



COURSE OUTLINE

HLT221 Human Pathophysiology

Course Coordinator: Robert Harvey (rharvey2@usc.edu.au) **School:** School of Health and Behavioural Sciences

2021 | Semester 1

USC Sunshine Coast

ON CAMPUS

Most of your course is on campus but you may be able to do some components of this course online.

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course further develops the introductory knowledge you have gained in physiology, to develop an understanding of disease and dysfunction. Cellular adaptation and injury will be explored and expanded to investigate major disorders associated with the organ systems. This course focuses on exploring the major causes and clinical manifestations of disease and the use of diagnostic information to learn about and evaluate the disease process. It develops basic communication skills applicable to programs such as Medical Laboratory Science, Paramedic Science and Clinical Exercise Physiology.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
ON CAMPUS			
Lecture – Lectorial (TELT only)	2hrs	Week 1	13 times
Tutorial/Workshop – Workshop (TELT only)	2hrs	Week 1	7 times
Laboratory – Weeks 2, 4, 8, 10 and 12 - Face-to-Face (restrictions permitting) or TELT format; Week 6 TELT only.	2hrs	Week 2	6 times

1.3. Course Topics

Basic pathophysiology of diseased states.

Major diseases affecting the organ systems including: nervous, cardiovascular, respiratory, immune, digestive, endocrine and renal. Introduction to diagnostic testing and management of diseased states.

2. What level is this course?

200 Level (Developing)

Building on and expanding the scope of introductory knowledge and skills, developing breadth or depth and applying knowledge and skills in a new context. May require pre-requisites where discipline specific introductory knowledge or skills is necessary. Normally, undertaken in the second or third full-time year of an undergraduate programs.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES		GRADUATE QUALITIES
On successful completion of this course, you should be able to...		Completing these tasks successfully will contribute to you becoming...
1	Describe, explain and clearly communicate knowledge of disease and dysfunction from cellular to organ system levels.	Knowledgeable Empowered
2	To understand the use of common diagnostic tests in assessing health and disease.	Knowledgeable Engaged
3	Display knowledge of pathological processes involved in disease and dysfunction.	Knowledgeable Empowered
4	Critically analyse and solve pathophysiology problems by collecting, accurately recording, interpreting clinical results, and drawing conclusions.	Knowledgeable Creative and critical thinker

5. Am I eligible to enrol in this course?

Refer to the [USC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

LFS112 or HLT100 and enrolled in Program SC211, SC304, SC367, SC391, SC392, SC394, SC395, SC346.

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

LFS203 or LFS303 or NUR221 or PAR221

5.4. Specific assumed prior knowledge and skills (where applicable)

Students will be able to demonstrate understanding in human physiology as evidenced through the successful completion of pre-requisite courses or equivalent credit courses

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Early feedback will be provided through formative online quizzes available on Blackboard each week after the lectures. Formative assessment activities will be completed in weekly workshops and laboratory classes.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Activity Participation	Individual	25%	Up to 6 sub-tasks	Refer to Format	Online Test (Quiz)
All	2	Activity Participation	Individual	25%	60 minutes	Week 7	Online Test (Quiz)
All	3	Examination - Centrally Scheduled	Individual	50%	2 hours	Exam Period	Online Test (Quiz)

All - Assessment Task 1: Practical and theory portfolio - online component

GOAL:	This portfolio has been designed to enable you to demonstrate your knowledge of pathophysiological processes and diagnostic tests, and to develop clear communication skills.	
PRODUCT:	Activity Participation	
FORMAT:	Individual, 15 multiple choice questions per sub-task; completed online during weeks 2-13	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstration of knowledge and understanding of pathophysiological processes and diagnostic tests 1 2 3
	2	Ability to critically analyse and solve pathophysiological problems. 4
	3	Use of correct pathophysiology terminology 1 2 3 4

All - Assessment Task 2: Mid-semester Exam

GOAL:	This examination is a check-point where you can demonstrate the theoretical and practical applications of pathophysiology you have mastered to date.	
PRODUCT:	Activity Participation	
FORMAT:	A 60-minute multiple choice examination. The examination is open book.	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstration of knowledge and understanding of pathophysiological processes and diagnostic tests 1 2 3
	2	Ability to utilise information from lectures, workshops and practicals to critically analyse and solve pathophysiological problems 4
	3	Use of correct terminology 1 2 3

All - Assessment Task 3: End-of-Semester Exam

GOAL:	This examination is an end-of-semester exam, where you can demonstrate the theoretical and practical applications of pathophysiology you have mastered to date.	
PRODUCT:	Examination - Centrally Scheduled	
FORMAT:	A comprehensive, two-hour final examination, consisting of multiple choice and short answer style questions.	
CRITERIA:	No.	Learning Outcome assessed
	1	Demonstration of knowledge and understanding of pathophysiological processes and diagnostic tests 1 2 3
	2	Application of knowledge from lectures, workshops and laboratory classes to pathophysiological problems 4
	3	Clear communication of pathophysiological knowledge and correct use of terminology 1 2 3 4

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Week 1: Introduction to pathophysiology and cellular adaptation	eModule, Lectorial, Workshop
Week 2: Cellular injury and Neoplasia	eModule, Lectorial, Practical
Week 3: Endocrine disorders	eModule, Lectorial, Workshop
Week 4: Renal and electrolyte disorders	eModule, Lectorial, Practical
Week 5: Inflammation and immunological disorders	eModule, Lectorial, Workshop
Week 6: Haematological disorders	eModule, Lectorial, Practical
Week 7: Disorders of the special senses and reproductive disorders	eModule, Lectorial, Workshop
Week 8: Digestive and hepatic disorders	eModule, Lectorial, Practical
Week 9: Vascular disease and hypertension	eModule, Lectorial, Workshop
Week 10: Cardiac disease	eModule, Lectorial, Practical
Week 11: Pain and neurological disorders	eModule, Lectorial, Workshop
Week 12: Respiratory disorders	eModule, Lectorial, Practical
Week 13: Shock and Course Review	eModule, Lectorial, Workshop

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

Please note that you need to have regular access to the resource(s) listed below. Resources may be required or recommended.

REQUIRED?	AUTHOR	YEAR	TITLE	PUBLISHER
Required	Craft, J. and Gordon, C.	2019	Understanding Pathophysiology	Elsevier, Australia
Required	HLT221 Teaching Staff	2020	Human Pathophysiology (HLT221): Workshop and Laboratory Manual	University of the Sunshine Coast Publication, Sippy Downs

8.2. Specific requirements

To complete this course, students will need personal protective equipment (PPE) to be used within laboratory classes. This includes: a clean laboratory coat, fully-enclosed footwear and safety glasses. Students must present with this PPE to gain entry to laboratory classes and assessments. Students are required to complete the online Laboratory Induction prior to gaining entry to the laboratory

9. How are risks managed in this course?

Risk assessments have been performed for all laboratory classes and a moderate level of health and safety risk exists. Moderate risks are those associated with laboratory work such as working with chemicals and hazardous substances. You will be required to undertake laboratory induction training and it is also your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- a. The final mark is in the percentage range 47% to 49.4%
- b. The course is graded using the Standard Grading scale
- c. You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate:

- 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task.
- 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.5. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.6. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.7. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: <http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.8. General Enquiries

In person:

- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au