



The University of Southern Queensland

## Course specification

This version produced 20 Dec 2007.

The current and official versions of the course specifications are available on the web at  
<<http://www.usq.edu.au/coursespecification/current>>.

Please consult the web for updates that may occur during the year.

### Description: Human Anatomy and Physiology

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
BIO	1203	67394	2, 2007	ONC	1.00	Fraser Coast

<b>Academic group:</b>	FOSCI
<b>Academic org:</b>	FOS002
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	010913

### STAFFING

Examiner: Helen Ison

Moderator: Michael Watson

### RATIONALE

This course provides an introduction to the structure and function of human cells, tissues and organs. An emphasis on human anatomy with an associated introduction to physiology provides the foundation knowledge for subsequent studies in physiology and other health related courses.

### SYNOPSIS

An organ systems approach is used in this course to study the anatomy and physiology of healthy people. Body systems covered in this course include cardiovascular system, blood, lymphatic and immune systems, respiratory system, digestive system, urinary system, integumentary system, musculoskeletal system, and an introduction to the nervous and endocrine systems. The residential school is a component of the external offering of this course.

### OBJECTIVES

On completion of this course students will be able to:

1. describe the structure and function of body cells, tissues and organs (Mid-semester Test; Exam);
2. describe the gross anatomy of major organ systems (Mid-semester Test; Exam);
3. demonstrate knowledge and an understanding of the basic physiology of major organ systems (Mid-semester Test; Exam);
4. demonstrate a basic understanding of the integration of organ systems to maintain homeostasis (Mid-semester Test; Exam);
5. demonstrate skills and knowledge required to perform laboratory experiments safely with appropriate equipment, including computer software and hardware for data acquisition and analysis (Mid-semester Test; Laboratory Activities).

## TOPICS

	Description	Weighting (%)
1.	Cells, Tissues & Homeostasis: anatomy and function of cellular structure and tissues; importance of homeostatic control for life.	10.00
2.	Nomenclature: anatomical and biomedical terms.	5.00
3.	Integumentary System: the structure and function of skin.	5.00
4.	Skeletal System: the structure of bone and cartilage, the axial and appendicular skeleton, classification of joints.	15.00
5.	Muscular System: major muscle groups, muscle structure.	15.00
6.	Nervous System: the central and peripheral nervous systems; structure and function of the Autonomic Nervous System.	10.00
7.	Endocrine System: major endocrine glands.	10.00
8.	Blood and Immune System: major components of blood; functions and formation of blood, lymphatic system and immunity.	5.00
9.	Cardiovascular System: anatomy and physiology of the heart and blood vessels; maintenance of blood pressure.	5.00
10.	Respiratory System: anatomy and physiology of the respiratory system; internal and external respiration; control of breathing.	5.00
11.	Digestive System: anatomy of the digestive tract and associated organs; digestion and absorption of nutrients.	5.00
12.	Urinary System: anatomy of the urogenital system; processes of urine formation and excretion; control of body fluid and electrolyte balance.	5.00
13.	Reproduction: anatomy and physiology of the male and female reproductive systems; outline of embryonic and foetal anatomy and physiology.	5.00

## TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

*Instructional Guide for Human Anatomy and Physiology*, USQ, Toowoomba.

(ALL STUDENTS MUST PURCHASE THE INSTRUCTIONAL GUIDE)

Jenkins, G & Tortora, G 2006, *Anatomy and Physiology: From Science to Life*, 6th edn, John Wiley & Sons, New York (ISBN: 047081280X).

(Pack includes textbook, DVD & WileyPlus Access card for online access)

## REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Abrahams PH, Marks SC & Hutchings RT 2003, *McMinn's color atlas of human anatomy*, 5th edn, Mosby, Edinburgh.

Drake RL, Bogl W, Mitchell AWM 2005, *Gray's anatomy for students*, Elsevier, Philadelphia.

Frenay AC & Mahoney RM 2001, *Understanding Medical Terminology*, 10th edn, WCB McGraw Hill, Boston.

Hubbard J & Mechan D 1997, *The Physiology of Health & Illness with Related Anatomy*, Stanley Thornes, Cheltenham, England.

MacKenna BR & Callender R 1997, *Illustrated Physiology*, Churchill Livingstone, New York.

Marieb EN 2004, *Study Guide Human Anatomy & Physiology*, 6th edn, Benjamin/Cummings, Menlo Park, California.

Martini FH, Mark D & Helgeson J 2004, *Fundamentals of Anatomy and Physiology Interactive study guide*, 6th edn, Prentice Hall, New Jersey.

(Computer file includes 8 audi cassettes, video tutor and CD-ROM)

Sieger CM 1998, *Fundamentals of Anatomy and Physiology: Study Guide*, 4th edn, Prentice Hall, New Jersey.

Van De Graaff K & Fox S 1999, *Concepts of Human Anatomy and Physiology*, 5th edn, WCB McGraw Hill, Boston.

Vander A, Sherman J & Luciano D 2001, *Human Physiology: The Mechanisms of Body Function*, 8th edn, McGraw-Hill, New York.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Examinations	3.00
Laboratory or Practical Classes	18.00
Lectures	26.00
Private Study	118.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
PT A 1HR CLOSED CMA TEST M/C	30.00	20.00	23 Jul 2007 (see note 1)
PT B 1HR CLOSED S/A TEST	20.00	10.00	23 Jul 2007 (see note 2)
LABORATORY ACTIVITIES	1.00	10.00	23 Jul 2007 (see note 3)
PT A 2HR CLOSED CMA EXAM M/C	60.00	40.00	END S2 (see note 4)
PT B CLOSED EXAM S/A	40.00	20.00	END S2 (see note 5)

### NOTES

1. Examiner to advise date of the mid-semester test.
2. Examiner to advise date of the mid-semester test.
3. Students to satisfactorily complete laboratory activities.
4. Examination dates will be available during the Semester. Please refer to the examination timetable when published.
5. Examination dates will be available during the Semester. Please refer to the examination timetable when published.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 2 Requirements for students to complete each assessment item satisfactorily:  
To satisfactorily complete an assessment item a student must achieve at least 50% of the marks or a grade of at least C-. Students do not have to satisfactorily complete each assessment item to be awarded a passing grade in this course. Refer to Statement 4 below for the requirements to receive a passing grade in this course.
- 3 Penalties for late submission of required work:  
If students submit assignments after the due date without prior approval then a penalty of up to 10% of the total marks gained by the student for the assignment will apply for each working day late.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available for the course.
- 5 Method used to combine assessment results to attain final grade:  
The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.
- 6 Examination information:  
Candidates are allowed to bring only writing and drawing instruments into the Closed examination.

- 7 Examination period when Deferred/Supplementary examinations will be held:  
Any Deferred or Supplementary examinations for this course will be held during the next examination period.
- 8 University Regulations:  
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

### **ASSESSMENT NOTES**

- 9 Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded IDS (Incomplete - Deferred Examination; IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).
- 10 In order to attend laboratory classes, students must provide and wear appropriate personal protective equipment. This shall include a laboratory coat, closed in shoes, and safety glasses. Such equipment must be approved by supervising staff. Failure to provide and wear the appropriate safety equipment will result in students being excluded from classes.