



## COURSE OUTLINE

# LFS112 Human Physiology

**Course Coordinator:** Mia Schaumberg (mschaum1@usc.edu.au) **School:** School of Health and Behavioural Sciences

2021 | Semester 2

USC Sunshine Coast  
USC Moreton Bay

**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

Human Physiology covers the normal physiology of the human body. It includes topics on metabolism, digestion, osmoregulation, excretion, respiration, circulation, muscles, neurophysiology, sense organs, immunology, endocrinology and reproduction. Emphasis in the course will be on normal structure and function of the human body and the approach will be to develop an understanding of the integrative nature of physiological systems.

### 1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
<b>ON CAMPUS</b>			
<b>Tutorial/Workshop 1</b> – Workshop	2hrs	Week 1	13 times
<b>Online</b> – Self-directed eModule completion	2hrs	Week 1	12 times
<b>Lecture</b> – eLectorial	2hrs	Week 1	13 times

### 1.3. Course Topics

- Thermoregulation and the Integumentary system
- Neurophysiology
- Muscle physiology
- Endocrine system
- Cellular Metabolism
- Blood physiology and the Immune System
- Digestive physiology
- Cardiac and Vascular physiology
- Renal physiology
- Respiratory physiology
- Reproductive physiology
- Sensory physiology

## 2. What level is this course?

100 Level (Introductory)

Engaging with discipline knowledge and skills at foundational level, broad application of knowledge and skills in familiar contexts and with support. Limited or no prerequisites. Normally, associated with the first full-time study year of an undergraduate program.

## 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 and apply theory to explain the physiology of individual systems and/or an integrated system response.	Knowledgeable Creative and critical thinker
2 Demonstrate knowledge of practical procedures in physiology, including presentation and interpretation of data.	Knowledgeable Empowered
3 Apply human physiology theory, knowledge and applications.	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

Not applicable

### 5.2. Co-requisites

Not applicable

### 5.3. Anti-requisites

LFS201 or LFS202 or LFS203

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

An understanding of: cell biology including structure and function of cell membranes and cellular transport; basic anatomy of human tissues, organs and systems; basic chemistry of molecules important in biological systems. Understanding of principles of data presentation and interpretation. Therefore, it is recommended that you successfully complete courses in cell biology or introduction to bioscience. At USC these courses are LFS100 and LFS103.

## 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

Formative feedback will be provided throughout the course. This involves provision of:

Model answers provided for workshop questions.

Analysis and discussion of data with tutors in the e-workshops.

Multiple attempts for online quizzes.

Revision questions that students can discuss with academic staff.

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	1a	Portfolio	Individual	10%	approximately 1 - 2 hours weekly	Week 12	Online Publisher Assessment
All	1b	Portfolio	Individual	30%	Approximately 30 min each	Refer to Format	Online Test (Quiz)
All	2	Examination	Individual	20%	60 min	Week 6	Online Test (Quiz)
All	3	Examination - Centrally Scheduled	Individual	40%	120 min	Exam Period	Exam Venue

All - Assessment Task 1a: Portfolio: Preparation and Participation

<b>GOAL:</b>	To provide ongoing opportunities to practice and apply the principles of the theoretical content covered in eModules and Lectorials which will facilitate and consolidate learning.																			
<b>PRODUCT:</b>	Portfolio																			
<b>FORMAT:</b>	<p>Weeks 3 - 12</p> <p>This task requires the completion of the eModules for each week and provides you with the opportunity to develop your understanding of the theoretical components of the course and receive timely feedback on your learning. You are able to attempt the eModule multiple times and are required to take a screenshot of your completion certificate. Further information is available on Blackboard. The questions and activities are associated with each theory topic and are completed weekly from Week 3-12 (1% per week = 10% of final grade) and are submitted at the end of Week 12. Weeks 1 and 2 do not contribute to your grade and are an opportunity to receive formative feedback.</p>																			
<b>CRITERIA:</b>	<table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Level of successful completion of e-workshop exercises</td> <td>1 3</td> </tr> <tr> <td>2</td> <td>Completion of pre- and/or post-class activities associated with eModules and e-workshops</td> <td>1 3</td> </tr> <tr> <td>3</td> <td>Active participation in workshops</td> <td>3</td> </tr> <tr> <td>4</td> <td>Correct responses to questions in the quizzes</td> <td>1 2 3</td> </tr> <tr> <td>5</td> <td>Accurate interpretation of physiological data</td> <td>2 3</td> </tr> </tbody> </table>	No.		Learning Outcome assessed	1	Level of successful completion of e-workshop exercises	1 3	2	Completion of pre- and/or post-class activities associated with eModules and e-workshops	1 3	3	Active participation in workshops	3	4	Correct responses to questions in the quizzes	1 2 3	5	Accurate interpretation of physiological data	2 3	
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All - Assessment Task 1b: Portfolio: Laboratory and Practical Skills Assessment

