

Course Syllabus SCPS362 Exercise Physiology

Credit: 2(1-2-3) Academic Year 2021

Course Coordinator: Dr Ioannis Papadimitriou

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Course schedule: From Jan 2022 – March 2022, From 13:00 p.m. - 17:00 p.m.

Curriculum: Bachelor of Science, Biomedical Program

Semester offering: Second semester

Prerequisite: None

Course Description:

This course will focus on trends in applied exercise physiology, body composition assessment, career development as well as laboratory evaluation of different physiological system responses to exercise training. The students in this course will combine what they have learned so far in physiology with the new knowledge, through experiential learning activities.

Assessment Criteria

Formative evaluation

- Feedback on participation in the laboratory
- Feedback on writing assignment

Summative evaluation

- Participation in laboratory activities 50%
- Assignment 50%

Student achievement will be graded according to the faculty and university standard using the symbols: A, B⁺, B, C⁺, C, D⁺, D, and F.

References:

Yan X.a · Papadimitriou I.a · Lidor R.b , Genetics and Sports, Editor(s): Posthumus, M. & Collins, (Cape Town)

Appeal Procedure: Students can appeal about the assessment, grade or any issues to the course coordinator by direct contact, email or telephone.

Course schedule

Date	Time	Topics	h	Instructor
04 Jan 2022	13:00-13:30	Course orientation	0.5	IP
	13:30-15:30	Introduction and applications of Exercise Physiology: Career development and trends in exercise	2	IP
11 Jan 2022	13:00-15:00	Skeletal muscle diversity and fuel sources during physical activity	2	IP
	15:00-17:00	Speed and power training	2	IP
18 Jan 2022	13:00-15:00	Laboratory: Body composition	2	IP
	15:00-17:00	Group Discussion: Body composition and weight control	2	IP
25 Jan 2022	13:00-15:00	Laboratory: Speed Testing	2	WS
	15:00-17:00	Laboratory: Power Testing	2	IP
01 Feb 2022	13:00-15:00	Resistance and endurance training	2	RS
	15:00-17:00	Group Discussion: Speed & Power Testing	2	IP
08 Feb 2022	13:00-15:00	Genetics and athletic performance I	2	IP
	15:00-17:00	Laboratory: Exercise genomics	2	IP
15 Feb 2022	13:00-15:00	Genetics and athletic performance II	2	IP
	15:00-17:00	Group Discussion: Exercise genomics	2	IP
22 Feb 2022	13:30-15:30	Heart and lung function during exercise	2	TB
	15:30-17:30	Laboratory: Blood pressure measurement	2	TB
01 Mar 2022	MID-TERM EXAMINATION WEEK			
08 Mar 2022	13:00-15:00	Exercise in altered environments	2	TB
	15:00-17:00	Laboratory: Measurement of oxygen consumption	2	TB
15 Mar 2022	13:00-15:00	Laboratory: Exercise stress test	2	TB
	15:00-17:00	Laboratory: Evaluation of aerobic capacity	2	TB
22 Mar 2022	8:00-17:00	Field trip: Laboratory in Exercise and Sport Sciences (Sport Authority of Thailand or Sport Science, Chulalongkorn U.)	8	TB/IP
Total hours			46	

Updated: 15 December 2021