Faculty of Health Sciences

Master of Exercise Physiology - 2016
Master of Exercise Physiology (Graduate Entry)

Applicants for the Master of Exercise Physiology course must have extensive pre-existing knowledge in the following 5 essential areas:

- Human Anatomy
- Human or Exercise Physiology
- Biomechanics/Physics
- Psychology/Behavioral Science
- Research Design and Statistics

As an applicant, you have to prove that you have studied the above mentioned topic areas. This has to be studied at the tertiary level as stand-alone units or as a combination of different units that meets the requirements as described in the next section.

All the units mentioned below can be studied as non-award units through the Faculty of Health Sciences. Successful completion of such study will meet the assumed knowledge requirement in the stated area(s). Please note that if you choose to undertake such non-award study, it will have to be completed (or be on track to complete) before commencement of the main Master’s program.

Depending on availability and scheduling, non-award studies can be done at the Faculty of Health Sciences or through Summer School. Please be aware that regardless of what method you choose in order to meet the assumed knowledge criteria, you have to complete this before commencement of the main program. Also to be noted is that if you do the units as a non-award student, you will have to pay upfront and will not be eligible for HECS-Help.

If you are currently studying at another faculty or university, depending on your course framework and if permitted by your home institution/faculty, you could also do the units mentioned in this document as cross-institutional units. By studying these units as a cross-institutional student, you will not have to pay for the unit(s) upfront as they will be considered as part of your current award course. Fees for any units done as cross-institutional can be absorbed into your current HECS debt (or as per your current payment method).
Definitions of assumed knowledge areas

**Human anatomy**

- Study of human anatomy, particularly of the cardiopulmonary, nervous and musculoskeletal systems
- It is essential that the following areas of the human body have been studied - bones, joints, ligaments, muscles, blood vessels and nerves of the upper limb, lower limb, vertebral column, thorax and pelvis, as well as the anatomy of the cardiovascular and respiratory system, brain and spinal cord and the somatosensory nervous system.
- It is desirable that applicants have also studied histological features of tissues of the cardiopulmonary, nervous and musculoskeletal systems, to have used a regional approach to their study (i.e. studied the complete anatomy of the shoulder or hip or ankle and foot at one time before moving onto another body region) and to have attended laboratory classes in which human cadavers are studied.
- For an example of a pair of subjects that cover the necessary assumed knowledge, refer to the Unit of Study description of BIOS1168 Functional Musculoskeletal Anatomy A and BIOS1169 Functional Musculoskeletal Anatomy B in the Faculty of Health Sciences Handbook. BIOS1168 & BIOS1169 are both available as undergraduate non-award study units. Please refer to [http://sydney.edu.au/courses/health-sciences-undergraduate-non-award](http://sydney.edu.au/courses/health-sciences-undergraduate-non-award) for further information.

**Human or Exercise Physiology**

- Study of the anatomy, histology, and physiology of the main systems of the human body
- It is essential that that the following systems of the human body have been studied - cardiovascular, respiratory, muscular and nervous. It is desirable that applicants have also studied pathophysiology of the systems described above
- It is desirable that the following systems of the human body have been studied – renal, digestive, reproductive and endocrine.
- It is essential that the applicants have also studied the impact of acute exercise on system function and adaptations to the systems of the body during exercise.
Biomechanics/Physics

- Study of the application of mechanical principles to human movement and everyday human activities.

- For an example of a subject that covers the necessary assumed knowledge, refer to the Unit of Study description of EXSS1018 Biomechanics of Human Movement in the Faculty of Health Sciences Handbook. EXSS1018 is available as undergraduate non-award study unit. Please refer to http://sydney.edu.au/courses/health-sciences-undergraduate-non-award for further information.

Psychology/Behavioural Science

- Study, at an introductory level, of the major paradigms and methodological approaches of contemporary psychology as well as the origins and nature of modern societies (i.e. sociology).

- It is desirable to study these in relation to health and wellbeing.

- For an example of a subject that covers the necessary assumed knowledge, refer to the Unit of Study description of BACH1161 Introductory Behavioural Health Sciences in the Faculty of Health Sciences Handbook. BACH1161 is available as an undergraduate non-award study unit. Please refer to http://sydney.edu.au/courses/health-sciences-undergraduate-non-award for further information.

Research Design and Statistics

- Study of experimental research design and methods of data analysis and interpretation.

- It is essential that the applicants have studied research design and hypothesis testing.

- It is essential that applicants have studied quantitative methods of data analysis and be familiar with some common data analysis tools.

- For an example of a subject that covers the necessary assumed knowledge, refer to the Unit of Study description of HSBH1007 Health Sciences and Research in the Faculty of Health Sciences Handbook. HSBH1007 is available as undergraduate non-award study unit. Please refer to http://sydney.edu.au/courses/health-sciences-undergraduate-non-award for further information.