ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

PROGRAMME ERASMUS+

COURSES OFFERED IN ENGLISH

Fall Semester (from 01.10.2014 till 13.02.2015)

Spring Semester (from 16.02.2015 till 30.06.2015)

1. All Erasmus incoming students are kindly requested to take into consideration that the above mentioned dates MUST be respected (ERASMUS STUDENT CHARTER: Erasmus students should comply with internal regulations of the host institution). As a result they should not reserve their return tickets for earlier dates.

2. All Erasmus incoming students are entitled to a 2-week period after their registration in order to make the modifications of courses they wish and finalize their learning agreement.

3. Attendance at each course is compulsory, after finalization of the Learning Agreement. Three justified absences from each course are accepted. The same applies for the Modern Greek Language course, which is offered free of charge at each semester.
1. International Economics
Thomas Moutos
6 ECTS credits
Level: Intermediate

Communication with Lecturer
E-mail: tmoutos@aueb.gr

Course Description
- International Trade: Theory and Policy
  Presentation of the current theoretical and policy developments in the literature of International Trade: Absolute and comparative advantage in international trade; International trade and income distribution; Factor endowments and international trade; International trade and international factor movements; International trade in imperfectly competitive markets; Instruments and the political economy of international trade policy; Preferential trading agreements and the theory of economic integration.

- International Monetary Relations: Theory and Policy
  Presentation of the current theoretical and policy developments in the literature of International Monetary Relations: Exchange Rates and open economy macroeconomics; Exchange rate systems and exchange rate crises, Effectiveness of international macroeconomic policy; International monetary system.

2. Economics of Globalization
Thomas Moutos and Panayiotis Hadjipanayiotou
6 ECTS credits
Level: Advanced (4th year course)

Communication with Lecturer
E-mail: tmoutos@aueb.gr

Course Objective
The purpose of this course is to examine the forces that have shaped the evolution of the world economy during the last two centuries (with special emphasis on developments after World War II), and to study the consequences for national and individual welfare of the increased pace of worldwide economic integration.
Course Content
1. A Brief Historical Overview of the World Economy
2. International Trade in Goods
   (a) Effects on National Welfare
   (b) Distributional Implications
3. The Effects of Preferential Liberalization
4. Economic Integration, Labour Markets and Migration
5. Outsourcing
6. Capital Movements and Exchange Rate Regimes
   (a) Fixed Exchange Rates
   (b) Flexible Exchange Rates
   (c) Monetary Unions

Recommended Prerequisite Knowledge
Intermediate-level knowledge of International Economics such as presented in Robert Feenstra and Alan Taylor, 2008, International Economics, Worth

Recommended Books on Globalization
Dani Rodrik, 1997, Has Globalization Gone too Far?, Peterson Institute
Jeffry Frieden, 2006, Global Capitalism: Its Fall and Rise in the 20th Century, Norton

Additional reading of (mainly) journal articles will be provided after the first lecture.

Course Evaluation
The overall evaluation in this course is based on the following items:
1. Comprehensive Final Exam (50% of the final grade) covering all the units and topics presented in the lectures.
2. Students will have to work on a project (approximately 5000 words), to do in-class presentation (30 minutes), and to deliver the essay to their discussant a week prior to their presentation (35% of the final grade).
3. Students will have to write a comment on another student’s project (maximum 1000 words) and to present it in class (15% of the final grade).

3. Legal Aspects of European Integration
Asterios Pliakos
6 ECTS credits
Level: Advanced
Course Content
- The history of European Integration.
- The structure of the European Union.
- The Community legal order.
- The Institutions.
- Community Legislation and legal instruments.
- Policy-making and administration.
- The application of EU law.
- The European Judicial System.
- The objectives, the means and the principles of the EU.
- Fundamental rights.
- The freedoms.
- The policy regulation mechanisms.
- Competition law.
- External relations.

SPRING SEMESTER

1. Government and Politics of the European Union
George Pagoulatos
6 ECTS credits
Level: Advanced

Communication with Lecturer
Patission 76, Athens 10434, Greece
Tel: +30 210 8203358; Fax: +30 210 8214122
gpag@aueb.gr

Course Content

2. Economics of EU Competition Policy
Chrysovalanto Milliou
6 ECTS credits
Level: Intermediate
**Communication with Lecturer**
cmilliou@aueb.gr

**Course Content**
In this course, we will analyze a number of firms’ practices in markets in which firms have significant market power. The firms’ practices that we will mainly analyze are: mergers & acquisitions, cartels, abuses of dominant position. Moreover, we will examine the policy measures that are undertaken in order to control such practices, i.e., competition policy. We will try to understand the reasons that firms follow these practices, the implications of these practices on consumers and welfare, as well as how these practices are treated by the law and the competition policy authorities.

Throughout the course, we will analyze a number of real world examples that took place mainly in the EU. By the end of the course, the students will be familiar with the main firms’ practices that reduce competition, the methods of competition policy, and their applications.

**Prerequisites**
Microeconomics
1. Labour Economics
Natassa Miaouli (E. Hatziharitou)
6 ECTS credits
Level: Intermediate (3rd year course)

Course Content
The role of the resource of labour in the productive procedure. The importance of Labour Economics and its relation with the other social sciences. The economic and institutional factors of the labour market. The analysis of labour market at local, regional, national, European and international level. The main determinants of the size of the labour force and its quality. The investment in human capital. Static and dynamic analysis of the individual and total labour supply. The elasticity of labour supply. Labour force mobility and efficiency. The short – run and long – run demand for labour under competitive or non – competitive conditions in the product market. The elasticity of labour demand. Wage determination and resource allocation under competitive or non- competitive conditions. Labour unions and collective bargaining. The economic impact of unions. The wage structure and labour market discrimination. Employment and unemployment: a brief reference of what is happening in the European Union countries. Unemployment data sources, its measurement and its comparability between the European Union countries. How the various countries confront the social problem of unemployment.

