# COURSE OUTLINE: MODELS OF FORECASTING IN ACCOUNTING AND FINANCE

## (1) GENERAL

SCHOOL	School of Economic Sciences				
ACADEMIC UNIT	Department of Accounting and Finance				
LEVEL OF STUDIES	Undergraduate				
COURSE CODE	AF803		SEMESTER 8 <sup>th</sup>		
COURSE TITLE	Models of Forecasting in Accounting and Finance				
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	3	5	
		TOTAL	3	5	
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	Scientific File	d			
PREREQUISITE COURSES:	None				
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek				
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes (upon ree	quest)			
COURSE WEBSITE (URL)					

### (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 purpose of the course is to introduce students to the basic knowledge of creating models for analysis and forecasting mainly of economic time-series.

Upon the successful completion of the course, students will acquire knowledge and skills that will allow them to:

- 1. Understand the special characteristics of an economic time-series and the types of patterns it can follow.
- 2. Formulate simple moving average, exponential smoothing, AR, MA, ARIMA, etc. models based on specific example problems.
- 3. Make forecasts with simple time series methods.
- 4. Solve problems of the above categories using a computer.
- 5. Know elements of decision making in simple problems with forecasting techniques.

#### **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 Respect for difference and multiculturalism				
Adapting to new situations	Respect for the natural environment Showing social, professional and ethical responsibility and sensitivity to gender issues				
Decision-making					
Working independently					
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				
1. Production of free, creative, and inductive thinking.					

- 2. Working in an interdisciplinary environment.
- 3. Generation of new research ideas.
- 4. Working independently.
- 5. Teamwork.

## (3) SYLLABUS

The basic material that students should know about the course is contained in the following sections:

- 1. Time-series
- 2. Types and sources of data
- 3. Forecasting methods
- 4. Smoothing Methods
- 5. Smoothing Methods: Double exponential smoothing, Exponential smoothing with voltage adaptation
- 6. Smoothing Methods: Exponential smoothing with voltage adjustment
- 7. Breakdown of time-series into individual components (trend, seasonality, cyclicality, etc.)
- 8. Input, processing of data and export of forecasts in Gretl and Eviews programs

# (4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	In class				
Face-to-face, Distance learning, etc.					
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Specialized Office Software – Power Point for the				
Use of ICT in teaching, laboratory education,	theoretical part of the course and specialized				
communication with students	software for the laboratory part of the course.				
TEACHING METHODS The manner and methods of teaching are	Activity	Semester workload			
described in detail. Lectures, seminars, laboratory practice,	Lectures	15			
fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art	Individual work	50			
workshop, interactive teaching, educational	Exercises	30			
visits, project, essay writing, artistic creativity, etc.	Independent study	55			
	Total Course Semester Workload 150				
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	In order to provide students with options				
<b>EVALUATION</b> Description of the evaluation procedure	preferences and use of their time, their evaluation				
	takes place in two ways:				
Language of evaluation, methods of evaluation, summative or conclusive, multiple choice					
	<ul> <li>Reports (60%) and written assignment (40%). Student participation in the reports is optional. Students are examined in every single unit of the course. Written assignment is also optional, but it requires intensive commitment to the course subject from the part of the student. Instructions on how to carry out the assignment as well as information about the submission deadline are announced on e-class.</li> <li>Final written exams (100%) for students who neither opt for reports nor carry out a written assignment.</li> </ul>				
	Language of examination: Greek				
	<b>Final Exams:</b> The exam timetable is annound days before the exams on the secretariat's				

# (5) SUGGESTED BIBLIOGRAPHY

1.	Jarrett, J. (1993) Μέθοδοι Προβλέψεων για Οικονομικές και Επιχειρηματικές Αποφάσεις, Gutenberg ,	
	Αθήνα.	
2.	Αγιακλόγλου Χ.Ν., Οικονόμου Γ.Σ., (2002) Μέθοδοι Προβλέψεων και Ανάλυσης Αποφάσεων , Εκδόσεις	
	Μπένου , Αθήνα.	
3.	Βαφειάδης , Γ., (1985) Στατιστική Ανάλυση και Βραχυχρόνιες Προβλέψεις Τιμών, (Αθήνα : Αγροτική	
	Τράπεζα)	

Τράπεζα). 4. Κονδύλης, Ε.Κ. (1999) Στατιστικές Τεχνικές Διοίκησης Επιχειρήσεων, Εκδόσεις Interbooks , Αθήνα.