

## 536-206 Physiology (Optometry)

<b>Credit Points:</b>	12.50
<b>Level:</b>	2 (Undergraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 36 lectures, 15 hours practical work, 12 hours computer-aided learning Total Time Commitment: 120 hours
<b>Prerequisites:</b>	Enrolment into the second year of the Bachelor of Optometry course.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.
<b>Coordinator:</b>	Prof David Alan Williams
<b>Subject Overview:</b>	Physiology is an integrative study of the control of normal body function. Following completion of this subject students should be able to comprehend how the body systems act and interact to maintain a constant internal environment (homeostasis). Students should also be able to describe and understand the function of cellular, subcellular and membrane structures and their importance in fluid distribution, functions of excitable cells (nerve and muscle), information transfer (electrical and hormonal) and metabolism. Students should also develop an understanding of basic cellular physiology as it pertains to all cell types as well as the properties and characteristics of specialised cells such as neurones and muscle cells. Students should also be able to comprehend how such cellular specialisation results in hormonal, neural and organ systems subserving specialised body functions. The specialised organ systems to be studied include the cardiovascular, respiratory, gastrointestinal and kidney systems. During this course students should also learn that physiology is an experimental science with many key concepts arising from the qualitative and quantitative observation and analysis of living organisms. The lectures will incorporate active interaction between students and lecturers using personal response system (PRS) clickers to answer questions during lectures. In the computer-aided learning sessions associated with this subject, students will work in groups on a variety of tasks which should help develop and enhance skills related to team work, analytical reading and the ability to communicate information both concisely and unambiguously (written and verbal).
<b>Assessment:</b>	Tasks related to computer-aided learning activities during the semester (5%); two 45-minute written examinations held mid-semester (each 15%); ongoing assessment of practical work during the semester (10%); effective PRS participation and contributions (5%); a 2-hour written examination in the examination period (50%).
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Notes:</b>	This subject is only available to students enrolled in the Bachelor of Optometry course. Experiments involving the use of animals are essential to this subject; exemption is not possible.
<b>Related Course(s):</b>	Bachelor of Optometry