2. Theory and Practice of Economic Integration
Gerassimos Sapountzoglou (E. Hatziharitou)
6 ECTS credits
Level: Advanced (4th year course)

Course Content
Part I
The creation of the unified internal market:
- Economic Integration and its forms
- Partial and general equilibrium analysis of the custom duties effects
- The welfare effects of custom duties quotas and subsidies
- The theory of custom union and its effects. A partial and general equilibrium analysis
- Fiscal unions and tax harmonization

Part II
The structural policy of the European Union, its instruments and its targets:
- European Social Fund and European Social Policy
- European Agricultural Fund
• European Fund of Regional Development and Regional Economic Policy
• Cohesion fund
• The Budget of the EU

Part III
Historical Reference of the Monetary Union: From the European Monetary System to the Economic and Monetary Union and the Common Currency, EURO:
• The system of the ECU
• The Single Act
• The Criteria of Maastricht
• The Three Stages of the Monetary Union
• The Euro: The Mechanism of the Unique Money

Part IV
The Theory of Monetary Integration
• The theory of “Optimum Currency Areas” and its criticism
• The benefits of a common currency
• The comparison between costs and benefits
• The European Monetary System and its imperfections

Part V
The Implementation of the Central Banks European System:
• The European System of Central Banks
• The European Central Bank
• The Policy of the European Central Bank

Note: All the Erasmus students have the opportunity to write an essay under the supervision of their professor.

SPRING SEMESTER

1. Business Economics
Christos Genakos
6 ECTS credits
Level: Intermediate (3rd year course)

Communication with Lecturer & General Information
Course Meetings: Friday 12:00-15:00 in 29 Evelpidon Str, 2nd floor.
Office: 4th floor Derigny (last one on the right as you enter), main building AUEB.
Email Contacts: cgenakos@aueb.gr
Web Site: Look at the website of this course on eclass: http://eclass.aueb.gr/

Course Description
Managerial (or Business) Economics is the application of economic theory to decisions made by firms. Our focus is on four topics. We start with demand theory and consumer behaviour, studying how consumers and other firms respond to price changes and thus how to decide what price to charge. We then move to production and cost theory, where we think about the most basic decisions of firms: how much to produce and what inputs to use. We then analyze pricing strategies under different market structures and the strategic world of managers. Lastly, we look inside the firm, on how firms are organized and the way they evaluate and reward performance. Managerial economics provides a comprehensive application of economic theory and methodology to managerial decision making.

**Course Objectives**

The learning objectives of the course:

- To enable students to develop the skills and to provide the opportunity to practice the study of Managerial Economics.
- To develop a critical understanding of methods, procedures and current issues and debates appropriate to the study of Managerial Economics.

By the end of the course the students should:

- have gained a knowledge and understanding of the themes, issues and debates within the study of Managerial Economics
- be able to think critically and independently about what they have seen and read
- have been introduced to the range of skills and critical vocabularies needed to facilitate the study of Managerial Economics
- gained a critical understanding of the application of the methods involved in the study of Managerial Economics

**Textbooks and Reading**


Course participants will be given a package of additional reading in some sessions. For those interested in further reading the following books are recommended:


**Course Outline**

1. Introduction
   1. What is Economics and what is managerial economics?
2. Does Management matters?
   1. Why care about management and productivity?
2. Managerial practices across the world.
3. What drives differences in managerial practices?

3. Demand curves and Elasticity
   1. Price elasticity.
   2. Income elasticity.
   4. Setting the price to maximize profits.

   1. Production Theory.
      1. The production function and it’s properties.
      2. Optimal input use.
      3. Marginal rate of technical substitution.
   2. Cost Analysis.
      1. Fixed, average, and marginal costs: short run.
      2. Sunk costs.
      3. Average costs: long run.

5. Pricing Techniques.
   1. Perfect Competition.
   2. Cost plus pricing.
   3. Discrimination.
   4. Bundling.

   1. Static games and basic definitions.
   2. Dominant Strategies.
   5. Applications
   6. Dynamic Games.
   7. Nash Equilibria and Sub-Game Perfection.
   8. Repeated games.

7. The Principal-Agent problem inside the firm.
   1. Asymmetric information, Moral Hazard, Adverse Selection.
   2. Evaluating Performance.
   3. Rewarding Performance.

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2. Theory and Practice of Economic Integration
Gerassimos Sapountzoglou (E. Hatziharitou)
6 ECTS credits
Level: Advanced (4th year course)

Course Content
Part I
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- Economic Integration and its forms
- Partial and general equilibrium analysis of the custom duties effects
- The welfare effects of custom duties quotas and subsidies
- The theory of custom union and its effects. A partial and general equilibrium analysis
- Fiscal unions and tax harmonization

Part II
The structural policy of the European Union, its instruments and its targets:
- European Social Fund and European Social Policy
- European Agricultural Fund
- European Fund of Regional Development and Regional Economic Policy
- Cohesion fund
- The Budget of the EU

Part III
Historical Reference of the Monetary Union: From the European Monetary System to the Economic and Monetary Union and the Common Currency, EURO:
- The system of the ECU
- The Single Act
- The Criteria of Maastricht
- The Three Stages of the Monetary Union
- The Euro: The Mechanism of the Unique Money

Part IV
The Theory of Monetary Integration
- The theory of “Optimum Currency Areas” and its criticism
- The benefits of a common currency
- The comparison between costs and benefits
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Part V
The Implementation of the Central Banks European System:
- The European System of Central Banks
- The European Central Bank
- The Policy of the European Central Bank

Note: All the Erasmus students have the opportunity to write an essay under the supervision of the lecturer.

