MODULE OUTLINE EPK50

1. GENERAL INFORMATION

SCHOOL	OF APPLIED ARTS AND SUSTAINABLE DESIGN		
PROGRAM COURSE	SUSTAINABLE INTERIOR DESIGN OF BUILDINGS (EPK)		
LEVEL OF STUDY	POSTGRADUATE		
MODULE CODE	EPK50	**SEMESTER OF STUDY**	1st
MODULE TITLE	**Introduction to sustainable design**		

INDEPENDENT TEACHING ACTIVITIES *in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits*	**HOURS**	**CREDIS**
Weekly teaching hours 21-23 hours x 13 weeks	**280-300**	**10 ECTS**

COURSE TYPE Compulsory, Optional, Optional mandatory	Compulsory
PREREQUISITE MODULES:	None
LANGUAGE OF INSTRUCTION AND EXAMS	Greek
THE MODULE IS OFFERED TO ERASMUS STUDENTS	No (due to annual duration of the module)
MODULE WEBSITE (URL)	https://www.eap.gr/en/viosimos-shediasmos/topics/#EPK50 Each module has its own space in the Learning Management System of EAP (https://courses.eap.gr/login/index.php), with controlled access (use of code) for students and teaching staff.

2. LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:

Upon successful completion of the Thematic Unit, students will be able to:

- Understand the basic principles of sustainability and sustainable design
- Understand the role of buildings in the energy and environmental problem
- Know the basic international, European and national objectives, basic legislation and regulations, and sources for monitoring future developments
- Identify the parameters that dictate the quality of interior environments
- Understand the interaction of comfort parameters with the energy performance of buildings and the operation of installations.

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

Search for, analysis and synthesis of data and information by the use of appropriate technologies,
Adapting to new situations
Decision-making
Project planning and management
Respect for diversity and multiculturalism
Environmental awareness
Social, professional and ethical responsibility and sensitivity to gender issues

Individual/Independent work	*Critical thinking*
Group/Team work	*Development of free, creative and inductive thinking*
Working in an international environment	*……*
Working in an interdisciplinary environment (Other…….citizenship, spiritual freedom, social awareness, altruism etc.) …….	*Introduction of innovative research*

- Search for, analysis and synthesis of data and information by the use of appropriate technologies
- Project planning and management
- Environmental awareness
- Adapting to new situations
- Decision-making
- Individual/Independent work
- Critical thinking
- Group/Team work
- Working in an interdisciplinary environment

3. MODULE CONTENT

Thematic Unit EPK50 aims to present the fundamental principles of sustainable design and introduce students to concepts related to interior built environment quality, the targets and basic parameters of Sustainable Development, the role of buildings and the built environment in the energy and environmental problem, the current legal framework, and the parameters that dictate the quality of interior environments.

4. TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY *Face-to-face, in-class lecturing, distance teaching and distance learning etc.*	Distance education with three Group Counseling Meetings (OSS) during the academic year on weekends. Personal communication and feedback, where necessary (advisory role of SEP members)
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY *Use of ICT in teaching, Laboratory Education, Communication with students*	We use : Remote meetings tools (cisco webex), Presentation software (e.g. power point), Additionally, the students use office automation tools, web browsers and e-reader for digital books.
MODULE DESIGN *Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc* *The study hours for each learning activity as well as the hours of selfdirected study are given following the principles of the ECTS.*	

Activity	***Annual Workload***
3 OSS (x 4 hours)	12
2 tutorial exercises (2 x 30 hours)	60
1 semester assignment	55
Examination	3
Individual study (21-23 hours x 13 weeks)	150-170

	Total module workload (hours)	**280-300**	
STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS *Detailed description of the evaluation procedures.* *Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other……etc.* *Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students*	Completion of written assignments during the academic semester which constitute a 40 percent of each student's grade, if a pass is obtained in the final or repetitive examination. Final exam grades constitute a 60 percent of the students' final course grade. For further information go to the **EAP Study Guide**.		

5. SUGGESTED BIBLIOGRAPHY

1. Sustainable development in the European Union, Monitoring report on progress towards the SDGs in an EU context (2022). Luxembourg: Publications Office of the European Union

2. Κατσαφάδος Π. & Μαυρομάτης Η. (2015). Εισαγωγή στη Φυσική της Ατμόσφαιρας και την Κλιματική Αλλαγή

3. Understanding and Responding to Climate Change (2008). The national academies

4. WMO_State of the Global Climate 2020

5. WMO_the global climate 2001 - 2010

6. Energy, transport and environment statistics (2020). Luxembourg: Publications Office of the European Union

7. Stierstadt K. (2022). Our Climate and the Energy Problem. How our Energy Needs can be Covered in a Climate-Friendly Way.Springer Wiesbaden.

8. IEA (2019). Perspectives for the clean energy transition. The critical role of buildings

9. U.S. Deparment of energy (2020). Tips on Buying and Using. Renewable Energy at Home

10. ΚΑΠΕ. Ανανεώσιμες πηγές ενέργειας σε οικιστικά σύνολα

11. United Nations Environment Programme (2022). 2022 Global Status Report for Buildings and Construction: Towards a Zero-emission, Efficient and Resilient Buildings and Construction Sector. Nairobi

12. Eurostat (2013). Manual for statistics on energy consumption. Luxembourg: Publications Office of the European Union

13. ΤΕΕ_Κλίμα και εσωτερικό περιβάλλον. Βιοκλιματικός σχεδιασμός κτιρίων

14. ΤΕΕ_Θερμοφυσικές ιδιότητες δομικών υλικών

15. ΤΕΕ_Τεχνολογίες Ανανεώσιμων Πηγών Ενέργειας

16. ΤΕΕ_Τεχνολογίες Εξοικονόμησης Διαχείρισης Ενέργειας

17. Παπαμανώλης Ν. (2015). Δομική Φυσική και Αρχές Περιβαλλοντικού Σχεδιασμού Κτιρίων. Ελληνικά ακαδημαϊκά ηλεκτρονικά συγγράμματα και βοηθήματα

18. Τ.Ο.Τ.Ε.Ε. 20701-4/2010. Οδηγίες και έντυπα ενεργειακών επιθεωρήσεων κτιρίων, συστημάτων θέρμανσης και συστημάτων κλιματισμού