

A104, SPECIALIZED EXERCISE PROGRAMS

COURSE OUTLINE

RESPONSIBLE OF THE COURSE

1. GENERAL

SCHOOL	PHYSICAL EDUCATION & SPORT SCIENCES				
DEPARTMENT	PHYSICAL EDUCATION & SPORT SCIENCES				
LEVEL OF STUDIES	7				
COURSE CODE	A104	SEMESTER A SEMESTER			
COURSE TITLE	SPECIALIZED EXERCISE PROGRAMS				
TEACHING ACT If the ECTS Credits are distributed in di lectures, labs etc. If the ECTS Credits course, then please indicate the teach corresponding ECT	stinct parts of the are awarded to hing hours per w	the whole	TEACHING HOUI PER WEEK	ECTS CREDITS	
			3	7,5	
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 PREREQUISITES:	SCIENTIFIC A	REA			
TEACHING & EXAMINATION LANGUAGE:	GREEK				
COURSE OFFERED TO ERASMUS STUDENTS:					
COURSE URL:	https://eclass	s.duth.gr/cou	rses/PHYED8104/		

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course:

Knowledge, skills and abilities acquired after the success ful completion of the course.

The objective of the course is to acquire knowledge, skills and abilities related to the design, implementation and guidance of specialized individual and group exercise programs to improve fitness parameters and promote the health of the musculoskeletal system. Students will learn to design and implement programs with slings, indoor cycling and myofascial pressure with foam rollers.

The course aims at the theoretical and practical training of the students in these programs, in order to be able to apply them safely and effectively to athletes and trainees.

After successful completion of the course, the students:

They will have specific knowledge of functional anatomy and kinesiology related to the application of swing sling programs, . indoor cycling and myofascial strain.

They will have specific knowledge of functional anatomy and kinesiology related to the implementation of sling, indoor cycling and myofascial pressure programs.

• They will be able to design and implement safe and effective individual and group specialized programs, basing their choices on current research data.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, Project design and management

ICT Use Equity and Inclusion

Adaptation to new situations Respect for the natural environment

Decision making Sustainability

13/9/2024 Σελίδα 1 από 5



Autonomous work

Teamwork

Working in an international environment
Working in an interdisciplinary environment

sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning

Demonstration of social, professional and moral responsibility and

Production of new research ideas

- Search, analysis and synthesis of data and information, ICT Use
- Adaptation to new situations
- Decision making
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment
- Project design and management
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Critical thinking
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

The course contents include:

- 1. Special topics of functional anatomy and kinesiology related to the application of sling programs.
- 2. Special topics of functional anatomy and kinesiology related to the application of myofascial pressure programs.
- 3. Myoperitoneal continuations
- 4. Basic principles of using the slings: terminology, technique of basic positions and handles. Learning basic sling exercises-Safety rules-variations
- 5. Technical analysis of complex exercises at different levels, using the swing straps
- 6. Design a program with slings. Program structure (warm-up main part recovery).
- 7. Designing group swing programs using music. Teaching and coaching
- 8. Basic principles of indoor cycling (Indoor cycling). Basic positions handles bicycle settings safety rules.
- 9. Design an indoor cycling program with music. Program structure: warm-up-main part-recovery.
- 10. Designing an indoor cycling program with music (Part II). Teaching and guiding programs.
- 11. Introduction to myofascial training I: physiology and properties of muscle fascia
- 12. Introduction to myofascial training II: theory of myofascial continuums applications to types of exercise.
- 13. Self-applied myofascial release with Foam Rollers, Roller Massagers and balls

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	The educational process is carried out either with live			
Face to face, Distance learning, etc.	lectures by the teachers, or with face to face			
	(synchronous) lectures by the teachers, or with on			
	demand (asynchronous) lectures by the teachers, or with			
	laboratory courses, or with the preparation and			
	presentation of assignments by the students, or in any			
	other appropriate way that, in the judgment of the			
	professors, contributes to the best scientific approach to			
	the subject and training of the student.			
USE OF INFORMATION &	Utilization of new technologies in teaching, laboratory			
COMMUNICATIONS TECHNOLOGY	education and communication with students			
(ICT)				
Use of ICT in Teaching, in Laboratory				
Education, in Communication with students				
TEACHING ORGANIZATION The ways and methods of teaching are	Activity	Workload/semester		
described in detail.				
Lectures, Seminars, Laboratory Exercise, Field	Lectures	39		
Exercise, Bibliographicresearch& analysis,				
Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning,	Lab exercises	30		
Exercise, Art Workshop, Interactive learning,				