3. Seminar Readings in Entrepreneurship (Ideas, process, outcomes)
Ioanna - Sapfo Pepelasis
6 ECTS credits
Level: advanced
Seminal Texts in Entrepreneurship (Ideas, process, outcomes)
Ioanna Sapfo Pepelasis

Section 1: THE BASICS AND CONTEXTUAL FRAMEWORK
1. On Entrepreneurship: Basic Concepts, Theory and History
2. Entrepreneurship, Innovation and Economic Development
3. Enterprise and the Environment: the State, Institutions and Culture
4. Diverse Facets of Entrepreneurship in International Business

Section 2: ENTREPRENEURSHIP AND BUILDING BUSINESSES
5. Types of Business organization: A Global Perspective
6. How to Conceptualize and Develop an Entrepreneurial Idea
7. First hand Accounts of Invited Entrepreneurs/Business Founders

Key words: entrepreneurial process, concepts and context, evolution/international comparisons, case studies, empirics. Outcome: This course aims at providing the students with in depth knowledge on important aspects of the big picture of the entrepreneurial process that may be neglected or taken for granted. By the end of the course they will be familiar with the: The conceptual frameworks available for comprehending the entrepreneurial process: from its inception to its implementation, the relevance of political, cultural, and institutional factors and the outcomes/ wider impact of entrepreneurship. They will also gain some basic knowledge on the empirics of entrepreneurship.

Information: There will be a mid term which will cover section 1 and a take home final which will cover Section 2. We will meet for class on a weekly basis for one and a half hours.

Contact: ipepelasis@aueb.gr
Office: Derigny wing, fourth floor.

My personal research on entrepreneurship:
http://www.aueb.gr/users/ipepelasis/jsc/index.htm

Readings (consist of the following collection of articles and chapters)
Section 1: THE BASICS AND CONTEXTUAL FRAMEWORK

2. Entrepreneurship, Innovation and Economic Development

3. Enterprise and the Environment: the State, Institutions and Culture

4. Diverse Facets of Entrepreneurship in International Business

Section 2: ENTREPRENEURSHIP AND BUILDING BUSINESSES
4. Evolution of Business Organization: A Global Perspective
Selected material from Franco Amatori and Andrea Colli, Business History: Complexities and Comparisons (2011)
5. How to Conceptualize and Develop an Entrepreneurial Idea
Summary handouts will be given in class providing guidelines and case studies for the practice of entrepreneurship.
7. First hand Accounts of Invited Entrepreneurs/Business Founders Concise handouts will be given in class.
1. Information Resource Management
Athanasia (Nancy) Pouloudi & George Doukidis
6 ECTS Credits
Level: Advanced

Course Objective (Expected Learning Outcomes and Competences to be acquired)
This is an advanced course on the management of information systems in organizations. Four main axes define the learning outcomes of the course:

- The strategic role of IT in contemporary business and strategic planning for information resources and systems
- The business role of IT as a tool for supporting and promoting business functions and management and the managerial skills associated with this role
- The fundamental role of IT in developing and supporting new business models
- The functional structure (department/services) of IT in contemporary business, its human resources and management
- Broader socio-economic aspects related to the use of IT in contemporary business

In this course, students are introduced to the basic themes and activities of the information systems manager in a business organization.

Prerequisites
No prerequisite

Course Contents
No prerequisite

Recommended Reading
A series of articles/case studies will be provided in class

Teaching Methods
Lectures and Seminars. In the course of the seminars case studies will be analyzed and presented by student groups.

Assessment Methods
Written exams and presentation of case studies in the course of the seminars

2. Modern Enterprise Information Systems
3. Managerial Decision Making
Manolis Kritikos
6 ECTS credits
Level: Advanced

Course Outline
This course outline describes the course Managerial Decision Making. It has been organized into the following sections:

1. Basic Information about the Course
2. Aim of the course
3. Planned learning activities and teaching methods
4. Learning Outcomes
5. Reading List
6. Syllabus
7. Course Assessment.

Basic Information about the Course
Prerequisites: None
Teaching Methods: The class meets once a week
Consultation Time/Tutorials: Wednesday 14.00-17.00
Contact email: kmn@aueb.gr

Course Objectives
The course introduces the student to the methodology of decision making, as well as to the major models used today. Decision making is one of the most important functions of management. The three major categories of models are covered: Linear and Integer Programming, Decision Analysis, and Simulation. In each unit, the student is exposed to a number of applications, and has the opportunity to apply his/her knowledge to a number of problems such as Transportation, Assignment and Network models. In addition to developing models, the student is exposed to a number of computer packages, most of them based on Excel, to use in order to solve the problems.

Planned Learning Activities and Teaching Methods
We cover the course material in lectures. Attending lectures is compulsory. This is the best way of being introduced to a topic. Self-study is a vital and significant part of studying for the course.

Learning Outcomes
Decision-Making is one of the most important functions of management. Today's business environment is characterized by high competition, constant changes, extensive globalization, large availability of data and information, and the huge penetration of information and telecommunications technology. In this environment, decision making is increasingly based on the use and analysis of data, through the development of “models”, and the use of user-friendly, PC-based computer packages.

On completion of this course, students should be able to: to understand and formulate decision making problems, and to use the computer technology efficiently in order to make the best decision.

