



The University of Southern Queensland

Course specification

Description: Anatomy and Physiology						
Subject	Cat-nbr	Class	Term	Mode	Units	Campus
NSC	1931	54355	2, 2006	EXT	1.00	Toowoomba

Academic group:	FOSCI
Academic org:	FOS002
Student contribution band:	2
ASCED code:	010913

STAFFING

Examiner: Kerry Withers

Moderator: Guang Liu

REQUISITES

Pre-requisite: Students must be enrolled in one of the following Programs: BNUR or BNPO

OTHER-REQUISITES

Recommended Co-requisite: NSC1951

RATIONALE

A basic knowledge and understanding of the structure and functioning of the cells, tissues and organs of healthy people is essential for subsequent studies in pharmacology and pathophysiology. This course provides the foundation knowledge required to integrate and apply clinical nursing practices.

SYNOPSIS

A body systems approach is used in this course to study the essential 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.

OBJECTIVES

On successful completion of this course students will be able to:

1. explain the relevance of the concept of homeostasis to the human body;
2. describe the structure and function of body cells, tissues and organs;
3. demonstrate knowledge and an understanding of the structure and function of many of the body systems in healthy people;

4. demonstrate a basic understanding of the integration of body functions to maintain the constancy of the internal environment.
5. demonstrate skills and knowledge required to perform laboratory experiments safely with appropriate equipment.

TOPICS

	Description	Weighting (%)
1.	CELLS, TISSUES & HOMEOSTASIS: Anatomy and function of cellular structure and tissues, Importance of homeostatic control for life.	9.00
2.	NOMENCLATURE: Anatomical and biomedical terms.	3.00
3.	INTRODUCTION TO THE NERVOUS AND ENDOCRINE SYSTEM: Overview of the central and peripheral nervous systems, Hypothalamic and Pituitary Control of Hormone function.	9.00
4.	THE CARDIOVASCULAR SYSTEM: Anatomy and physiology of the heart and blood vessels, Maintenance of blood pressure.	13.00
5.	BLOOD AND THE IMMUNE SYSTEM: Major components of blood, functions and formation of blood, Introduction to the lymphatic system and immune processes.	13.00
6.	RESPIRATORY SYSTEM: Anatomy and physiology of the respiratory system, Internal and external respiration, Control of breathing.	9.00
7.	MUSCOLOSKELETAL SYSTEM: Anatomy and physiology of the voluntary muscles, bones and joints.	10.00
8.	INTEGUMENTARY SYSTEM: Anatomy and physiology of skin.	3.00
9.	DIGESTIVE SYSTEM: Anatomy of the digestive tract and associated organs, Digestion and absorption of nutrients.	9.00
10.	URINARY SYSTEM: Anatomy of the urogenital system, Processes of urine formation and excretion, Control of body fluid and electrolyte balance.	13.00
11.	REPRODUCTION: Anatomy and physiology of the male and female reproductive systems. Outline of embryonic and foetal anatomy and physiology.	9.00

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).

Interactive Physiology CD-ROMs.

Marieb, EN 2007, *Human anatomy and physiology*, 7th edn, Benjamin/Cummings, Menlo Park, CA.

Marieb, EN 2007, *Study guide*, 7th edn, Benjamin/Cummings, Menlo Park, CA.

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.

Burdess, N 1997, *The handbook of student skills*, 2nd edn, Prentice Hall, Sydney.

Frenay, AC & Mahoney, RM 2001, *Understanding medical terminology*, 10th edn, Wm C Brown Publishers, Dubuque, IA.

MacKenna, BR & Callender, R 1997, *Illustrated physiology*, 6th edn, Churchill Livingstone, New York.

Martini, FH 2004, *Fundamentals of anatomy and physiology*, 6th edn, Benjamin Cummings, San Francisco.

Rutishauser, S 1994, *Physiology and anatomy: A basis for nursing and health care*, Churchill Livingstone, New York.

Seiger, CM 2004, *Study guide: fundamentals of anatomy and physiology*, 6th edn, Benjamin Cummings, San Francisco.

Tortora, GJ & Derrickson, B 2006, *Principles of Anatomy & Physiology*, 10th edn, John Wiley & Sons, New York.

Van De Graaff, K & Fox, S 1999, *Concepts of human anatomy and physiology*, 5th edn, W C Brown, Dubuque, IA.

Vander, A, Sherman, J and Luciano, D 2001, *Human physiology: the mechanisms of body functions*, 8th edn, McGraw-Hill, Sydney.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Assessment	30.00
Directed Study	84.00
Examinations	3.00
Private Study	56.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
WRITTEN ASSIGNMENT 1	100.00	10.00	21 Aug 2006
WRITTEN ASSIGNMENT 2	100.00	20.00	03 Oct 2006
PTA 2.5 HR CLOSED CMA EXAM M/C	60.00	30.00	END S2 (see note 1)
PTB 2.5 HR CLOSED EXAM S/A	80.00	40.00	END S2

NOTES

1. Examination dates will be available during the Semester. Please refer to the examination timetable when published.

IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:
There are no attendance requirements for this course. However, it is the students' responsibility 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.
- 3 Penalties for late submission of required work:
If students submit assignments after the due date without prior approval then a penalty of 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 examination period at the end of the semester 3 of the current academic year.
- 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 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 10 In accordance with University Policy, the Examiner may grant an extension of the due date of an assignment in extenuating circumstances.
- 11 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 12 The Faculty will NOT accept submission of assignments by facsimile.
- 13 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 14 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.
- 15 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).
- 16 Students may be required to provide a copy of assignments submitted for assessment purposes. Such copies should be dispatched to the USQ within 24 hours of receipt of a request to do so.