COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF SCIENCES		
ACADEMIC UNIT	DEPARTMENT OF PHYSICS		
LEVEL OF STUDIES	1		
COURSE CODE	**M217**	**SEMESTER**	**1**
COURSE TITLE	MAN AND HIS ENVIRONMENT		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
	3	4
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Special background
PREREQUISITE COURSES:	
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes
COURSE WEBSITE (URL)	http://ecourse.uoi.gr/course/view.php?id=177

(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*

The course offers an overview of the phenomena treated by environmental physics and deals with the basic principles and laws of physics underlying these phenomena. Upon completion of the course the students will be able to:

- Understand the effects of meteorological conditions on human health.
- Know the effects of various meteorological indices on human health
- Evaluate the classical biometeorological indices (PET, PMV, TH, RSI, Humidex)
- Understand the processes of acid rain in the atmosphere
- Know the biometeorological index UTCI.
- Know the Heat Health Watch Warning Systems
- Understand the effect of atmospheric pollutants on human health
- Know the Air quality index (AQI)
- Evaluate AQIs in various countries
- Evaluate the combination of classical and aggregate AQIs
- Evaluate both AQIs and biometeorological Indices affecting human health

- Evaluate the effect on human morbidity from abrupt climatic changes

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 the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and 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…*
	…….

Search for, analysis and synthesis of data and information, with the use of the necessary technology. Working independently. Criticism and self-criticism. Production of free, creative and inductive thinking. Respect for the natural environment.

(3) SYLLABUS

The impact of meteorology on public health. Biometeorological indices (PET, PMV, THI, RSI, Humidex). The UTCI index. Heat-Health-Watch-Warning Systems. The impact of atmospheric pollutants on public health. The EC guidelines on atmospheric pollution. Air Quality Indices. Simple and combined indices. Applications and worked-examples.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of Moodle on-line learning platform for the dissemination of notes, problem sets as well as contacting the students
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, 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*	
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination,*	Written exam at the end of the course containing theory and problem solving

Activity	***Semester workload***
Lectures	26
Tutorials	13
Bibliography study	35
Non-guided study	23
Exams	3
Course total	***100***

public presentation, laboratory work, clinical examination of patient, art interpretation, other *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- Related academic journals:

Suggested bibliography :

- Kristie E-G. McGregor, 2009. Biometeorology for adaptation to Climate Variability and Change, Springer