

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ Α.ΔΙ.Π. ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ & ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ HELLENIC REPUBLIC H.Q.A. HELLENIC QUALITY ASSURANCE AND ACCREDITATION AGENCY

τεχνολογικό εκπαιδευτικό ιδρύμα ανατολικής μακεδονίας και θρακής Μοναδά διασφαλίσης της ποιοτητάς τει αμφ

> Quality Assurance in Higher Education Course Data Collection Form

ΤΕΧΝΟΛΟΓΙΚΟ ΕΚΠΑΙΔΕΥΤΙΚΟ ΙΔΡΥΜΑ ΑΝΑΤΟΛΙΚΗΣ ΜΑΚΕΔΟΝΙΑΣ & ΘΡΑΚΗΣ ΑΓΙΟΣ ΛΟΥΚΑΣ, 65404 ΚΑΒΑΛΑ EASTERN MACEDONIA AND THRACE INSTITUTE OF TECHNOLOGY AGIOS LOUKAS 65404 KAVALA

# **COURSE OUTLINE**

### (1) GENERAL

NAME & SURNAME OF LECTURER	CONSTANTINOS POTOLIAS			
SCHOOL	SCHOOL OF TECHNOLOGICAL ENGINEERING			
ACADEMIC UNIT	ELECTRICAL ENGINEERING			
LEVEL OF STUDIES	UNDERGRADUATE			
COURSE CODE	ZN5 SEMESTER 7º			
COURSE TITLE	ENERGY PLANNING			
INDEPENDENT TEACHING if credits are awarded for separate componer laboratory exercises, etc. If the credits are awar give the weekly teaching hours an	WEEKLY TEACHING HOURS		CREDITS	
	LECTURES	3		4,5
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>				
COURSE TYPE general background, special background, specialised general knowledge, skills development	Specialised general knowledge,			
PREREQUISITE COURSES:	ELECTRIC CIRCUITS I			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK			
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO			
COURSE WEBSITE (URL)	http://eclass.teikav.edu.gr/ED206/			

### (2) LEARNING OUTCOMES

### Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

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### **General Competences**

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with	Project planning and management		
the use of the necessary technology	Respect for difference and multiculturalism		
Adapting to new situations	Respect for the natural environment		
Decision-making	Showing social, professional and ethical responsibility and		
Working independently	sensitivity to gender issues		
Team work	Criticism and self-criticism		
Working in an international environment	Production of free, creative and inductive thinking		
Working in an interdisciplinary environment			
Production of new research ideas	Others		
Durness and gim of the course is to enable students to design and calculate the combination of different forms of energy			

Purpose and aim of the course is to enable students to design and calculate the combination of different forms of energy to meet the energy needs of an area and learn the basic principles of energy planning and energy strategy.

Analytical during the semester will be deepened to:

- •Types of energy
- OriginCharacteristics
- Utilization
- Energy Production technologies, products
- The Energy issuet
- $\bullet \ Environmental \ aspects \ of \ energy$
- Security of energy supply
- Exogenous factors
- The energy design and European policies
- The national energy strategy
- decision making theory for energy planning
  Renewable energy sources in the energy planning

## (3) SYLLABUS

Understand concepts

- Design of general
- Work in unity energy planning
- Teamwork
- Decision-making on energy planning
- Respect for the environment through the design process

# (4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	In classroom			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	Lectures and Laboratory Exercises using Power Point presentations. Website of the course in e-class with supporting and auxiliary material which is updated at regular intervals. Software simulation Application. E-mail contact.			
TEACHING METHODS	Activity	Semester workload		
The manner and methods of teaching are described	Lectures	39		
in detail. Lectures seminars laboratory practice fieldwork				
study and analysis of bibliography, tutorials,				
placements, clinical practice, art workshop,				
essay writing, artistic creativity, etc.				
The student's study hours for each learning activity are given as well as the hours of non-directed study				
according to the principles of the ECTS				
	Self study	53		
	Course total (25 hours	112		
	/ ECTS)	112		
STUDENT PERFORMANCE	<b>Theory</b> : Final writing examination where			
EVALUATION	students solve different problems concerning			
Description of the evaluation procedure	Energy Planning			
Language of evaluation, methods of evaluation,				
summative or conclusive, multiple choice				
questions, problem solving, written work,				
essay/report, oral examination, public presentation,				
interpretation, other				

## (5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography: - Related academic journals:

- Meier, P. Energy Planning in Developing Countries: An Introduction to Analytical Methods. Colorado: Westview Press. 1986.
- Eastop T.D. Croft D.R. "Energy Efficiency", Longman, London..1996.
- Boyle G. et al. "Energy Systems and Sustainability", Oxford University Press in association with the Open University, Oxford. 2003.