COURSE OUTLINE

1. GENERAL

FACULTY	ECONOMICS & PUBLIC ADMINISTRATION SCIENCES
SECTION	ECONOMIC & REGIONAL DEVELOPMENT
LEVEL OF STUDY	6th

COURSE CODE	8032	**SEMESTER OF STUDY**	D

COURSE TITLE	Quantitative methods of economic analysis

INDEPENDENT TEACHING ACTIVITIES *in case the credits are awarded to distinct parts of the course e.g. lectures, laboratory exercises, etc. If the credits are awarded uniformly for the entire course, indicate the weekly teaching hours and the total credits*		**TEACHING WEEKS**	**CREDITS**
	Lectures	4	6
Add rows if needed. The teaching organization and teaching methods used are described in detail in 4.			

COURSE TYPE *Background, General Knowledge, Scientific Area, Skills Development*	Background Scientific Area Skills Development
PREREQUISITE COURSES:	No
LANGUAGE OF INSTRUCTION AND EXAMINATIONS:	Greek
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https://openeclass.panteion.gr/courses/TMI189/

2. LEARNING OUTCOMES

Learning Outcomes

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

Consult Appendix A
- *Description of the Level of Learning Outcomes for each cycle of study according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning*
and Appendix B
- *Learning Outcomes Writing Summary Guide*

Upon successful completion of the subject *Quantitative Methods of Economic Analysis*, students will be able to:
- ✓ know and use the basic quantitative tools of Microeconomics and Macroeconomic Analysis.
- ✓ understand the concept of elasticity.
- ✓ use marginal analysis.
- ✓ They know the principles of integration.
- ✓ understand the function of difference equations;
- ✓ They use the techniques of maximizing and minimizing constrained functions.
- ✓ know and apply linear programming.

General Competencies

Taking into account the general competencies that the graduate must have acquired (as listed in the Diploma Supplement and listed below), which of them does the course aim at?.

Search, analyze and synthesize data and information, using the necessary technologies	*Project planning and management*
Adapting to new situations	*Respect for diversity and multiculturalism*
Decision-making	*Respect for the natural environment*
	Demonstrate social, professional and ethical responsibility and

Autonomous work	*sensitivity to gender issues*
Teamwork	*Criticism and self-criticism*
Working in an international environment	*Promoting free, creative and inductive thinking*
Working in an interdisciplinary environment	
Generation of new research ideas	

Promoting critical thinking

Knowledge of quantitative methods of economic analysis

Empowering participatory-student-centered education

Promoting free and inductive thinking

Research design development

3. COURSE CONTENT

The aim of the course is to present, explain and apply quantitative tools for measuring and analyzing economic concepts and relationships of microeconomic and macroeconomic theory. The principles of quantitative methods of economic analysis are taught at theoretical and applied level, and are classified into the following modules:

1) Concepts of inclinations, elasticities and equilibrium of the free, or interventional, market by applying linear and nonlinear equations and systems of equations.
2) Marginal analysis of economic concepts and relationships.
3) Concepts of curvilinear equations & derivation techniques.
4) Principles of integration (useful and necessary tool for measuring and analyzing economic aggregates, such as producer and consumer surpluses, resulting from market changes that may be the result of policies and interventions).
5) Equations of difference (for understanding, measuring and analyzing dynamic economic relations, such as the "spider's web" and dynamic patterns with/or without reserves).

4. TEACHING AND LEARNING METHODS - ASSESSMENT

DELIVERY *METHOD Face to face, Distance learning, etc.*	• Face to face • Remote in times of extraordinary circumstances
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES *Use of ICT in Teaching, Laboratory Training, Communication with students*	Using presentation software Contact students by email for clarifications about the course

TEACHING ORGANIZATION		
The method and methods of teaching are described in detail. *Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliography Study & Analysis, Tutorial, Internship (Placement), Clinical Practicing, Art Workshop, Interactive Teaching, Educational visits, Project Writing, Writing a project / assignments, Artistic creation, etc.* *The student's study hours for each learning activity are listed as well as the hours of unguided study so that the total workload at semester level corresponds to ECTS standards*	*Activity*	*Semester Workload*
	Lectures	48
	Laboratory application tutorials	42
	Study of alternative textbooks (mandatory) and suggested bibliography	50
	Exercise	40
	Total course	**180**

STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Summative, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay/Report, Oral Examination, Public Presentation, Laboratory Work, Clinical Examination of a Patient, Artistic Interpretation, Other/Others* *Explicitly defined evaluation criteria and whether and where they are accessible to students are mentioned.*	The evaluation of the Course will be done with: • An intermediate progress in the openeclass of the course. • Final exam (which in extraordinary circumstances takes place electronically). The examination of the course is done with exercises.

5. RECOMMENDED-BIBLIOGRAPHY

Suggested indicative bibliography:
• TH. PALASKAS, D. CHRISTOPOULOS & G. OIKONOMAKIS, "Quantitative Methods of Economic Analysis", Kritiki Publications.