Reading List

Required Textbook

Recommended Reading
N.Balakrishnan, B.Render, and R.M.Stair, Jr. (2013), Managerial Decision Modeling with Spreadsheets, Pearson Education Inc.

Syllabus

Managerial Decision Making

Overview:
The Fundamentals of Operations Research: Introduction to management Science; The methodology of Decision Making; Models in Managerial Decision Making
Linear Programming (LP): Introduction; Characteristics of LP Problems; Graphical solution of a LP problems; A Maximization Problem; a Minimization Problems; Problems General Formulation and Assumptions of LP problems
Sensitivity analysis in Linear Programming: Dual Prices in LP; Reduced costs in LP; Changes in the Objective Function’s Coefficients; Changes in the Right Hand Sides (RHS) of the Constraints; Evaluation of a New Activity
Using Solver to Solve Linear Programming Problems: Introducing the model in Excel; Solving the Problem; Understanding and Analyzing the Solution – SOLVER Reports.
Integer Programming (IP): Introduction; Formulating IP Problems with Binary Variables; Formulating IP Problems; Solving IP problems; Solving Integer Programming Problems with SOLVER.
Implementing Management Science in Practice: Marketing and Sales problems; Production and Inventory problems; Networks and Transportation problems; Logistics and Supply Chain problems; Investments problems; Human Resources problems.

Decision Analysis and Precision Tree: Introduction; Criteria for Making Decision under Uncertainty; The Expected Value of Perfect Information; Decision Tree; Calculating the Risk Profile a Strategy; Sensitivity Analysis; Using Precision Tree to Solve Decision Analysis Problems.

Simulation: Introduction; Implementation of Simulation under Conditions of Uncertainty Using Excel and @Risk in Simulation: Introduction; Simulation of Queuing Systems; Simulation of an Inventory System; Analysis of Simulation Results.

Course Assessment
The following notes offer guidance on how you will be assessed for the course. The final grade will be based on homework, classroom participation, an individual essay, case studies and a final exam. The breakdown of the final grade will be approximately as follows:

- 20% homework and classroom participation
- 30% individual essay and group case studies
- 50% final written exam

4. Management of Information Systems
Angeliki Poulymenakou
6 ECTS credits
Advanced level

Course Objectives (expected learning outcomes and competences to be acquired)
This course aims to introduce to the student the essential dimensions related to the management of Information technology and Systems in modern organisations. Related topics include the pervasive role of ICTS in the economy and in organisations, IS planning and strategy, Types of IS used currently in organisations, E-business, E-commerce, Knowledge Management and e-learning, approaches for developing Information Systems, Outsourcing, the organisation and the business roles of the IS function, IS evaluation and the economics of ICT.

Prerequisites
No prerequisite. Student should, however, be familiar with the fundamentals of IT, and understand databases and software development methods at a basic level.

Course Content
The course largely follows the chapter structure of the book provided as essential reading (Turban et al).

Recommended Reading Material
5. Innovation in Organizations: Knowledge, Creativity and the Processes of Innovation
Eric Soderquist
6 ECTS credits
Advanced level

Communication with the Lecturer
soderq@aueb.gr

Learning Outcomes
Today, all kinds of organizations and businesses must have the ability of constantly innovating and turning environmental uncertainty into exploitable advantages. In this context, demands for creative thinking, and better use of organizational knowledge for enhanced innovation performance and innovation output are raised on employees at all levels. This course provides an introductory overview of innovation, innovation processes and innovation management, placing particular emphasis on the underlying phenomena of knowledge and creativity. The objective is to improve the students' understanding the nature and dynamics of organizational knowledge, the prerequisites and processes of organizational creativity, and how knowledge and creativity relate to innovation.

Innovation in itself will also be analyzed. Various forms of innovation that can be pursued by organizations will be explained, and the students will develop frameworks for analyzing how different organizational structures, processes and management methods can be used for implementing and managing innovation. The course aims at opening up the black box of innovation and equipping the students with concepts and frameworks that will help them to apprehend and better manage innovation.

Mode of delivery (face-to-face, distance learning)
Face-to face teaching, individual student work and student presentations.

Prerequisites and co-requisites
Introductory courses in Management and/or Business Strategy and/or Organizational Behaviour are recommended.

Recommended optional programme components
Independent research and use of bibliographical sources to synthesize material and analyze specific topics related to innovation.

**Course Contents**

**INTRODUCTION TO THE COURSE (SESSION 1)**
- Structure and Requirements
- Overview of the three subject topics – Innovation, Creativity and Knowledge

**INNOVATION (SESSIONS 2-4)**
- Forms of innovation, overview of determinants for innovation,
- Drivers for innovation – the dynamics of technological change,
- Innovation management frameworks, the new product and service development process, bringing innovation to the market,
- Modes and types of innovation co-development: Open Innovation,
- Ten Types of Innovation.

**INTERMEDIARY PRESENTATIONS (SESSION 5)**

**CREATIVITY (SESSIONS 5-7):**
- Overview of creativity as a concept – nature, core elements and factors enhancing / blocking creativity,
- Developing the creative potential of human resources – tools for directed creativity,
- Strategic management frameworks and their relation to creativity and innovation,
- Establishing “creativity channels” through cooperating with end users, customers, academics and scientists.
- The Egg Game – Creativity and team-building game.

