



1. General Course Information

1.1 Course Details

Course Code:	1017MSC
Course Name:	Anatomy & Physiology Systems II
Trimester:	Trimester 3, 2019
Program:	Diploma of Health Sciences
Credit Points:	10
Course Coordinator:	Dr Jos de Schepper
Document modified:	2 October 2019

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 lectures. 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 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 and
- 1016MSC - Anatomy & Physiology Systems 1

1.2 Teaching Team

Your lecturer/tutor can be contacted via the email system on the portal.

Name	Email
Dr Jos de Schepper	jos.deschepper@staff.griffithcollege.edu.au

1.3 Staff Consultation

Your lecturer/tutor is available each week for consultation outside of normal class times. Times that your lecturer/tutor will be available for consultation will be given in the first week of lectures. 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

The primary aims of Anatomy & Physiology Systems II are to:

- 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 competency in laboratory procedures including, human tissue handling, and identification of anatomical structures on human cadaveric material.

2.3 Generic skills

For further details on the Generic Skills please refer to the Graduate Generic Skills and Capabilities policy.

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	Taught	Practised	Assessed
Written Communication	Yes	Yes	Yes
Oral Communication		Yes	
Information Literacy		Yes	Yes
Secondary Research			
Critical and Innovative Thinking	Yes	Yes	Yes
Academic Integrity	Yes	Yes	Yes
Self Directed Learning		Yes	Yes
Team Work		Yes	
Cultural Intelligence			
English Language Proficiency		Yes	Yes

3. Learning Resources

3.1 Required Resources

Required Texts:

- 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).
- 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 and workshop workbook are available on the course site in the Griffith College Student Portal.

Required Support Materials (available from Griffith University Campus Bookshop G40):

- **Laboratory gown**
- Timer
- Marker pens
- Safety Glasses

Please note: It is compulsory for Diploma of Health Science students to purchase a **laboratory gown**. If you forget your laboratory gown, you may purchase a disposable lab coat from the Griffith University Campus Bookshop (G40)

3.2 Recommended Resources

- Anatomy Learning Centre at level 10 G40 (students have access to this learning resource after reading and following the guidelines published on the course portal)
- Pearson Online course environment (students have access to this learning resource after purchasing the required course textbook)

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.

[Digital Library](#) – 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.

[Academic Integrity Tutorial](#) - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of breaches of academic integrity, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Services and Support provides a range of services to support students throughout their studies including personal support such as Counselling; Academic support; and Welfare support.

Jobs and Employment in the [Student Hub](#) can assist students with career direction, resume and interview preparation, job search tips, and more.

[IT Support](#) provides details of accessing support, information on s numbers and internet access and computer lab rules.

3.4 Other Learning Information

Attendance

You are expected to attend all lectures and tutorials and to actively engage in learning during these sessions. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you may 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 Class

In order to enhance learning, prepare before lectures and tutorials. Read the relevant section of your text book before a lecture, and for a tutorial read both the textbook and the relevant lecture notes. If you have been given tutorial exercises, make sure you complete them. Active participation in lectures and tutorials will improve your learning. Ask questions when something is unclear or when you want to bring some issue to your lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

Preparation and Participation in Class

You are expected to read your text book and the lecture notes plus attempt any tutorial/workshop exercises before class so that each week you can actively contribute to your learning and the learning of others in your classes. You are expected to ask and answer questions and to initiate discussions and stimulate debate in group and class situations.

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 Materials

Lecture notes will be made available to you in MyStudy on the Griffith College Portal and you are advised to either print these out and bring them to each class so that extra notes can be added or BYOD (bring your own device) and add extra notes digitally.

Self-Directed Learning

You will be expected to learn independently. This means you must organise and learn the course content even when you are not specifically asked to do so by your lecturer or tutor. This involves revising the weekly course material. It also means you will need to find additional information for some assessment items beyond that given to you in textbooks and lecture notes, 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 lecturers and tutors. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your lecturer and tutor or by completing course and lecturer evaluations via Griffith College's evaluation tool whenever these are available.

4. Learning and Teaching Activities

Classes for Anatomy & Physiology II include the following:

- * **Lectures:** 3 hours per week
- * **Workshops:** 1 hour per week
- * **Laboratories:** 3 x 2 hour laboratory sessions (weeks 2, 3, & 9) on **Wednesday 9-11 am**
- * **Practicums:** 4 x 3 hour practicums (weeks 5, 6, 10, & 12). Lab practicums in weeks 6 and 12 will include the Mid-trimester and Final Lab examinations. Practicums in week 5, 6 (lab exam), and 12 (lab exam) on **Wednesday 9 am – 12 pm. Practicum in week 10 on Friday 9 am – 12 pm.**

Note: **ATTENDANCE AT LABORATORIES AND PRACTICUMS ARE COMPULSORY.** These practical sessions provide learning activities that are essential to the learning outcomes in this course. Students will work in small groups to conduct experiments and develop problem solving skills. Students are expected to attend their scheduled laboratory class except in extenuating circumstances.

