

# Unit Outline (Higher Education)

|                            |   |
|----------------------------|---|
| <b>Institute / School:</b> | Institute of Health and Wellbeing                 |
| <b>Unit Title:</b>         | Anatomy and Physiology for Health Professionals 2 |
| <b>Unit ID:</b>            | HEALT1112   |
| <b>Credit Points:</b>      | 15.00   |
| <b>Prerequisite(s):</b>    | Nil   |
| <b>Co-requisite(s):</b>    | Nil   |
| <b>Exclusion(s):</b>       | Nil   |
| <b>ASCED:</b>              | 010913  |

## Description of the Unit:

This unit is one of two units that provide foundational knowledge of human anatomy and physiology relevant to the health professions. In this unit the biological basis of human health and the working of the human body will be explored.

The major themes of study relate to body defences, integration and control through hormonal process and maintenance and development of normal body function through nutrition and fluid balance. An integrated approach using case scenarios provides inter-professional learning opportunities and allows scrutiny of structural and physiological changes across the lifespan.

Topics include: the structure and function of the integumentary and lymphatic systems with emphasis on their roles in immunity; the structure and function of the endocrine, digestive and urinary systems; metabolism; the special senses; growth and development; and the choice of 2 elective streams designed to meet student discipline requirements in the areas of health science or nursing.

**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 |   |   |   |   |    |
|-------------------------|---------------------|---|---|---|---|----|
|                         | 5                   | 6 | 7 | 8 | 9 | 10 |
| Introductory            | ■                   | ■ | ✓ | ■ | ■ | ■  |
| Intermediate            | ■                   | ■ | ■ | ■ | ■ | ■  |
| Advanced                | ■                   | ■ | ■ | ■ | ■ | ■  |

### Learning Outcomes:

On successful completion of this unit the students are expected to be able to:

#### Knowledge:

- K1.** Describe the relationships between the structure of the integumentary, lymphatic, endocrine, urinary and digestive systems and their roles in bodily functions including the maintenance of homeostasis;
- K2.** Describe the major changes during growth and development across the lifespan and how they relate to health;
- K3.** Describe the neuromuscular responses to exercise and the anatomical and functional relationships between nutrition, metabolism, protein synthesis and temperature regulation;
- K4.** Explain the role of the main neurotransmitters, their receptors and the functions they mediate.

#### Skills:

- S1.** Relate the concept of homeostasis to physiological processes;
- S2.** Link underlying physiological principles to the care of a client in a practical scenario; and
- S3.** Locate components of the body systems using a variety of resources together with its relevance to practice within health disciplines.

#### Application of knowledge and skills:

- A1.** Demonstrate accurate use of health terminology related to human anatomy and physiology for communication in a health or therapeutic environment;
- A2.** Make accurate observations of anatomical and physiological structures or events in normal functioning conditions; and
- A3.** Demonstrate and apply theoretical concepts to simulated scenarios to develop a framework for critical understanding of human anatomy and physiology within practical settings.

#### Unit Content:

*Exercise Science Accreditation Standards (ESSA); the NMBA Registered Nurse Standards for Practice (2016); the NMBA Standards for Practice for Enrolled Nurse (2016); NMBA Code of Professional Conduct for Nurses and Code of Ethics for Nurses and ANMAC Accreditation Standards have substantially informed the syllabus/content of this unit.*

Topics may include:

- Integumentary System and Nonspecific Defences

- Lymphatic System and Immunology
- Endocrine System and Hormones
- Digestive system: Structural Aspects, Nutrition, Digestive and Metabolic Processes
- Urinary System: Structural Aspects and Functional Processes
- Fluids and Electrolyte Balance
- Special Senses: Reception, Hearing, Balance and Vision
- Health Science Stream: Neuromuscular Physiology, Protein Synthesis and Thermoregulation OR
- Nursing Stream: Neural Transmission with Clinical Application
- Growth and Development

### Learning Task and Assessment:

#### Planned Student Learning Experience

A 15 credit point unit will involve a minimum of 150 hours of learning. For every one hour of teacher directed learning there will be a minimum of two hours of student/learner directed learning. The *Teacher-directed* hours of student learning in this unit will be experienced primarily through teaching innovations like interactive technology enhanced lectures, class discussions, audio-visual presentations, flexible blended and on-line learning, low and high fidelity simulations, exploration of case studies and inquiry-based learning. Attendance and active participation is encouraged and expected during class sessions.

*Learner-directed* hours will include focused self-directed learning activities, simulated laboratory learning, practice and reflection on practice, and role modelling. Students are expected to access electronic research databases and use computers to facilitate learning.

| Learning Outcomes Assessed             | Assessment Tasks  | Assessment Type                             | Weighting  |
|--|---|---|------------|
| K1, K2, K3, K4, S1, S2, S3, A1, A2, A3 | Laboratory Session Attendance and Participation: Students attend and participate in 90% of scheduled laboratory classes. Participation can involve undertaking practical activities, analysing scenarios, engaging in class discussion, generating and collating data and completing worksheets to address their competency and comprehension of the work being undertaken. | 90% Laboratory Attendance and Participation | S/U Hurdle |
| K1, K2, K3, K4, S1, S2, S3, A1, A2, A3 | Apply and extend anatomical and physiological knowledge using a case study scenario and write a report describing normal human body function, while investigating pathologies that disrupt homeostasis.   | Case Study Report                           | 20-30%     |

| Learning Outcomes Assessed             | Assessment Tasks  | Assessment Type         | Weighting |
|--|---|-------------------------|-----------|
| K1, K2, K3, K4, S1, S2, S3, A1, A2, A3 | Laboratory and associated online content - Test completed mid-semester by students in a face-to-face, lab-based assessment.                         | Practical Test          | 30-40%    |
| K1, K2, K3, K4, S1, S2, S3, A1, A2, A3 | Laboratory and associated online content - Theoretical based exam covering all learning outcomes, completed during the end of semester exam period. | Invigilated Theory Exam | 30-50%    |

**Adopted Reference Style:**

APA

Refer to the [library website](#) for more informationFed Cite - [referencing tool](#)