**KNOWLEDGE (SESSIONS 8-10)**
- The language of knowledge,
- Forms of organizational knowledge,
- New knowledge creation processes: The role of absorbing and exploiting external knowledge for innovation,

**FINAL PRESENTATIONS (SESSIONS 11-12)**

**Recommended or Required Reading**

📖 Textbooks:
Textbooks are recommended only for the part on innovation management. One of the following textbooks is a useful background reading for the entire course:

📖 Additional useful books are (including one on Knowledge and one on Creativity):

**Articles**

In the following, articles are listed for each of the three different parts of the course. Two articles in each part are compulsory readings for all students. These articles are listed first and marked with *. Another three or four articles are listed per part, as an indication of important readings depending on the subject of the dissertation selected by the students. In addition, a separate reading list will be provided.

**INNOVATION**


**CREATIVITY**


Planned Learning Activities and Teaching Methods
Nine lectures and three presentation sessions. Lectures, reading assignments, exercises, games, individual student work and student presentations.

Assessment Methods and Criteria
80% of the grade is based on an individual (or pair) dissertation (60% written report, 20% presentation).
20% of the grade is based on reading assignments and individual participation.
It is recommended that the dissertation is done in pairs of two students. Each student must explicitly indicate his/her individual contribution to the whole and the presentation must be shared between the students.
Students will select topic area after the introduction session, and the initial reading of articles (emphasize on Innovation or Creativity or Knowledge). The final dissertation must contain a synthesis of various literatures on the selected subject, and an integration of examples from practice through the study of company/organization cases and company/organization websites. Students are also encouraged to enrich their dissertation with first-hand empirical data, e.g., from interviews with managers or other relevant actors in Greece or in their home country of studies.
A template for the dissertation will be handed out at the beginning of the class. Indicatively, the dissertation should be about 6.500 words (between 6.000 and 7.000 words).

Work placement(s)
N.A.
Spring Semester

1. Production and Operations Management
George Ioannou
6 ECTS credits
Advanced level

Learning Outcomes
The aim of the course is to introduce the student to the design, analysis, reengineering, optimisation and functional control of Manufacturing and Service operations, and to highlight the need for effective management of the constrained resources of operations systems. Through the course, the student will understand the organizational structure and the various components and functions of a Production or Service Operations System. They will practice basic analysis and problem-solving methods that are used by all kinds of organizations to understand and optimize operations.

The topics of the course cover the major business processes inherent in the operation systems, starting from operations strategy – showing the bigger picture of operations in a transforming global economy. Then the course delves into product, service and process design, forecasting, facility location and layout, procurement and inventory management, operations scheduling, and, finally, quality control. In summary, the course provides: a) an introductory overview of the major areas of operations management, b) an understanding of the practical and theoretical problems encountered in operations, and, c) practice of tools and techniques for effective operations management emphasizing both qualitative reflection and quantitative methods.

Mode of delivery (face-to-face, distance learning)
Face-to face teaching, individual work on cases and exercises.

Prerequisites and co-requisites
Fundamentals in quantitative methods. Fundamentals in management.

Recommended optional programme components
Simulation Game.
Video Tours of operations issues in companies and organizations.

Course contents
The topics included within the scope of Production and Operations Management (POM) are numerous and diverse. The following list provides the areas that will be covered within the course including recommended readings, which are available to the students through the AUEB Library and e-Library.

1. Introduction – Definitions
   • Course content and structure
   • Context and definitions of POM
Readings:

2. Operations Strategy and Lean Production
   - The strategic framework, illustration and deployment of operations strategies
   - "New" operations strategies – Agile Operations

   Readings:

3. Product, Service and Process Design and Development
   - Key concepts in product and service design
   - The product development process and project
   - Classifications of production process structures (product and process). Video

   Readings:

4. Facility Location
   - Factors affection location decisions
   - Locating a single facility

   Readings:
   - Article

5. Facility Layout
   - Layout types and performance
   - Product and process layout designs - models/algorithms
   - Application exercises in class

   Readings:
   - Article

6. Capacity Planning
   - Capacity strategies and tools
7. Forecasting
   - Basic forecasting methods
   - Application exercises in class
   **Readings:**

8. The Beer Game
   - Business game in class where students are practically familiarized with the problems of inventory control and management.
   **Readings (common to sessions 8-10):**

9. Production Planning and Inventory Control I
   - Deterministic models: Economic Order Quantity
   - Materials Requirements Planning (MRP)
   - Application exercises in class

10. Production Planning and Inventory Control II
    - Just-In-Time – KANBAN
    - Integrated exercise: Determining inventory strategy

11. Production Scheduling
    - Operations Scheduling and Monitoring
    - Application exercises in class
    **Readings:**
    - Article

12. Statistical Quality Control and Total Quality Management – TQM
    - Overview and introduction to Quality Management, Fundamental definitions
    - Basics of Statistic Process Control (SPC)
• Application exercises in class

Readings:

**Recommended or Required Reading**

Articles according to the above list.

**Planned learning activities and teaching methods**
Lectures, exercises in class, case assignments and readings, video illustrations and Business Game. Cases and readings are discussed in class, case assignments are also handed in written and can be part of formal assessment.

**Assessment methods and criteria**
  o Two case studies to accomplish in groups of two students (30% (2*15%) of final grade).
  o One individual reading note (10% of final grade).
  o Final individual written exam (60% of final grade).

The first case study "Disney" consists of various documents that assess the students' understanding of fundamental introductory aspects of operations management and operations strategy. Students are asked to reflect on how an entertainment company and especially entertainment parks take into account different operational and strategic changes, and how operations interact with other functions of the enterprise.

The second case study "Fitness Plus Part A" (Krajewski & Ritzman, 2005, p. 272) is a capacity analysis and planning case. Students are faced with the problem of a fitness center that operates a number of training areas all which have different demand and different capacity. Students should calculate capacity of each area as well as total capacity for the center, and suggest how capacity should be balanced and what moves the center should make in view of maximizing utilization and customer satisfaction. The case requires calculation, reflection and use of capacity notions such as peak and effective capacity, capacity cushions and break-even analysis.

