COURSE OUTLINE SPORTS PHYSIOLOGY

1. GENERAL

SCHOOL	PHYSICAL EDUCATION, SPORT SCIENCE AND OCCUPATIONAL THERAPY		
DEPARTMENT	PHYSICAL EDUCATION AND SPORT SCIENCE		
LEVEL OF STUDIES	ISCED level 6 – Bachelor's or equivalent level		
COURSE CODE	C063	**SEMESTER**	7th & 8th
COURSE TITLE	SPORTS PHYSIOLOGY		

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	2	3
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	Scientific area
PREREQUISITES:	None
TEACHING & EXAMINATION LANGUAGE:	Greek
COURSE OFFERED TO ERASMUS STUDENTS:	Yes
COURSE URL:	https://eclass.duth.gr/courses/KOM02160/

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course the student will:

- *know the physiological factors that determine human performance,*
- *know the physiological bases of physical conditioning training (aerobic endurance, anaerobic capacity, strength, speed, flexibility),*
- *use physiological parameters to design exercise programs,*
- *know how factors such as diet, exogenous administration of substances, body composition and environment affect human performance.*

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,
ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Working in an international environment *Working in an interdisciplinary environment* *Production of new research ideas*	*Critical thinking* *Promoting free, creative and inductive reasoning*

- *Search, analysis and synthesis of data and information, ICT use*
- *Decision making*
- *Autonomous work*
- *Production of new research ideas*
- *Equity and inclusion*
- *Critical thinking*
- *Promoting free, creative and inductive thinking*

3. COURSE CONTENT

1. *Basic elements and concepts for designing a training program*
2. *Physiological factors determining aerobic performance I*
3. *Physiological factors determining aerobic performance II*
4. *Physiological principles of aerobic training I*
5. *Physiological principles of aerobic training II*
6. *Anaerobic capacity: Physiological bases*
7. *Anaerobic training and biological adaptations*
8. *Physiology of strength and speed training I*
9. *Physiology of strength and speed training II*
10. *Flexibility training*
11. *Balance training*
12. *Exercise at altitude and in hypobaric conditions*
13. *Nutrition - Ergogenic aids and athletic performance*

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	Face to face
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory Education, in Communication with students*	Use of ICT in teaching and communication with students • digital slides • videos • e-class, webmail
TEACHING ORGANIZATION *The ways and methods of teaching are described in detail.* *Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.* *The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.*	

Activity	***Workload/semester***
Lectures	26
Laboratory exercise	13
Bibliographic study & analysis	30
Exams	6
Total	**75**

STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report,Clinical examination of a patient,Artistic interpretation, Other/Others* *Please indicate all relevant information about the course assessment and how students are informed*	• Online mid-term exams (multiple choice and correct - error questions) 20% • Written final exams (short answer questions, essay development questions, problem solving) 80% • The exams are conducted in the Greek language

5. SUGGESTED BIBLIOGRAPHY

1. *Smith DL, Plowman SA, & Ormsbee MJ. (2024). Exercise Physiology fro Health, Fitness and Performance. Konstantaras Publihing, Athens.*
2. *Raven PB, Wasserman DH, Squires WG, & Murray TD (2016). Exercise Physiology: An integrated approach. Lagos medical Publishing, Athens.*
3. *Powers SK, & Howley ET. (2017). Exercise Physiology:Theories and Applications in health and performance. Broken Hill Publishers LTD., Athens.*
4. *Klissouras V. (2021). Ergophysiology. Pashalidis Publishers, Athens.*

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Ilias Smilios
Contact details:	ismilios@phyed.duth.gr
Supervisors:	No
Evaluation methods:	Written assignment (20%) Written online exam (80%)
Implementation Instructions:	Written assignment should be submitted via eclass on a specified date. The online exam will be conducted via eclass with simultaneous connection to Microsoft Teams for identity checking, at a specified date and time.