

SPORT AND EXERCISE PHYSIOLOGY, 15 CREDITS

General Course information

This course is offered as an independent course.

Subject: Sport Science

Scope: 15 credits

Level: Advanced

Processed by the Department of Sport and Health Sciences 2008-02-11.

This course profile was approved by the Board of the Faculty for Undergraduate Education 2008-03-12 and later revised 2012-02-06 and 2014-11-12.

This course profile is valid from the Spring study period of 2015.

Admission requirements and selection

General pre-requisites

General eligibility for undergraduate study.

Specific pre-requisites

The applicant must have a university education equivalent to 90 credits in sport science (or equivalent), including minimum 20 credits in human biology.

Selection

In the case of receiving more applicants than the number of places available, 50% of the cohort will be accepted based on their academic credits and 50% by a lottery system after submitting a personal written justification as to why you want to join the course. Students studying within GIH's Master's or doctoral program have priority to the course.

Learning objectives

The student should be able to:

- Have a thorough knowledge of the methodology used, and be able to evaluate the advantages and disadvantages of various methods of testing
- Be able to integrate and use knowledge to handle complex problems
- Discuss different theories within a certain set of problems
- Independently or in a pair write a literature review

Content and structure

The course includes studies in the following areas:

- Metabolism

- Circulation and respiration: oxygen transport / utilisation
- Fatigue, performance and training
- Environmental physiology, nutrition, supplements and oxidative stress
- Physical activity and health
- Physiological and biochemical test methodology

The focus of the course relates to using different testing methods, learning about different research modes and theoretical approaches, as well as the link between theory and sport in practice.

Students will be required to complete a literature review within a chosen area (comprising approximately 5 credits).

Teaching and learning activities

The course included six joint teacher-training educational sessions concentrated over two days per theme. Instruction consists of lectures, seminars, laboratory sessions and demonstrations. The students shall individually or in pairs write an essay specialising in a chosen course area. The essay shall also be presented orally and discussed within the group.

Progression

The course includes studies at an advanced level, which means a deepening of knowledge relative to basic level education within the framework of a Bachelor, Master or Master's degree in Sport or equivalent. This course requires an increased level of understanding of the theory, higher demands on communication skills, deeper level of discussion of problems, integration of knowledge and increased ability to work independently.

Assessment

Requirements

Attendance is required at a minimum two thirds of the course's lectures and that all assessment items are passed. To obtain a Pass with distinction as a final grade, the student is required to receive a Pass with distinction in both the literature review writing assessment and the final written exam.

Modes of assessment

- Final home-written examination
- Written examinations of short-answer questions
- Written and oral presentation of the literature review

Timing of examinations and re-examinations

The examinations are held during the course as detailed in the course outline, which students should expect to receive at the beginning of the course. Re-examinations will be offered no sooner than three weeks after the student has received results of the original examination. Re-examinations are held at the earliest three weeks after the completion of the relevant part of the course, before the start of the fall term and / or when the course is next offered.

Grading

Possible grades include: Pass with Distinction, Pass or Fail. Students should expect to receive defined criteria at the commencement of the course. Grades will be reported to the study administrator no later than three weeks after the completion of the course.

Other

Language of instruction

Instruction may be given in English.

Course evaluation

After completion of the course each student will have the opportunity to evaluate the course and the lecturer will complete a self-evaluation. These evaluations will be returned to the student group and the examiner within 3 weeks.

Student Influence

Student participation takes place by way of student representation on the Undergraduate Education committee.

Literature and other teaching aids

Required:

- Kenney, W. L., Wilmore, J. H. & Costill, D.L. (2012). Physiology of sport and exercise. Champaign: Human Kinetics, 5th edition, 621 pages.
- Review articles (approximately three to five per theme).
- The students' literature reviews

Optional:

- Additional original articles in their respective thematic areas in consultation with the course lecturer (~100-150 pages).