The reading note will be accomplished on the basis of one of the suggested articles (above list) selected by each student. Students can also propose a topic of their own choice. A template for the reading note will be distributed separately.

The final exam lasts for three hours and is composed of two parts. The first assesses through short questions and mini-cases the understanding of fundamental operations
management concepts such as different operations paradigms (standardized and diversified mass production, lean production), product, service and process development concepts, procurement, location and layout issues, forecasting issues and quality management. The second part is based on problems and assesses the different quantitative aspects of the course focusing on inventory management, capacity planning and statistical process control. The above are indicative areas covered, each exam is tailored to the specific emphasis given in class and adapted to what was examined in the case studies.

2. Applied Software Engineering
Diomidis Spinellis
6 ECTS credits
Advanced level

Objective of the course (expected learning outcomes and competences to be acquired)
While most Information Systems and Computer Science courses traditionally deal with the development of new systems, in practice developers spend the largest part of their time in software life-cycle activities that follow the development phase. The objective of the course is to allow students to read and understand a system’s software elements (code, structure, architecture). Having followed this course, students should be able to intelligently decide on how existing systems will be maintained, setup design and evolution strategies for legacy code, and prescribe the use of refactoring for dealing with architectural mismatches and low-quality code. An innovative aspect of the course involves the use of Open Source Software (OSS) in course examples and exercises. Through the study of OSS students will be able to see how non-trivial applications like the Apache Web server, the Postgres Relational Database Management System, the Jakarta Java servlet container and the Cocoon framework are structured.

Prerequisites
Proficiency in programming and software development

Course contents
Course outline: Course Introduction; Code as Part of the Software Development Process; The Open Source Landscape; Tackling Large Projects; Version Control; Declarative Drawing; Build Management; Code-Reading Tools; General Purpose Tools; Performance Measurement and Management; Inspection and Testing; Coding Standards and Conventions; Documentation; Maintainability.

Recommended reading

**Mode of delivery**
Lectures, labwork, and coursework

**Assessment methods**
Coursework

**Language of instruction**
Greek & English

### 3. Algorithmic Operations Research

Christos Tarantilis  
6 ECTS credits  
Level: Advanced

**Learning Outcomes**
On completion of this course, students should be able to design and implement effective optimization methods for solving both complex (NP-hard) and realistic (i.e. large scale) size Operations Research (OR) applications.

**Mode of Delivery (face-to-face, distance learning)**
Full course, face to face

**Prerequisites and Co-requisites**
Students must be quite familiar with combinatorial optimization concepts, data structures & algorithms, and programming skills (C++, Java etc).

**Course Contents**
The course material includes the following thematic areas:
- Construction algorithms
- Greedy algorithms
- Local search and neighborhood structures
- Simulated Annealing
- Tabu Search

**Recommended or Required Reading**
Planned Learning Activities and Teaching Methods
Lectures and Labs

Assessment Methods Assessment Methods and Criteria
Project: 100%. The project deals with the design and implementation of optimization algorithms to solve a complex and large-scale combinatorial optimization problem.
1. Advertising and Communication Management
George Panigirakis
6 ECTS credits
Level: Advanced

Course Objective
The aim of this course is to examine the promotional function and the role of advertising for contemporary companies. The course focuses on the promotional elements in the marketing programs of domestic and foreign companies. Students will be introduced to the concept of integrated marketing communications (IMC) and consider how it evolves. Also, the course examines how various marketing and promotional elements must be coordinated to communicate effectively. Different IMC models are examined in addition with the steps in developing a marketing communication program.

Prerequisites
Two marketing courses, at least an introductory one.

Course Content
- Integrated marketing communication
- Setting communication objectives
- Advertising Planning & Decision Making
- Sales Promotion, Direct marketing & Personal Selling
- Public relations & Corporate Advertising
- Creative strategy
- Media Planning-Strategy & Tactics Media Evaluation
- Advertising Ethics
- Global Advertising
- Advertising and the law

Recommended Reading Material

Teaching Methods
Lectures, Case studies, Video & Multimedia materials

Assessment Methods
70% written assignment, 30% written exams

2. Financial Management
Course outline
This module examines various items in the area of Corporate Finance. For that reason it is divided into 2 major groups:
a) The first group includes the most important methods concerning Investment Appraisal.
b) The second group is concerned with Financing Decisions.

Reading Material
The required text for the course is:
- DRYDEN PRESS HARCOURT

Some highly recommended texts are the following:

Components of the Course
The major components of the course are the following:
- Introduction to Investment Appraisal
- Methods and Criteria of Investment Appraisal
- Net Cash Flow Analysis
- Investment Appraisal and Inflation
- Risk Analysis
- Capital Markets
- Bond and Share Valuations
- Cost of Capital
- Capital Structure
- Dividend Policy
- Portfolio Considerations

3. Business Policy and Strategy
Helen Salavou
6 ECTS credits

Communication with Lecturer
e-mail: esalav@auceb.gr
Tel: +30 210 8203 425
Rationale for the Course
This course will provide techniques to effectively manage the process of strategizing. The aim is to help students understand how to build a strategically responsive organization by tuning systems, structures and people to strategy, and how.