<b>GOAL:</b>	To provide ongoing opportunities to practice and apply the principles of the theoretical and practical content covered in lectures, laboratories and workshops which will facilitate and consolidate learning.	
<b>PRODUCT:</b>	Portfolio	
<b>FORMAT:</b>	<p>Submit: Weeks 3, 5, 9 &amp; 13</p> <p>The online quizzes will assist in consolidating skills related to creating and interpreting graphs, calculations, data interpretation, and the comprehension and application of physiology knowledge. Each quiz will cover topics covered in laboratories, workshops and lectorials and will require synthesis and application of knowledge. Sub-tasks will be scheduled in Weeks 3 (graphing eModule), 5, 9 and 13 and further information will be available on Blackboard. Quizzes will be open for 5 days (Monday 8am-Friday 5pm of the due week) and questions will be drawn from a large database of questions so that no two quizzes will be the same. NOTE: Following the closing of the quiz at the end of the due week, there will be NO OPPORTUNITY FOR LATE SUBMISSION. An extension will require an AAE and supporting documentation, and may take an alternative format.</p>	

CRITERIA:	No.	Learning Outcome assessed	
	1	Level of successful completion of e-workshop exercises	2
	2	Completion of pre- and/or post-class activities associated with eModules, laboratories and workshops	2 3
	3	Active participation in laboratories and workshops	1 2 3
	4	Correct responses to questions in the quizzes	2 3
	5	Accurate interpretation of physiological data	2 3
	6	Quality and clarity of written work	1

#### All - Assessment Task 2: Mid-semester examination

<b>GOAL:</b>	You will demonstrate your knowledge and understanding of the theoretical and practical components of the course.		
<b>PRODUCT:</b>	Examination		
<b>FORMAT:</b>	60 minute online examination consisting of multiple choice questions. This is an open-book knowledge-recall examination delivered via Blackboard. The exam will be open for 5 days (Monday 8am-Friday 5pm of Week 6), however, once you start the exam, you will have 60 minutes to complete it, and only have one attempt. Questions will be based on the content covered in Weeks 1-5 of Semester and may require you to recall information, perform calculations, interpret data, analyse and synthesise information.		
CRITERIA:	No.		Learning Outcome assessed
	1	Ability to demonstrate accurate discipline knowledge	1 2 3
	2	Ability to provide correct answers to multiple choice questions relating to the theoretical content sourced from the eModules, lectorials, practicals, workshops, readings and other prescribed activities	1 2 3
	3	ability to apply theoretical knowledge to physiology problems	3

#### All - Assessment Task 3: End of semester examination of theory

<b>GOAL:</b>	The goal of this task is to give you the opportunity to demonstrate your knowledge and understanding of the theory presented in the course. LFS112 is a foundation course for your degree and it is important to develop a sound understanding of the key physiological concepts and principles of different tissues and organ systems responsible for human life.		
<b>PRODUCT:</b>	Examination - Centrally Scheduled		
<b>FORMAT:</b>	Completion of the final comprehensive exam, two hours in length and consisting of multiple choice and short answer style questions. The final examination will be online, or centrally-invigilated, and closed book, depending on government guidelines and examination setting.		
CRITERIA:	No.		Learning Outcome assessed
	1	Ability to demonstrate accurate discipline knowledge	1 2 3
	2	Ability to provide correct answers to multiple choice questions relating to the theoretical content sourced from the eModules, lectorials, laboratories, workshops, readings and other prescribed activities	1 2 3
	3	Ability to apply knowledge to physiology problems	3

## 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.

## 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	Martini, FH, Nath JL & Bartholomew EF	2018	Fundamentals of Human Anatomy & Physiology **Mastering A&P available with purchase of the text; see link through Blackboard	Pearson

### 8.2. Specific requirements

To complete this course, students will require the LFS112 Human Physiology Course Manual and Lectorial Workbook (two separate resources). This is available for purchase from MaPS; with an electronic copy being available on Blackboard. It is strongly recommended to have a hard copy of these manuals, as they are an invaluable resources to successfully complete the course. Students will require personal protective equipment (PPE) for laboratory classes. This includes: a clean laboratory coat, fully-enclosed footwear and safety glasses. Students must present with this PPE in order to gain entry into the laboratory; no PPE is available for loan. Students are also required to complete the online Laboratory Induction on Blackboard prior to gaining entry into 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

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

The final mark is in the percentage range 47% to 49.4%

The course is graded using the Standard Grading scale

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](mailto: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](mailto: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](mailto: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](mailto:studentcentral@usc.edu.au)