



# Course Outline (Higher Education)

<b>School:</b>	School of Science, Psychology and Sport
<b>Course Title:</b>	PATHOPHYSIOLOGY 1
<b>Course ID:</b>	SCMED2010
<b>Credit Points:</b>	15.00
<b>Prerequisite(s):</b>	(BIOGC1711 or SCBIO1020 or SCMED1014)
<b>Co-requisite(s):</b>	Nil
<b>Exclusion(s):</b>	(BIOGC2731 and SB541)
<b>ASCED:</b>	010913

## Description of the Course :

This course consolidates on basic anatomy and physiology from first year biology courses and explores these in more detail with an emphasis on disease processes and disease states in each system. How and why normal structure and function are disrupted is examined in detail with particular focus on common diseases. Abnormal anatomy and physiology are explored from histological levels through to gross levels, exploring disease processes that lead to how and why any given set of symptoms for a particular disease occur. This course focuses on an introduction to disease processes, cancer biology, reproductive systems, nervous system, musculoskeletal system and haematological system.

**Grade Scheme:** Graded (HD, D, C, etc.)

## Work Experience:

No work experience: Student is not undertaking work experience in industry.

**Placement Component:** No

**Supplementary Assessment:** Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

## Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory						

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Intermediate	■	■	✓	■	■	■
Advanced	■	■	■	■	■	■

### Learning Outcomes:

#### Knowledge:

- K1.** Identify and explain the basic disease processes in human systems.
- K2.** Describe the anatomy of each system in the human body and discuss its physiological role.
- K3.** Describe the anatomy and physiology of various pathological states.
- K4.** Compare and contrast normal function with pathological (dys) function.

#### Skills:

- S1.** Adapt anatomy theory to the examination and dissection of vertebrate tissues.
- S2.** Investigate and measure anatomical and physiological variables.
- S3.** Investigate problems in pathophysiology and research solutions.
- S4.** Examine and dissect the relationships between disease states and symptoms.
- S5.** Make inferences and conclusions on laboratory observations and report on these.
- S6.** Recognise the benefits and disadvantages of working in teams versus individually.

#### Application of knowledge and skills:

- A1.** Synthesise knowledge of anatomy and physiology with research findings of pathological states.
- A2.** Apply anatomy and physiology knowledge to the evaluation and comparison of vertebrate specimens in normal and pathological states.
- A3.** Measure physiological variables and interpret their meaning.
- A4.** Convert the theoretical aspects of anatomy/physiology and pathophysiology to the practical aspects.

#### Course Content:

This course uses a systems approach to provide advanced learning in anatomy and physiology to build on basic knowledge obtained in first year. Understanding of the normal structure and function of the human body are consolidated and then extended to include examples of disease pathology affecting the major organ systems.

Topics may include:

- Disease Processes
- Biology of Cancer
- Reproductive systems
- Nervous system
- Musculoskeletal system
- Haematologic system

#### Values:

- V1.** Appreciate the levels of complexity and integration within biological systems.
- V2.** Appreciate the incidences of chronic diseases, the impact on the population at various levels and why it is important to reduce the health care burden.

- V3.** Appreciate the need for continued research into common pathologies such as cancer to reduce their incidence.
- V4.** Continuous learning and self-reliance through combining scientific knowledge and critical thinking to associate form with function in the human body.
- V5.** Engaged citizenship through the application of critical thinking and problem solving skills in the linking of disease states with changes in form and function.

### Graduate Attributes

The Federation University FedUni graduate attributes (GA) are entrenched in the Higher Education Graduate Attributes Policy (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course			
		Learning Outcomes (KSA)	Code A. Direct B. Indirect N/A Not addressed	Assessment task (AT#)	Code A. Certain B. Likely C. Possible N/A Not likely
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1-4, S1-5, A1-4	A,A,A,A,A,A,A,A,A,A,A,A	1, 3, 4	A,A,B
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	S5, A3	A,A	1	B
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K4	A	1, 3, 4	A,A,B
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	S2, S3, S5, S6, A1-4	B,B,B,A,A,A,A	1, 3, 4	A,A,B
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K2, 3, S1, 4, 5, 6, A1, 2, 3, 4	B,A,A,A,A,B,A,A,A,A	1, 3	B,B

**Learning Task and Assessment:**

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2, K3, K4, S1, S2, S5, S6, A2, A3, A4	Students will complete worksheets during practical activities addressing their competency and comprehension of the work being undertaken.	Practical activities	10-30%
K1, K2, K3, K4, S4, A1	Students will complete regular quizzes throughout semester testing their knowledge of the course content at the end of each content section.	Quizzes	5-10%
K1, K3, S3, S4, A1	Students will complete assignments requiring them to identify and outline the pathways leading from development of particular human disease to various symptoms.	Assignment	10-30%
K1, K2, K3, K4	Students will be tested on their knowledge of the course material.	End of Semester tests	40-60%

**Adopted Reference Style:**

Australian Harvard