An attendance roll will be maintained for all laboratories. Students must read the Laboratory Safety requirements prior to attending their first laboratory, and comply with the dress and behaviour codes as described; Students **MUST WEAR LABORATORY GOWN AND CLOSED IN SHOES FOR ALL LABORATORIES.** Students will be required to bring their laboratory manuals to laboratories. Content covered in these laboratories complements lecture material and hence will be assessed in both laboratory

examination and examinations.

IMPORTANT: All students must undertake the on-line health and safety training prior to being permitted entry into laboratories, and be familiar with the contents of the Laboratory Rules booklet. As part of your studies you are required to complete the following online Health and Safety Induction modules before you commence your formal learning activities.

1. **Student Basic Health and Safety Induction module (no need to print off completion certificate)**
2. **Health Lab Safety Induction module (no need to print off completion certificate)**

4.1 Weekly Learning Activities

Weekly Teaching Schedule

Week	Topic	Activity	Readings	Learning Outcomes
1	Functional anatomy of the heart	Lecture	Marieb Chapters 18 & 19	1,2
	Cardiovascular system overview	Lecture	Marieb Chapters 18 & 19	1,2
	ECGs and myocardial contraction	Lecture	Marieb Chapters 18 & 19	1,2
	Introduction to the course and assessment	Workshop	Workshop workbook	1,2
2	Anatomy and function of arteries and veins	Lecture	Marieb Chapters 18 & 19	1,2
	Overview: blood vessels	Lecture	Marieb Chapters 18 & 19	1,2
	Overview: blood vessels	Lecture	Marieb Chapters 18 & 19	1,2
	Review cardiovascular system	Workshop	Workshop workbook week 1	1,2
	Laboratory : Animal Heart Dissection (LAB 1 in G16)	Laboratory	Lab note-guide and (Marieb Ex 30)	1,2,3
3	Functional anatomy of capillary networks	Lecture	Marieb Chapters 18 & 19	1,2
	Cardiac output and Resistance	Lecture	Marieb Chapters 18 & 19	1,2
	Determinants of blood pressure	Lecture	Marieb Chapters 18 & 19	1,2
	Review blood vessels	Workshop	Workshop workbook week 2	1,2
	Laboratory: Blood	Laboratory	Lab note-guide and (Marieb Ex 33A)	1,2,3

	pressure/ECG (LAB 2 in G16)			
4	Lymphatics system	Lecture	Marieb Chapters 17 & 20	1,2
	Composition and function of blood	Lecture	Marieb Chapters 17 & 20	1,2
	Exam (MTE Part 1) revision	Lecture	Marieb Chapters 18 & 19	1,2
	Mid trimester exam Part 1		Covering materials which have been taught in week 1, 2, and 3 from chapter 18 &19	1,2
	Review cardiac output and resistance	Workshop	Workshop workbook week 3	1,2
5	Lymphatics system and blood	Lecture	Marieb Chapters 17 & 20	1,2
	Organisation of the respiratory system	Lecture	Marieb Chapter 22	1,2
	Organisation of the respiratory system	Lecture	Marieb Chapter 22	1,2
	Review Lymphatics and blood	Workshop	Workshop workbook week 4	1,2
	Cardiovascular and Respiratory system Anatomy (LAB 3 in G40)	Practicum	Lab note-guide and (Marieb Ex 30, 32, 36)	1,2,3
6	Partial pressures	Lecture	Marieb Chapter 22	1,2
	Function of bronchi and alveoli	Lecture	Marieb Chapter 22	1,2
	Gas transport	Lecture	Marieb Chapter 22	1,2
	Review Lymphatics and blood	Workshop	Workshop workbook week 5	1,2
	Mid-trimester lab exam		Covering the labs 1, 2, and 3	1,2,3
7	Renal / Urinary system	Lecture	Marieb Chapter 25	1,2
	Renal / Urinary system	Lecture	Marieb Chapter 25	1,2
	Renal / Urinary system	Lecture	Marieb Chapter 25	1,2
	Review Respiratory System	Workshop	Workshop workbook week 6	1,2

