



Course Outline (Higher Education)

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|-------------------------|-------------------------------|
| School: | School of Health |
| Course Title: | NEUROSCIENCE IN PHYSIOTHERAPY |
| Course ID: | NHPPS2004 |
| Credit Points: | 15.00 |
| Prerequisite(s): | (NHPBM1032 and NHPPS1002) |
| Co-requisite(s): | (NHPPS3003) |
| Exclusion(s): | Nil |
| ASCED: | 061701 |

Description of the Course :

Students will continue expanding knowledge of anatomy, with a focus on the neurological system. This includes a detailed study of gross anatomical structure and functional anatomy of the spinal cord, neck and cranial regions and viscera. Physiological processes around special senses. Pain science is combined with human biology. The emphasis will be on gaining an integrated understanding of the human body through practical sessions including digital human cadaveric material and functional and clinical case-studies to facilitate the integration of material and correlation.

This course contains 4 hours fieldwork

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

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 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Intermediate | <input type="checkbox"/> | <input type="checkbox"/> | ✓ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Advanced | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Learning Outcomes:**Knowledge:**

- K1.** Identify and describe the structure (anatomy) and function (physiology) of the neurological and visceral systems
- K2.** Identify and describe the structure of the spinal cord, internal and external brain, neck and face
- K3.** Discuss the function of the special senses
- K4.** Understand basics of pain science

Skills:

- S1.** Relate the concept of neurological function to physiological processes of various body systems
- S2.** Collate and evaluate clinical data relevant to the functioning of various body systems
- S3.** Apply an understanding of sympathetic and parasympathetic pathways to human function
- S4.** Apply underlying physiological principles to the care of a client in a practical scenario

Application of knowledge and skills:

- A1.** Critically apply anatomical and physiological knowledge to a human bioscience discipline

Course Content:

- Anatomy and physiology of the spinal cord, neck and cranial regions and viscera
- Basic pain science
- Examination of the special senses

Values:

- V1.** Appreciate best practice in physiotherapy is based on contemporary peer-reviewed evidence for acute care/cardiorespiratory physiotherapy
- V2.** Appreciate professionalism and professional judgement in physiotherapy practice

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**

The program develops and assesses Federation University Graduate Attributes together with Physiotherapy Board of Australia and Physiotherapy Board of New Zealand, Physiotherapy practice thresholds in Australia and Aotearoa New Zealand (2015). Federation University aims to have graduates with knowledge, skills and competence that enable them to stand out as Thinkers, Innovators, Citizens, Communicators and Leaders. Each course in the program identifies the focus and development of the graduate attribute and this course focuses on the graduate attributes listed below.

| Graduate attribute and descriptor | | Development and acquisition of GAs in the course | | | |
|-----------------------------------|--|--|---|-----------------------|---|
| | | Learning outcomes (KSA) | Code A: Direct B: Indirect N/A: Not Assessed | Assessment task (AT#) | Code: A: Certain B: Likely C: Possible N/A: Not |
| 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,K2,K3, K4, S1, S2, S3, S4, A1 | A | AT1, AT2, AT3, AT4 | A |
| 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. | K1, S3, A1 | B | AT2, AT3 | 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. | K1, K4, S1, S2, S3, A1 | B | AT1, AT2, AT3 | 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. | K2, K4, S1, S2, S3, S4, A1 | A | AT1, AT2, AT3, AT4 | A |
| 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. | K1, K2, K4, S1, S2, S3, A1 | A | AT1, AT2, AT3, AT4 | A |

Learning Task and Assessment:

| Learning Outcomes Assessed | Learning Tasks | Assessment Type | Weighting |
|--------------------------------|---|-------------------------|-----------|
| K1, K2, K3, S1, S2, S3, S4, A1 | Lesson content delivered with a focus on physiology and student-directed learning tasks using multimedia approaches | Online quizzes | 5-15% |
| K1, K2, K3, S1, S2, S3, S4, A1 | Lesson content delivered with a focus on anatomy and student-directed learning tasks using multimedia approaches | Online quizzes | 10-30% |
| K1, K2, K3, S1, S2, S3, S4, A1 | Lesson content delivered with a focus on laboratory tasks and student-directed learning tasks using multimedia | Practical Examination | 20-40% |
| K1, K2, K3, S1, S2, S3, S4, A1 | Lesson content delivered - Blended learning covering all learning outcomes. | Theoretical examination | 30-50% |

Adopted Reference Style:

APA