(1) GENERAL

SCHOOL	SCHOOL OF INFORMATION SCIENCES & TECHNOLOGY		
ACADEMIC UNIT	DEPARTMENT OF STATISTICS		
LEVEL OF STUDIES	POSTGRADUATE		
COURSE CODE		**TRIMESTER**	**3 OR 6**
COURSE TITLE	Integrated Exercise Physiology		

INDEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**CREDITS**
	1,5	2,5
	15	2,5

COURSE TYPE	Specialization Elective
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	ENGLISH
COURSE DELIVERY METHOD	Distance
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://cloud.aueb.gr/index.php/s/nFmXaKrAjMtFBkx

(2) LEARNING OUTCOMES

Learning outcomes
• Understanding the importance of biological and physiological data in monitoring athletic performance and athlete health. • Become familiar with physiological adaptations to exercise and training and their contribution to performance improvement. • Development of skills in assessing biological and physiological parameters using appropriate methods and tools. • Understanding the main types of biological data that can be included in an athlete's monitoring record for medical or performance purposes. • Ability to manage and interpret athlete monitoring data within the context of applied sport science. • Development of applied skills in analyzing athletic activity by utilizing scientific knowledge and evidence-based practices.
General Competences
• Ability to work in an interdisciplinary environment.

(3) SYLLABUS

The aim of this course is to enable students to understand, monitor, and analyze biological and physiological data that can be included in athlete monitoring for performance and/or health purposes. Upon completion of the course, students will be able to recognize physiological adaptations to exercise and training, manage methods and tools for assessing biological and physiological parameters, identify all relevant biological data that can be included in an athlete's monitoring record for medical or performance purposes, and analyze athletic activity by applying scientific knowledge.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Distance
METHOD AND FREQUENCY OF COMMUNICATING WITH THE STUDENTS	Remotely via email and through weekly office hours (and whenever necessary) via teleconferencing or in-person office visits.
ENSURING COMMUNICATION AMONG STUDENTS	Teleconference, Chat via eclass and/ or TEAMS, and QA sessions
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	MS Teams, e-class, MS Outlook, R, Python, WayGround or Kahoot educational games and quizzes
REQUIRED EQUIPMENT AND TECHNOLOGY KNOWLEDGE	Camera, mic, PC, MS Office, and TEAMS
COURSE POLICY ON PLAGIARISM AND PLAGIARISM DETECTION TOOLS	Turnitin
COURSE POLICY ON USE OF AI TOOLS	The use of Artificial Intelligence is permitted with explicit reference to the bibliography (2) for the verbal correction of assignments and as long as students have understood the basic principles and methods of the course.
TEACHING METHODS	
STUDENT PERFORMANCE EVALUATION .	Evaluation language is English. Evaluation methods include lab exercises, written assignments, and/or written examinations. Oral examinations of the assignments may be conducted if clarifications are needed or if there are suspicions of plagiarism or unauthorized use of Artificial Intelligence tools. Assessment criteria are provided on the course eClass platform and in the course materials.

Activity	***Semester workload***
Lectures	15
Assignment writing	20
Lab Exercise	10
Self-Study hours	20
Course total	***65***

(5) RECOMMENDED BIBLIOGRAPHY

- Kraemer, W. J., Fleck, S. J., & Deschenes, M. R. (2011). Exercise physiology: integrating theory and application. Lippincott Williams & Wilkins.