



The University of Southern Queensland

## Course specification

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	91033	2, 2009	ONC	1.00	Fraser Coast

<b>Academic group:</b>	FOSCI
<b>Academic org:</b>	FOS002
<b>Student contribution band:</b>	6
<b>ASCED code:</b>	010913

### STAFFING

Examiner: Helen Ison

Moderator: Jianxiong Wang

### 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 (Quiz; Laboratories; Discussion; Exam);
2. describe the gross anatomy of major organ systems (Quiz; Laboratories; Discussion; Exam);
3. demonstrate knowledge and an understanding of the basic physiology of major organ systems (Quiz; Laboratories; Discussion; Exam);
4. demonstrate a basic understanding of the integration of organ systems to maintain homeostasis (Quiz; Laboratories; Discussion; 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 (Laboratories).

## TOPICS

	Description	Weighting (%)
1.	Cells, Tissues & Homeostasis: Anatomy and function of cellular structure and tissues, Importance of homeostatic control for life.	13.00
2.	Nomenclature: Anatomical and biomedical terms.	4.00
3.	Integumentary System: The structure and function of skin.	4.00
4.	Skeletal System: The structure of bone and cartilage, the axial and appendicular skeleton, classification of joints.	11.00
5.	Muscular System: Major muscle groups, muscle structure.	11.00
6.	Nervous System: The central and peripheral nervous systems. Structure and function of the Autonomic Nervous System.	11.00
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.	6.00
9.	Cardiovascular System: Anatomy and physiology of the heart and blood vessels, Maintenance of blood pressure.	6.00
10.	Respiratory System: Anatomy and physiology of the respiratory system, Internal and external respiration, Control of breathing.	6.00
11.	Digestive System: Anatomy of the digestive tract and associated organs, Digestion and absorption of nutrients.	6.00
12.	Urinary System: Anatomy of the urogenital system, Processes of urine formation and excretion, Control of body fluid and electrolyte balance.	6.00
13.	Reproduction: Anatomy and physiology of the male and female reproductive systems. Outline of embryonic and foetal anatomy and physiology.	6.00

## 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.

(This will be available on-line and all students must access this via StudyDesk)

Jenkins GW, Kemnitz CP & Tortora GJ 2007, *Anatomy and physiology: from science to life*, 1st edn, John Wiley & Sons, New York.

(ISBN: 0470051809 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.

Levy, MN 2006, *Principles of physiology*, 4th edn, Elsevier Mosby, St Louis.

Marieb, EN & Hoehn, K 2007, *Human anatomy and physiology*, 7th edn, Pearson Benjamin Cummings, San Francisco.

Martini, FH 2005, *Fundamentals of anatomy and physiology*, 6th edn, Prentice Hall, New Jersey. (Computer file includes 8 audi cassettes, video tutor and CD-ROM)

Prezbindowski, KS 2008, *Learning guide: principles of anatomy and physiology*, 12th edn, Wiley, Hoboken, NJ.

(Gerald G Tortora, Bryan H Derrickson/Kathleen Schmidt Prezbindowski)

Rohen, JW 2006, *Colour atlas of anatomy: a photographic study of the human body*, 6th edn, Lippincott Williams & Wilkins, Philadelphia.

Thibedou, G 2007, *Anatomy and physiology*, 6th edn, Mosby, St Louis.

Tortora, GJ 2008, *Principles of anatomy and physiology*, 12th edn, John Wiley and Sons, Hoboken, NJ.

Tortora, GJ 2005, *Principles of anatomy and physiology: illustrated notebook*, 11th edn, Wiley, New York.

Tortora, GJ 2004, *A photographic atlas of the human body: with selected cat, sheep and cow dissections*, 2nd edn, Wiley, New York.

Waugh, A 2001, *Ross and Wilson anatomy and physiology in health and illness*, 9th edn, Churchill Livingstone, Edinburgh.

## STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Examinations	2.00
Laboratory or Practical Classes	18.00
Lectures	26.00
On-line Participation	3.00
Private Study	110.00
Quiz Questions	6.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
ON-LINE QUIZZES	120.00	30.00	20 Jul 2009 (see note 1)
ON-LINE PARTICIPATION	5.00	5.00	20 Jul 2009 (see note 2)
LABORATORY ACTIVITIES	6.00	5.00	20 Jul 2009 (see note 3)
PT A 2HR RESTRICT CMA EXAM M/C	60.00	40.00	END S2 (see note 4)
PT B 2HR RESTRICTED EXAM S/A	40.00	20.00	END S2

### NOTES

1. Examiner to advise due dates of the on-line quizzes.
2. Students to satisfactorily participate in the on-line discussion groups.
3. Students to satisfactorily complete laboratory activities.
4. 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 of the examiner then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded. No assignments will be accepted after model answers have been posted.
- 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 access only to specific materials during a Restricted Examination. The only materials that candidates may use in the restricted examination for this course are: writing materials and translation dictionary. Students whose first language is not

- English, may, take an appropriate unmarked non-electronic translation dictionary (but not technical dictionary) into the examination. Dictionaries with any handwritten notes will not be permitted. Translation dictionaries will be subject to perusal and may be removed from the candidate's possession until appropriate disciplinary action is completed if found to contain material that could give the candidate an unfair advantage.
- 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.