Brief Outline
Strategic management deals with the fundamental problems facing top managers:
1. How to analyze the external and internal environment of the company
2. How to direct the company into the future
3. How to make a strategic choice, given a number of alternative strategic options (choices include: in which areas should we diversify, in which products/services should we expand, how are we going to implement this expansion, are we going to acquire, merge, form an alliance with another business)
4. How to build and sustain competitive advantage
5. What type of structure, systems, and people does a company need to successfully implement a chosen strategy?
6. How to strategically respond in the global environment

Learning Objectives
As a result of taking this course, the student should be able to:
1. Conduct an environmental analysis of a given organization or industrial sector.
2. Conduct a competitor analysis.
3. Conduct a resources analysis and identify core competencies and the elements of a firm’s competitive advantage.
4. Identify and assess potential strategic choices.
5. Identify and evaluate strategic alternatives for development and select the most appropriate to implement.
6. Apply all the above in a real-world competitive setting.

Pre-requisite Knowledge
The knowledge acquired in previous courses attended (e.g. marketing, production management, human resources management, operational and financial management), will provide useful insights in better understanding the strategy course.

Textbook

How Will the Course Evolve
This is a teaching-reading course. You are going to attend 3-4 lectures (about 10 hours) and respond to 2 written assignments (see Appendix II).
How You Can Enroll in the Course
You can send an e-mail (esalav@aueb.gr) stating your full name and that you decided to take this course.

Evaluation
Your final grade will depend on the following:

<table>
<thead>
<tr>
<th>Quality of Written Reports to case studies</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Examination</td>
<td>40%</td>
</tr>
</tbody>
</table>

Exams will take place in the period between mid January-Mid February. Therefore students wishing to go back to their countries before or shortly after Christmas are advised not to take this course.

Final examination will be an open book based on a short case study and/or questions (i.e., multiple-choice).

Appendices
APPENDIX I. THE INSTRUCTOR
Helen Salavou holds a BSc in Business Administration, an MBA and a PhD from the Athens University of Economics and Business (AUEB). She is currently an Assistant Professor at the Department of Business Administration of AUEB and member of the laboratories of ‘business strategy’ and ‘strategy and entrepreneurship’ at the AUEB.

Her main research interests involve innovation, entrepreneurship and small business research. She has published in several international journals including: Journal of Business Research, European Journal of Marketing, European Business Review, Management Decision, European Journal of Innovation Management, Creativity and Innovation Management. She has authored a monograph, co-authored a monograph and published chapters in edited volumes. She has also presented her work in international conferences, such as EMAC (European Marketing Academy) and EIASM (European Institute for Advanced Studies in Management).

She has participated in various research projects both at a national and international level since 1997. She has also taught undergraduate and postgraduate courses, such as management, strategy and entrepreneurship at the AUEB, Agricultural University of Athens and Hellenic Management Association (EEDE). She also possesses consulting experience with public and private organizations in Greece.

Appendix II. Case Assignments
Regarding the case assignments you are required to:
   a. Read the material (case study) on your own and understand it.
   b. Read the relevant chapters from the book and/or additional material you may wish to find on your own.
   c. Link the questions (see below) to the textbook material and produce a short report responding to each of the questions posed (you will receive specific guidelines).
In addition, there are specific deadlines you have to meet (see Table 1).

**Table 1.Individual Assignments (See Appendix II)**

<table>
<thead>
<tr>
<th>Case Assignments</th>
<th>See Textbook</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. The New Corporation (2001)</td>
<td>Chapters 8,9,10,13</td>
</tr>
</tbody>
</table>

*Important Notes:*

All reports will be graded on a 1-10 scale (10 being the perfect mark). Delayed reports will not receive a grade.

Plagiarism is forbidden. Plagiarism is defined as using ‘a piece of writing that has been copied from someone else and is presented as being your own work’. Of course you are allowed to use any sources of data you want, cooperate with students working on the same assignment, however you have to present your arguments in your own words. Plagiarizing assignments will get a zero mark.


1. To what extent is Wal-Mart’s (WM) performance attributable to industry attractiveness and to what extent to competitive advantage?
2. Identify distinctive resources and capabilities in the internal environment of WM.
3. To what extent is WM’s competitive advantage sustainable? Why have other retailers had limited success in imitating WM’s strategy and duplicating its competitive advantage?

**Discussion Questions for Case Assignment 2: News Corporation (2001)**

1. Please identify the corporate-level strategies TNC implemented throughout the period 1980-2000.
2. Please evaluate how these strategies (see question 1) were associated with the SWOT analysis of TNC.
3. How did TNC corporate-level strategies add value at the business-level?
4. Please propose and evaluate two corporate-level strategies, which should be adopted by TNC for the period 2001-06.

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**4. Money and Capital Markets**

Konstandinos Kassimatis  
6 ECTS Credits  
Level: Advanced

**Course Outline**

Analysis of the nature and operations of modern money and capital markets. How the markets work and what instruments are used. The money markets, the bond markets, the equity markets and the derivatives markets are covered.

**Evaluation Methods**
Final written exam - 100% of overall assessment (late January or early February, according to the official exams time-table of the University).

**Reading Material**
- Brealey-Myers: Principles of Corporate Finance
- Bodie-Kane-Marcus: Investments (Irwin, 1996)
- Reilly-Brown: Investment Analysis and Portfolio Management (Dryden)
- Fabozzi F.J.: Bond Markets, Analysis and Strategies (Prentice Hall)
- Kolb R.W.: Futures, Options and Swaps (Blackwell, 1999)

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**5. Engineering Logistics**
Paraschos Maniatis
6 ECTS Credits

**Communication with Lecturer**
Paraschos Maniatis, Mobile Phone: 6942487212, E-mail address: pman@aueb.gr.

**Suggested Reading Material**


Articles and Material to be distributed

**Course Description**
An introduction to the operations aspects of logistics combined with an overview of Supply Chain Management. Topics will include purchasing, vendor relations, inventory strategies and control, warehousing, material handling, layout planning, packaging, and transportation, combined under supply chain management philosophy. The course will be taught through lectures, problem sets and case studies.

