EXERSCI 101
Foundations of Exercise and Sport Sciences
(15 points)
(Semester 1, City Campus)

Who should take this course?
If you are thinking of majoring in Exercise Sciences, then it is mandatory that you enroll in this introductory course as it provides a holistic view of this discipline as well as fundamental knowledge of its four sub-disciplines. Lectures and tutorials will be primarily based on human physiology, neuroscience, biomechanics and sport and exercise psychology. If you are enrolled in a science (or any other major) and interested in the scientific basis of physical activity, exercise and sport, then you’d find this course very interesting.

The course involves introductory-level physics, basic mathematical calculations along with human biology/physiology. If you have never done any science courses in high-school you’d have a bit of catching up to do. Extra help is certainly available if your math/physics skills are a bit rusty though.

Learning Outcomes
1. Explain and apply basic mathematical and physics principles to effectively engage in computational problem-solving, at an introductory level, in a biomechanical context.
2. Evaluate the concept of homeostasis as it relates to maintenance of core body temperature and blood glucose concentration; and apply the concept to other biological systems in a sport and exercise context.
3. Explain the fundamental molecular and cellular biological processes.
4. Explain and apply the introductory physiology and exercise physiology of the cardiovascular, respiratory and nervous systems.
5. Explain the introductory concepts of exercise and sport psychology.
6. Develop and demonstrate academic literacy skills and communicate effectively using appropriate biological and physiological terminology.
7. Identify the scope of, and career pathways in, each of the four sub-disciplines of exercise sciences: exercise physiology, biomechanics, movement neuroscience and sport and exercise psychology.

Learning and Teaching
Students are expected to attend 2 lectures per week and 1 tutorial every fortnight, held in the City Campus. Tutorials are focused on consolidating what you learnt in lectures as well as learning new academic numeracy and literacy skills. There are also optional ‘Drop In’ sessions organised each week in the City where you could simply walk in and have a chat with the lecturer to discuss things you don’t understand. At the end of each fortnight, there will be a small assignment which assesses your learning.
Teaching Staff

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Assessment*

Mid-term Test (50 min.)
20% (SAQs)

4 Written Assignments (7.5% ea.) 30%

Final Exam (2 hours)
50% (SAQs and mini-essays)
*Weightings subject to change

Prescribed Textbook


Student Feedback

“The structure of the course and the way it was presented was exceptional!”

“Really well structured course. Assessments supported learning for the test and exam.”

“Waruna was a clear speaker, used really good analogies and explained things in a really easy to understand terms. And his slides were excellent”.

“Waruna’s witty comments were very engaging!”

“The doodles ("live" drawing on the document projector) really helped because they helped me understand concepts in a visual way”.

“I changed my major after doing this course and now going to continue in "Exercise Sciences".

Note: This course is NOT a General Education course. If you would like to take EXERSCI 101 in place of a General Education course, then you need to consult your own Faculty/Department and get approval.

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