Renal medulla and water balance	(Zoom) Lectorials incorporating debate, team work and individual activities through: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -Complete Mastering Assignment		1 & 2
11	-Review of Renal system	(Zoom) Lectorials incorporating debate, team work and	-Complete workbook exercises	Post- module	1 & 2

	-GI tract: movement and secretion -Pancreatic and hepatic function	individual activities through: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -Complete Mastering Assignment	assessm ent (1%)	
	Module 6: Imm	unology			
12	-Review GI tract -Immune System -Revision Module 5 and 6	(Zoom) Lectorials: -Presentations -Jeopardy quizzes -Kahoot Quizzes -Zoom quizzes -Completing the electronic lectorial workbook activities	-Complete workbook exercises -Watch the mini lecture(s), additional videos and resources (incl. the course textbook) -Complete Review Questions -Complete Mastering Assignment	Lab Exam 2 (20%)	1 & 2
13				End of Tri Exam (Module 4-6) (30%)	

Overview of Lab sessions (including [online] lab exams):

	Learning Content	Learning experiences	Learning activities	Evidence of learning	Learning outcome
	Module 1				
2	Physiology Lab: Animal Heart Dissection	Laboratory	Voice over lab powerpoint, Lab note-guide and (Marieb Ex 30)		1, 2 & 3
	Module 1	I			
3	Physiology Lab: Blood pressure/ECG	Laboratory	Voice over lab powerpoint, Lab note-guide and (Marieb Ex 33A)		1, 2 & 3
	Module 1	ı			
6	Anatomy Lab: Cardiovascular	Practicum	Voice over lab powerpoint, Lab note-guide and (Marieb Ex 30, 32, 36)		1, 2 & 3
	Module 1 & 3				
8	Anatomy Lab: Respiratory system/REVIEW Cardiovascular system	Practicum	Voice over lab powerpoint, Lab note-guide and (Marieb Ex 30, 32, 36)		1, 2 & 3
	Module 3 & 4				
9	Anatomy Lab: Renal	Practicum	Marieb Ex 3, 8, 40, 42		1, 2 & 3

	system/REVIEW				
	Respiratory system				
	Module 3 & 4				
10	Physiology Lab: Respiratory & Urinalysis	Laboratory	Urinalysis (Marieb Ex 41A, 40), Lung Function (Marieb Ex 36)		1, 2 & 3
	Module 5				
11	Anatomy Lab: Digestive system/REVIEW Renal system	Practicum	Marieb Ex 3, 8, 40, 42		1, 2 & 3
12	REVIEW all systems	Practicum			1, 2 & 3
	(ONLINE) Lab Exam 1	(Module 1-3)			
9	-Module 1-3	See previous week	See previous week	Lab Exam 1 (Module 1+3)	1, 2 & 3
	(ONLINE) Lab Exam 2	(Module 1-6)		•	
12	-Module 1-6	See previous week	See previous week	Lab Exam 2 (Module 1-6)	1, 2 & 3



5. Evidence of Learning (Evidence of Learning Task Plan)

5.1 Evidence of Learning Summary

	Evidence of learning	ılı.		0-0
		Weighting	Learning outcome	Due Date
1	Post-module assessment	5%	1 & 2	Week 3, 5, 7, 9, 11
2	Lab Exam 1	15%	1, 2 & 3	Week 7
3	Mid Tri Exam	30%	1 & 2	Week 8
4	Lab Exam 2	20%	1, 2 & 3	Week 12
5	End of Tri Exam	30%	1 & 2	Week 13

5.2 Evidence of Learning Task Detail

Post-module assessment (5%)

Rationale: The aim of post-module assessment is to assess comprehension of the material covered in each module and to encourage students to stay up-to-date with the teaching modules. **Evidence of Learning Task details:** This quiz will be in the form of multi-choice questions. **Marking criteria:** The quiz will be marked against established model answers .

Mid Tri Exam: assessing Module 1-3 (30%)

Rationale: The aim of mid tri exam is to assess comprehension of the material covered in Module 1 to 3 content. **Evidence of Learning Task details:** This quiz will be in the form of multi-choice questions and short answer questions.

Marking criteria: The quiz will be marked against established model answers and undergo a full moderation process

End of Tri Exam: assessing Module 4 - 6 (30%)

Rationale: The aim of end of tri exam is to assess comprehension of the material covered in Module 4 to 6 content. **Evidence of Learning Task details:** This quiz will be in the form of multi-choice questions and short answer questions.

Marking criteria: The quiz will be marked against established model answers and undergo a full moderation process

Laboratory examinations

Lab exam 1 (15%) assessing Module 1-2

Closed book moodle quiz. Timed randomised labelling questions and short open answer questions designed to assess knowledge of laboratory content.

Lab exam 2 (20%) assessing Module 1-6

Closed book moodle quiz. Timed randomised labelling questions and short open answer questions designed to assess knowledge of laboratory content.

Requirements to pass this course:

In addition to meeting the laboratory requirements, students must:

- 1. attend and attempt all evidence of learning task; AND
- 2. achieve an overall course result (sum of all evidence of learning tasks) of at least 50%

5.3 Late Submission

An evidence of learning (assessment) task submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the evidence of learning task by 5% of the maximum mark applicable for the evidence of learning task, for each working day or part working day that the task is late. Evidence of learning tasks submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > <u>Assessment Policy</u> for guidelines and penalties for late submission.

5.4 Other Information about Evidence of Learning

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Requests for extension

To apply for an extension of time for an evidence of learning task, you must submit an Application for Extension of Assignment form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. Griffith College Student Medical Certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

Return of Evidence of Learning Tasks

- Marks awarded for in-trimester evidence of learning tasks, except those being moderated externally with Griffith University, will be available on the Student Portal within fourteen [14] days of the due date. This does not apply to the final evidence of learning task in this course (marks for this task will be provided with the final course result).
- 2. Students will be advised of their final grade through the Student Portal. Students can review their final exam papers after student grades have been published. Review of final exam papers will not be permitted after the final date to enrol.
- 3. Marks for **all** evidence of learning tasks including the final exam (if applicable) will be recorded in the Moodle Course Site and made available to students through the Moodle Course Site.

The sum of your marks of evidence of learning tasks in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.

6. Policies & Guidelines

Griffith College assessment-related policies can be found in the Griffith College Policy Library which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sitting, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed using the 'Document Search' feature within the Policy Library

Academic Integrity Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, premeditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your teachers and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor. Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > Academic Integrity Policy

Reasonable Adjustments for Evidence of Learning Tasks – The Disability Services policy

The <u>Disability Services policy</u> (accessed using the Document Search' feature with the <u>Policy Library</u>) outlines the principles and processes that guide the College in making reasonable adjustments to evidence of learning tasks for students with disabilities while maintaining academic robustness of its programs.

Risk Assessment Statement

There are no out of the ordinary risks associated with this course.

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