COURSE OUTLINE

(1) General information

FACULTY/SCHOOL			
DEPARTMENT	Department Of Maritime Studies		
LEVEL OF STUDY	Undergraduate		
COURSE UNIT CODE	NA808-1		
COURSE TITLE	Intelligent Maritime Systems		
INSTRUCTOR'S NAME	Associate Professor Alexandros Artikis		
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*		**WEEKLY TEACHNG HOURS**	**CREDITS**
Lectures and Tutorials		4	5
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4			
COURSE TYPE *Background knowledge, Scientific expertise, General Knowledge, Skills Development*	*Background knowledge*		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION:	English		
LANGUAGE OF EXAMINATION/ASSESSMENT:			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBSITE (URL)	https://eclass.unipi.gr/courses/NAS315/		

(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:

APPENDIX A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and*

APPENDIX B

- *Guidelines for writing Learning Outcomes*

Upon completion of the course, the students will be able to:

- *Understand the concepts of maritime data analytics.*
- *Develop SQL queries for extracting actionable knowledge from maritime data.*
- *Understand complex maritime event recognition.*

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,	*Project planning and management*
Adapting to new situations	*Respect for diversity and multiculturalism*
Decision-making	*Environmental awareness*
Individual/Independent work	*Social, professional and ethical responsibility and sensitivity to gender issues*
Group/Team work	*Critical thinking*
Working in an international environment	*Development of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Introduction of innovative research	*(Other…….citizenship, spiritual freedom, social awareness, altruism etc.)*
	…….

Adapting to new situations
Decision-making
Individual/Independent work
Group/Team work
Project planning and management
Critical thinking
Development of free, creative and inductive thinking

(3) COURSE CONTENT

- Maritime reporting systems.
- Maritime data.
- Maritime data analytics.
- Trajectory simplification.
- Data-driven shipping finance.

(4) TEACHING METHODS--ASSESSMENT

MODES OF DELIVERY *Face-to-face, in-class lecturing, distance teaching and distance learning etc.*	*Face-to-face, in-class lecturing*
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY *Use of ICT in teaching, Laboratory Education, Communication with students*	*Use of ICT in teaching; use of eClass; use of software platform illustrating game theoretic concepts.*
COURSE DESIGN	***Activity/Method*** | ***Semester workload*** Lectures | 46

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 self-directed study are given following the principles of the ECTS.*	Tutorials: 10 Coursework: 29 Study and analysis: 40 **Total**: 125
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.*	• Final written exam. • Coursework.

(5) SUGGESTED BIBLIOGRAPHY:

-Suggested bibliography:

A. Artikis and D. Zissis. Guide to Maritime Informatics. Springer. 2021.