ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Α .Δ Ι .Π .
ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ & ΠΙΣΤΟΠΟΙΗΣΗΣ
ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ
ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC
H .Q .A .
HELLENIC QUALITY ASSURANCE
AND ACCREDITATION AGENCY

ΤΕΧΝΟΛΟΓΙΚΟ ΕΚΠΑΙΔΕΥΤΙΚΟ ΙΔΡΥΜΑ ΑΝΑΤΟΛΙΚΗΣ ΜΑΚΕΔΟΝΙΑΣ ΚΑΙ ΘΡΑΚΗΣ
ΜΟΝΑΔΑ ΔΙΑΣΦΑΛΙΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΕΙ ΑΜΘ

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

SCHOOL	SCHOOL OF TECHNOLOGICAL APPLICATIONS		
ACADEMIC UNIT	DEPARTMENT OF ELECTRICAL ENGINEERING		
DEGREE LEVEL	UNDERGRADUATE		
COURSE CODE	ZN10	**SEMESTER**	7
COURSE TITLE	BUSSINESS RESEARCH		

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**
Lectures	2	3
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Knowledge
Required passed courses:	-
TEACHING AND EXAMS LANGUAGE:	Greek
THE COURSE IS OFFERED TO ERASMUS STUDENTS:	No
COURSE WEBPAGE (URL)	http://eclass.teikav.edu.gr/ED123/

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 constitutes a scientific area course about: The familiarization with the fundamental tools of Business Research and the utilisation of mathematical methods for the resolution of optimization problems. The understanding of basic meanings of Business Research and the usefulness of mathematical models for the solution of problems from management and economy. The development of basic methods of Business Research that are applied in the solution of financial problems of optimization like: Linear Programming (Graphical Solution, Simplex Method, Financial Interpretation, Dyic Theory) Dynamic Programming, Network theory (Distance and coverage minimization, Stream maximization) Markovian Analysis (Normal Markovian Chains, Case classification, Asymptotic Behavior, Absorption Chains) and Decision Theory (Decisions with multiple criteria, decisions with uncertainty situations)

Upon successful completion of the course the student should be able to:

- Develop skills of analytical and critical thinking about the understanding and solution of optimization problems
- Demonstrate in depth, knowledge of the different business theories and models

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…*

.....
• Research, analysis and synthesis of data and information, with the usage of the necessary technology • Adaptation in new situations • Decision making • Autonomous work • Teamwork • Criticism and self-criticism • Promotion of free, creative and inductive thinking • Communication skills - written and spoken with arguments in essays, presentations and public conversations • Produce new ideas of his/her own and from his/her fellow students • Manage cooperative relations with colleagues and educational personnel

3. COURSE CONTENT

I. Introduction to Business Research II. Linear Programming: Formation and Graphical solution of maximization problems III. Linear Programming: Formation and Graphical solution of minimization problems IV. Simplex Method: Formation and solution of maximization problems V. Simplex Method: Formation and solution of minimization problems VI. Linear Programming: Sensitivity analysis of objective coefficients VII. Linear Programming: Sensitivity analysis of the right side of the limitations VIII. Linear Programming: Dyic Theory IX. Dynamic Programming X. Networking analysis: Distance and coverage minimization XI. Networking analysis: Stream maximization XII. Markovian Analysis: Normal Markovian Chains XIII. Markovian Analysis: Absorption Chains

4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD *Face-to-face, Distance learning, etc.*	Room Lecture
UTILISATIONS OF INFORMATION AND COMMUNICATION TECNOLOGIES *Use of ICT in teaching, laboratory education, communication with students*	Syllabus organization in PPT slides. Learning process support through e-class electronic Contact via email.
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*	***Acivity*** / ***Semester workload*** Lectures — 26 Preparation of a project work and presence it at audience using ppt. — 20 Self-contained coursework — 30 ***Course Summary (25 workload per credit)*** — ***76***
STUDENT ASSESSMENT *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, public*	1. Final written exam (50%) 2. Writing and presentation of individual work (50%). The criteria of the evaluation of that work are based on: • The ability of analysis and synthesis. • The depth of the literature research. • The right usage of the references. • The correct reference writing.

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.*	• The critical writing and thinking, subject coverage and conclusion. • The presentation. • Correct methodological approach. • Connection between theory and practice.

5. RECCOMENDED READING

- Suggested bibliography:
- Related academic journals:

• BUSINESS RESEARCH, PANTELIS YPSILANTIS, Editions PROPOMPOS, KIMERIS K. THOMAS, 2007, ISBN: 978-960-7860-66-8
• Introduction to Business Research, John Koletsos, Dimitris Stogiannis, Provider (Publisher): JOHN KOLETSOS, 2015, ISBN: 978-960-93-7163-6
• Administrative science, Anderson David R., Sweeney Dennis J., Williams Thomas A., Martin Kipp, KRITIKI EDITIONS SA, 2014, ISBN: 978-960-218-932-0