8	Kidney, glomerular function	Lecture	Marieb Chapter 25	1,2
	Functional anatomy urinary tract	Lecture	Marieb Chapter 25	1,2
	Exam Revision (MTE Part 2)	Lecture	Marieb Chapters 17,20, 22, and 25	1,2
	Review renal system	Workshop	Workshop workbook week 7	1,2
	Mid-trimester Exam Part 2		Covering materials which have been taught on week 4, 5, 6, and 7 from chapter 17, 20, 22, and 25.	1,2
9	Renal medulla and water balance	Lecture	Marieb Chapter 25	1,2
	Renal Sytem	Lecture	Marieb Chapter 25	1,2
	Renal System	Lecture	Marieb Chapter 25	1,2
	Review renal system	Workshop	Workshop workbook week 8	1,2
	Laboratory : Respiratory and renal system Physiology (LAB 4 in G16)	Laboratory	Lab note-guide and (Marieb Ex 41A, 40), (Marieb Ex 36)	1,2,3
10	GI tract: Movement and secretion	Lecture	Marieb Chapters 23	1,2
	GI tract: Movement and secretion	Lecture	Marieb Chapters 23	1,2
	GI tract: Movement and secretion	Lecture	Marieb Chapters 23	1,2
	Review renal system	Workshop	Workshop workbook week 9	1,2
	Digestive and Urinary system Anatomy (LAB 5 in G40)	Practicum	Lab note-guide and (Marieb Ex 41A, 40), (Marieb Ex 36)	1,2,3
11	GI tract: Movement and secretion	Lecture	Marieb Chapter 23	1,2
	Pancreatic & hepatic function	Lecture	Marieb Chapter 23	1,2
	Gastrointestinal system	Lecture	Marieb Chapter 23	1,2
	Review GI tract	Workshop	Workshop workbook week 10	1,2
12	Immune system	Lecture	Marieb Chapter 21	1,2

	Immune system	Lecture	Marieb Chapter 21	1,2
	Final Exam Revision	Lecture	Marieb Chapters 21, 23, and 25	1,2
	Review GI tract and immune system	Workshop	Workshop workbook week 11 and 12	1,2
	Final lab exam in G40		Covering materials of labs 1, 2, 3, 4 & 5	1,2,3
13	Final Exam	Examination	Covering material which have been taught in week 8, 9, 10, 11, and 12 from chapters 21, 23, and 25	1,2

5. Assessment Plan

5.1 Assessment Summary

Item	Assessment Task	Weighting	Learning Outcomes	Due Date
1	Mid trimester laboratory exam	15%	1,2,3	Week 6
2	Mid trimester exam part 1	20%	1, 2	Week 4
2	Mid trimester exam part 2	20%	1, 2	Week 8
3	Final laboratory exam	15%	1, 2, 3	Week 12
4	End of trimester exam <i>- Students achieve 40% or more to be awarded a pass in this assessment</i>	30%	1, 2	Exam Weeks

5.2 Assessment Detail

1. Mid trimester lab exam

Rationale: To test students' practical knowledge of the material emphasized in the lab environment

Assessment details: The 30-minute lab exam will consist of 30 questions and will require the identification of anatomical structures on various models and specimens. The questions will be based on material covered during the first three laboratory sessions. It will be held during lab time in week 6.

Marking criteria: The lab exam will be marked against established marking criteria

2. Mid-trimester Exams

Rationale: These in-trimester exams will be in two parts, with each including both multiple choice and short answer exam questions. These examinations are designed to assess the students' knowledge and understanding of the first seven weeks of lectures.

Assessment details: In-trimester exam part 1: This written exam will consist of 50 multiple choice questions and 10 marks worth of short answer questions. Students will be assessed on course material which has been covered in weeks 1, 2, & 3.

In-trimester exam part 2: This written exam will consist of 60 multiple choice questions and 10 marks worth of short answer questions. Students will be assessed on course material which has been covered in weeks 4, 5, & 6.

Marking criteria: These two in-trimester examinations will be marked against established model answers and undergo a full moderation process.

3. Final laboratory Exam

Rationale: This exam is designed to assess the anatomy and physiology specifically covered in the lab component of the course

Assessment details: This 30-minute exam will consist of 30 written and pin location questions in the lab setting.

Marking criteria: One mark awarded per correct answer. The Laboratory examination is marked against pre-moderated criteria.

4. End of trimester Exam

Rationale: This examination is designed to assess the students' knowledge and understanding of the material presented in weeks 7 – 12.

Assessment details: This written exam will consist of 55 multiple choice questions and 25 marks worth of written questions.

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

Requirements to Pass this course

In order to pass this course and in addition to meeting the laboratory requirements, students must:

1. **attend and attempt all assessment items, AND**
2. **obtain at least 40% in the final, End of trimester exam, AND**
3. **Achieve an overall course grade (sum of all assessments) of 50%**

5.3 Late Submission

An assessment item 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 assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Assessment items submitted more than five working days after the due date are awarded zero marks.

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

5.4 Other Assessment Information

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 assignment, 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 Assessment Items

1. Marks awarded for in-trimester assessment items, 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 assessment item in this course (marks for this item 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 exam papers after student grades have been published (see relevant Griffith College Fact Sheet for allocated times at Support> Factsheets). Review of exam papers will not be permitted after the final date to enrol.
3. Marks for **all** assessment items 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 overall assessment items 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, pre-meditated 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 lecturers, tutors 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 Assessment – The Disability Services policy

The Disability Services policy (accessed using the Document Search' feature with the [Policy Library](#)) outlines the principles and processes that guide the College in making reasonable adjustments to assessment 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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