



## Unit Outline (Higher Education)

**Institute / School:** Institute of Innovation, Science & Sustainability

Unit Title: PATHOPHYSIOLOGY 1

Unit ID: SCMED2010

Credit Points: 15.00

**Prerequisite(s):** (SCBIO1020) OR (HEALT1121 and HEALT1122)

Co-requisite(s): Nil

Exclusion(s): Nil

**ASCED:** 019901

## **Description of the Unit:**

This unit consolidates on basic anatomy and physiology studies undertaken in first year units 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 explain how and why any given set of symptoms for a particular disease occur. This unit focuses on an introduction to disease processes, immune system and disease, cancer biology, reproductive systems, nervous system, musculoskeletal system and haematological system.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**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 Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment

#### **Course Level:**

| Level of Unit in Course   | AQF Level of Course |   |          |   |   |    |
|---------------------------|---------------------|---|----------|---|---|----|
| Level of office in course | 5                   | 6 | 7        | 8 | 9 | 10 |
| Introductory              |                     |   |          |   |   |    |
| Intermediate              |                     |   | <b>V</b> |   |   |    |
| Advanced                  |                     |   |          |   |   |    |

#### **Learning Outcomes:**

## **Knowledge:**

- **K1.** Identify and explain the immune system and basic disease processes in mammalian systems.
- **K2.** Articulate the changes in the anatomy and physiology of various pathophysiological conditions.
- **K3.** Compare and contrast normal bodily function with pathological dysfunction.

#### Skills:

- **S1.** Apply anatomical knowledge to the examination of mammalian tissues.
- **S2.** Apply the concepts and theories of physiology to understand the normal role of mammalian structures and their associated disease processes
- **S3.** Relate disease states to their associated symptoms by providing physiological links.
- **S4.** Make inferences and conclusions on case study measurements, observations and report on these.

### Application of knowledge and skills:

- **A1.** Apply anatomy and physiology knowledge to the evaluation and comparison of mammalian specimens in normal and pathological states.
- **A2.** Critically analyse case study information to make inferences and conclusions about disease states and symptoms

#### **Unit Content:**

This unit 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
- Immune system and inflammation
- Biology of Cancer
- Reproductive systems
- Nervous system
- Musculoskeletal system
- Haematologic system

#### **FEDTASKS**

Federation University Federation recognises that students require key transferable employability skills to prepare them for their future workplace and society. FEDTASKS (**T**ransferable **A**ttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are be embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Cooperative Learning opportunities. *One or more FEDTASK, transferable Attributes, Skills or Knowledge must be evident in the specified learning outcomes and assessment for each FedUni Unit, and all must be directly* 



assessed in each Course.

| FEDTASK attribute and descriptor                 |  | Development and acquisition of FEDTASKS in the Unit |                          |  |
|--|--|---|--------------------------|--|
|  |  | Learning<br>Outcomes<br>(KSA)                       | Assessment task<br>(AT#) |  |
| FEDTASK 1<br>Interpersonal                       | Students will demonstrate the ability to effectively communicate, inter-act and work with others both individually and in groups. Students will be required to display skills inperson and/or online in: | Not applicable                                      | Not applicable           |  |
|  | Using effective verbal and non-verbal communication  |   |                          |  |
|  | Listening for meaning and influencing via active listening   |   |                          |  |
|  | Showing empathy for others   |   |                          |  |
|  | Negotiating and demonstrating conflict resolution skills   |   |                          |  |
|  | Working respectfully in cross-cultural and diverse teams.  |   |                          |  |
| FEDTASK 2<br>Leadership                          | Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in:   | Not applicable                                      | Not applicable           |  |
|  | Creating a collegial environment   |   |                          |  |
|  | Showing self -awareness and the ability to self-reflect  |   |                          |  |
|  | Inspiring and convincing others  |   |                          |  |
|  | Making informed decisions  |   |                          |  |
|  | Displaying initiative  |   |                          |  |
| FEDTASK 3<br>Critical Thinking<br>and Creativity | Students will demonstrate an ability to work in complexity and ambiguity using the imagination to create new ideas. Students will be required to display skills in:                                      | K2, K3, S1, S2, S3,<br>S4, A1, A2                   | 1, 2, 3                  |  |
|  | Reflecting critically  |   |                          |  |
|  | Evaluating ideas, concepts and information   |   |                          |  |
|  | Considering alternative perspectives to refine ideas   |   |                          |  |
|  | Challenging conventional thinking to clarify concepts  |   |                          |  |
|  | Forming creative solutions in problem solving.   |   |                          |  |



| FEDTASK attribute and descriptor                |  | Development and acquisition of FEDTASKS in the Unit |                          |  |
|---|--|---|--------------------------|--|
|   |  | Learning<br>Outcomes<br>(KSA)                       | Assessment task<br>(AT#) |  |
| FEDTASK 4<br>Digital Literacy                   | Students will demonstrate the ability to work fluently across a range of tools, platforms and applications to achieve a range of tasks. Students will be required to display skills in:                      | Not applicable                                      | Not applicable           |  |
|   | Finding, evaluating, managing, curating, organising and sharing digital information  |   |                          |  |
|   | Collating, managing, accessing and using digital data securely   |   |                          |  |
|   | Receiving and responding to messages in a range of digital media   |   |                          |  |
|   | Contributing actively to digital teams and working groups  |   |                          |  |
|   | Participating in and benefiting from digital learning opportunities.   |   |                          |  |
| FEDTASK 5<br>Sustainable and<br>Ethical Mindset | Students will demonstrate the ability to consider and assess the consequences and impact of ideas and actions in enacting ethical and sustainable decisions. Students will be required to display skills in: | Not applicable                                      | Not applicable           |  |
|   | Making informed judgments that consider the impact of<br>devising solutions in global economic environmental and<br>societal contexts  |   |                          |  |
|   | Committing to social responsibility as a professional and a citizen  |   |                          |  |
|   | Evaluating ethical, socially responsible and/or sustainable challenges and generating and articulating responses   |   |                          |  |
|   | Embracing lifelong, life-wide and life-deep learning to be open to diverse others  |   |                          |  |
|   | <ul> <li>Implementing required actions to foster sustainability in<br/>their professional and personal life.</li> </ul>  |   |                          |  |

## **Learning Task and Assessment:**

| Learning Outcomes<br>Assessed | Assessment Tasks  | Assessment Type                                      | Weighting |
|-------------------------------|---|--|-----------|
| K1-3, S1-4, A1-2              | Students will complete oral and/or written assessment during case study activities addressing their competency and comprehension of the content being explored. | Case study activities with oral and/or written tasks | 50-60%    |
| K1-3, S2-3, A1                | Students will be quizzed on their knowledge and comprehension of the unit content.  | Quiz   | 5-10%     |
| K1-3, S3, S4, A1-2            | Students will be tested on their knowledge of the unit material at the end of semester.   | End of semester test                                 | 30-40%    |

## **Adopted Reference Style:**

APA



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Refer to the <u>library website</u> for more information

Fed Cite - referencing tool