

Unit Outline (Higher Education)

Institute / School:	Institute of Health and Wellbeing
Unit Title:	Anatomy & Physiology for Health Professionals 2
Unit ID:	HEALT1112
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	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 and human movement professions. In this unit the biological basis of human movement and the working of the human body will be explored. The major themes of study focus on the interrelationships between structure and function of body systems including body defences, integration and control through hormonal process and maintenance, cardiovascular, respiratory and musculoskeletal function during movement and development of normal body function through thermoregulation and fluid balance. An integrated approach using human movement scenarios provides practical 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 neuromusculoskeletal, cardiovascular, respiratory, and renal systems with applications to movement settings and homeostasis; and the structure of the endocrine, special senses, and reproductive systems and the integrative physiological function.

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

Work Experience:

No work experience

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:

Knowledge:

- K1.** Describe the interrelationships between the structure and function of the cardiovascular, respiratory, integumentary, lymphatic, immune, endocrine, renal and reproductive systems and their roles in the maintenance of homeostasis and how they respond to human movement;
- K2.** Describe the major anatomical changes during growth and development across the lifespan and how they relate to health and human movement;
- K3.** Identify and describe the micro and macro-level anatomical structures and physiological processes of specific body systems including the cardiovascular, respiratory, integumentary, lymphatic, immune, endocrine, renal, and reproductive systems of the human body;
- K4.** Identify and describe the gross anatomy and surface musculoskeletal structures, including joint complexes, of the human body and their role in human movement; and
- K5.** Explain the physiological role of a variety of human cells in regulation, transmission and homeostasis.

Skills:

- S1.** Relate the concept of homeostasis to physiological processes and integration of systems to human movement contexts;
- S2.** Adopt and develop proficiency in learning and studying strategies that promote knowledge acquisition and retention; and
- S3.** Locate components of the body systems using a variety of resources together with their relevance to practice within exercise and sport science disciplines.

Application of knowledge and skills:

- A1.** Demonstrate accurate use of health terminology related to human anatomy and physiology for communication and testing in an exercise and sport science environment;
- A2.** Make accurate observations of anatomical and physiological structures or events in normal functioning conditions and during human movement; and
- A3.** Demonstrate and apply relevant anatomical or lay terms when communicating with health or exercise professionals or clients.

Unit Content:

Topics may include:

- Biochemistry - cell function, integration and genetics
- Heart: Structure & function, cardiac cycle & electrical activity
- The Circulatory System - Blood, blood vessels and blood pressure regulation

- The Respiratory System: Structure & function, pulmonary ventilation & gas exchange
- Integumentary System and Thermoregulation
- Lymphatic System, non-specific defences and immunology
- Endocrine System and Hormones
- Urinary System: Structural aspects and functional processes
- Fluids and Electrolyte Balance
- Special Senses: Reception, hearing, balance/proprioception and vision
- The Reproductive Systems: Male, female & pregnancy, and growth and development

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**tttributes **S**kills and **K**nowledge) provide a targeted focus on five key transferable Attributes, Skills, and Knowledge that are embedded within curriculum, developed gradually towards successful measures and interlinked with cross-discipline and Co-operative 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 Outcomes (KSA)	Assessment task (AT#)
FEDTASK 1 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 in-person and/or online in: <ul style="list-style-type: none"> • 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. 	Not applicable	Not applicable
FEDTASK 2 Leadership	Students will demonstrate the ability to apply professional skills and behaviours in leading others. Students will be required to display skills in: <ul style="list-style-type: none"> • Creating a collegial environment • Showing self-awareness and the ability to self-reflect • Inspiring and convincing others • Making informed decisions • Displaying initiative 	Not applicable	Not applicable
FEDTASK 3 Critical Thinking 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: <ul style="list-style-type: none"> • 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. 	Not applicable	Not applicable

FEDTASK attribute and descriptor		Development and acquisition of FEDTASKS in the Unit	
		Learning Outcomes (KSA)	Assessment task (AT#)
FEDTASK 4 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: <ul style="list-style-type: none"> 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. 	Not applicable	Not applicable
FEDTASK 5 Sustainable and 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: <ul style="list-style-type: none"> Making informed judgments that consider the impact of devising solutions in global economic environmental and 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 Implementing required actions to foster sustainability in their professional and personal life. 	Not applicable	Not applicable

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, K4, K5, S1, S2, S3, A1, A2, A3	Laboratory Session Attendance and Participation: Students attend and actively participate in 90% of scheduled laboratory classes. Active 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, K5	Lab Manual Completion: In accordance with active participation in lab classes, students are to complete a Lab Manual to display and develop proficiency in study strategies that promote knowledge acquisition and retention. For Flexible Mode Students, this will also involve satisfactory preparation for fortnightly tutorials/workshops.	90% completion of workbook to a satisfactory standard.	S/U Hurdle
K1, K2, K3, K4, K5, S1, S2, S3, A1, A2, A3	Demonstrate skill and competency while undertaking commonly used and recognised assessments of human physiological function (e.g. spirometry, ECG, blood pressure) to collect data. Display an application of knowledge to present and discuss collected data in a written lab report.	Practical Skills Assessment and Lab Report	20-30%

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, K4, K5, S1, S2, S3, A1, A2, A3	Laboratory and associated online content - Exam completed by students in a face-to-face, lab-based assessment.	Practical-based Exam	30-40%
K1, K2, K3, K4, K5, 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.	Theory Exam	30-50%

Adopted Reference Style:

APA ()

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)