13/9/2024 Σελίδα 2 από 5



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.	Project Study of digital material Practical practice Total	45 50 24 188	
STUDENT EVALUATION	Courses are evaluated by written or oral examination,		

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 Courses are evaluated by written or oral examination, assignment, presentation, report (report) or a combination of the above. The exact format of the evaluation is determined by the teacher or teachers in relation to the nature of each course and is announced at the beginning of the semester.

5. SUGGESTED BIBLIOGRAPHY

- **6.** Barnes, J. F. (2008). Myofascial release: the missing link in traditional treatment. In: C. M. Davis, *Complementary Therapies in Rehabilitation: Evidence for Efficacy in Therapy, Prevention, and Wellness* (pp. 89–112). Thorofare, NJ: Slack Incorporated.
- **7.** Barnes, J. F. (1997). The basic science of myofascial release: morphologic change in connective tissue. *Journal of Bodywork and Movement Therapies*, 1(4), 231–238.
- **8.** Bradbury-Squires, D. J., Noftall, J. C., Sullivan, K. M., Behm, D. G., Power, K. E., & Button, D. C. (2015). Roller-massager application to the quadriceps and kneejoint range of motion and neuromuscular efficiency during a lunge. *Journal of Athletic Training*, 50(2), 133–140.
- **9.** Craig, A. D. (2003). Interoception: The sense of the physiological condition of the body. *Current Opinion in Neurobiology*, 13(4), 500–505.
- 10. Daskalaki, K., Pafis, G., Gioftsidou, A., Beneka, A., Bebetsos, E., & Malliou, P. (2020). Investigation of the Effects of Leg Dominance on Cross-Transfer of Flexibility after a Unilateral Treatment with Foam Roller a Pilot Study. International Journal of Human Movement and Sports Sciences, 8(3): 79-85.
- **11.** Myers, T. (2011). Fascial Fitness: Training in the Neuromyofascial Web. *IDEA Fitness Journal*, 8, 1–11.
- **12.** Myers, T. W. (2009). *Myofascial Meridians for Manual and Movement Therapists*. New York: Elsevier.

13/9/2024 Σελίδα 3 από 5



ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	Katerina Daskalaki, PhD-DUTH	
Contact details:	adaskal@phyed.duth.gr	
Supervisors: (1)	No	
Evaluation methods: (2)	Written or oral examination with distance learning methods, via eClass. Identification and monitoring of examinees through Microsoft Teams	
Implementation Instructions: (3)	The total examination duration of each group will be 90 minutes. In the first thirty minutes of the examination period, the examinees will be identified through the MS Teams app. For this purpose, there must be a camera, microphone and headphones connected to their terminal device (PC or smartphone). The relevant link will be sent via eClass, exclusively to the institutional accounts of those who have registered for the course and have accepted the terms of distance examination. For identification, students will display their student ID on camera when requested. The main examination will be carried out through the "Exercises" application of eClass. In particular, at the end of the identification process, an exercise entitled "Examination A104" will be activated in the eClass, which will include 40 questions. The time limit for answering the questions will be 60 minutes. During this period, all questions should be answered and finalized. Each of the questions will be graded with 0.25 points. Students should log in to the eClass platform through their institutional account. Also during the exam the camera and microphone of the examinees have to	
	be continuously activated and the MS Teams application should be open.	

⁽¹⁾ Please write YES or NO

⁽²⁾ Noted own the evaluation methods used by the teacher, e.g.

written assignmentor/andexercises

> written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are

⁽³⁾ In the Implementation Instructions section, the teacher notes down clear instructions to the students:

a) in case of written assignment and / or exercises: the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.

b) incaseoforal examination with distance learning methods: the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.

c) in case of written examination with distance learning methods: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be unattached list with the Student Registration Numbers only of students eligible to participate in the examination.



13/9/2024 Σελίδα 5 από 5