

Unit Outline (Higher Education)

Institute / School: Institute of Health and Wellbeing

Unit Title: ANATOMY AND PHYSIOLOGY FOR REHABILITATION SCIENCE 1

Unit ID: NHPBM1031

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): Nil

ASCED: 061703

Description of the Unit:

This unit will introduce the principles of human body structure and function as relevant for students of Occupational Therapy. This includes an introduction to cells and tissues, the musculoskeletal system and the nervous system. This will include a detailed study of the gross anatomical structure and functional anatomy of the skull, vertebral column and the lower limb including the hip, thigh, knee, leg, ankle and foot. An integrated understanding of the human body will be achieved through online learning as well as practical sessions, including the interactive study of digital human cadaveric models and clinical case-studies. This blended approach to learning will facilitate the integration of learning material with contemporary clinical practice, through the correlation of anatomical structure to physiological function.

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

Work Experience:

Not wholly work experience: Student is not undertaking work experience in industry or student is undertaking work experience in industry where learning and performance is directed by the provider.

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 the unit the students are expected to be able to:

Knowledge:

- **K1.** Identify and describe the structure (Anatomy) and function (physiology) of the musculo-skeletal and nervous systems
- **K2.** Identify and describe the gross anatomy of the skull, vertebral column and the lower limb, including the hip, thigh, knee, leg, ankle and foot
- **K3.** Discuss the relationship between the organisational levels of the human body from the cellular to the organ level
- **K4.** Explain the fundamental science of selected imaging techniques
- **K5.** Explain the basic kinesiology of the joints of the vertebral column and lower limb

Skills:

- **S1.** Relate the concept of homeostasis to physiological processes;
- **S2.** Demonstrate an understanding of imaging principles to the interpretation of ultrasound, radiographic and MRI images
- **S3.** Apply underlying physiological principles to the care of a client in a practical scenario
- **S4.** Collate and evaluate clinical data relevant to the functioning of various body systems.

Application of knowledge and skills:

- **A1.** Critically apply anatomical and physiological knowledge to a human bioscience discipline.
- **A2.** Assess and interpret selected imaging techniques with an applied understanding of the underpinning science

Unit Content:

The Occupational Therapy Board of Australia, OTBA Code of Conduct (2014) Australian Occupational Therapy Competency Standards (2018) and National Safety and Quality Health Service (NSQHS) Standards (2017) have substantially informed the syllabus/content of this unit.

- Musculoskeletal anatomy and physiology of muscles, bones, joints and ligaments
- Anatomy, kinesiology and physiology of the hip, thigh, knee, leg, ankle, foot and vertebral column
- Introduction to clinical imaging
- Cells, tissues, nerves and skin
- Anatomy and physiology of the nervous system

Learning Task and Assessment:



Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1, K2, K3, K4, S1, S2, S3, S4	Online quiz based on lesson content delivered with a focus on anatomy and physiology (Early Intervention Task)	Online quiz	5-15%
K1, K2, K3, K4, S1, S2, S3, S4	Online quiz based on lesson content delivered with a focus on anatomy and physiology (Mid Semester)	Online quiz	5-15%
K1, K2, K3, K4, S1, S2, S3, S4	Online quiz based on lesson content delivered with a focus on anatomy and physiology (End of Semester)	Online quiz	5-15%
K1, K2, K3, S2, S3, A2	Flag race styled assessment based on lesson content delivered with a focus on laboratory tasks and fundamental knowledge	Practical Examination	20-40%
K1, K2, K3, K4, K5, S1, S2, S3, S4, A1, A2	Written examination covering all learning outcomes	End of Semester Examination	30-50%

Adopted Reference Style:

APA

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

Fed Cite - referencing tool