**Course Objectives**
To enable the student to describe, understand, analyse and recommend enhancements to the purchase, logistics and distribution functions within a manufacturing or service environment.

To provide the student with an overview of the larger issues associated with Supply Chain Management.

**Learning Outcomes**
Upon successful completion of this course, the student will be able to:
- Demonstrate systems thinking capacity in the logistics environment.
• Be able to provide input to, understand and take action on reports generated by the various functions associated with purchasing, logistics and distribution.
• Be able to generate and analyse simple reports in the areas of forecasting, purchasing, inventory management, transportation and warehousing.
• Be able to articulate a solid understanding of Supply Chain Management including vendor selection and vendor relations strategies and techniques.
• Be able to assemble, review and recommend action plans for complex logistics and Supply Chain Systems.

Course Methodology
We will be using a combination of lecture, case studies, class discussions, class exercises and student presentations to cover the required material.

Methods of Assessment
• Written test at the end of the semester  50%
• Written Answers to Case Studies in Electronic Form  30%
• Oral Presentation of the Case Studies  20% (Required)
• Class participation  10%

All class members will be graded on a curve based upon overall performance in the class. Late papers are not encouraged and will only be accepted with prior approval by the instructor. Grades will be affected by timeliness of the work.

Attendance Policy
Students are expected to attend all class sessions. Circumstances that prevent attendance will be honoured up to two instances. Absences in excess of three times may result in an incomplete grade for the course. Contact the instructor when a special situation arises. All absences require that the instructor be informed in advance.

Class Schedule

Week 1: Introduction, Course Overview, Logistics of the course
Week 2: Logistics Integration, Customer Service
Week 3: Supply Chain Relationships, Global Logistics
Week 4: Information Systems, Forecasting
Week 5: Inventory Strategy, Inventory Management
Week 6: Transportation Infrastructure, Transportation Regulation
Week 7: Transportation Management, Warehouse Management
Week 8: Material Handling, Packaging
Week 9: Layout Planning
Week 10: Logistics Positioning, Integration Theory
Week 11: Planning and Design Methodology, Planning and Design Techniques
Week 12: Organization, Planning, Costing and Pricing
Week 13: Case Studies Presentation

LAST DAY OF CLASSES JANUARY 16th, 2015 (presentation of the five case studies individually performed by the students)

EXAMINATION: 23d of January, 2015 (3-5 p.m)
To: Engineering Logistics Class
From: Paraschos Maniatis
Subject: Term paper evaluation criteria (each student has to perform 5 case studies taken from the list stated below and assigned by the instructor in the beginning of the semester)

The full text description of all the cases separately could be found in the e-class section in the website of the University under the name of the course "ENGINEERING LOGISTICS"

The case studies answers are an important part of the Logistics course requirements. Therefore, it is important that you think about your answers and its ground rules early in the semester.

The specific subject of the cases is expected to include several of the logistics topics discussed in class and in the book. The subject should be selected in terms of viability, significant issues to be addressed and what is required to implement the topic such as manpower, materials, packaging, inventory and so on. The subject should be selected by the instructor fitting one of personal interest to you, which will make the project far more enjoyable.

You should support your subject with clear references to experts within the field of choice. You are free to apply personal experience to the subject but it should be well supported with outside justification.

The length of the answers in no case will be less than the number of the words of the actual case given to you. This is why the cases are given to you in an electronic form, so that you’ll be able to word count them. Your answers will be returned in electronic form and must also include a bibliography of all reference material used in the formulation of the answers.

To: Engineering Logistics Class
From: Paraschos Maniatis
Subject: Oral Presentation

The oral presentation accounts for 20% of your final grade and therefore is a very important component of the required class work. The purpose here is to outline the expectations I have of you when giving your presentation. As, mostly, business school students, it is expected that you are able to think logically and communicate verbally in an accurate and succinct manner. One of the objectives of this oral presentation is to give you an opportunity to refine those skills. The ability to make straightforward and logical presentations is critical for your success. Although public speaking can cause a certain amount of stress, this environment is an opportunity conducive to honing these skills and must not be missed. It is also an opportunity for you to convince your fellow students how much you have learned in your study program to date. Your material should be thoroughly researched and presented in a convincing manner. After all, upon completion of this research, you are expected to be the expert in the subject matter. The structure of your presentation should be logical, easy to follow and relatively structured. Please view this as a learning opportunity versus a task that must be endured.

Oral Presentation Structure/Outline
The oral presentation is individually performed and should be a maximum of fifteen minutes in length. Each member will be responsible for his/her own answers of the presentation and should cover it thoroughly. Allow adequate time for a question and discussion session at the end of the presentation. Please try to stay within these time constraints.

**Panel Presentation Grading**
- Each student will earn his own grade, which will be based on the presentation itself and responses to questions and the impromptu discussion that follows.
- Is each individual clear, concise, accurate, logical and easy to understand?
- Is a fundamental understanding of the topic covered before diving into the more complicated issues surrounding the subject?
- Does the presentation flow not only for each individual but also from one presenter to another?
- Do the visual aids support what is being discussed at the time?

**A List of Case Studies**
1. Nittany Systems Electronics and Missiles Group
2. Macklin, Ltd.
3. No-Tell Computer Parts
4. Old British Fish “N” Chips, Ltd.
5. Athletic Corner
6. Peninsula Point, Inc.
7. Sea-Tac Distributing Company
8. Bellwether Corporation
9. OK Jeans
10. Trump Railcar Corporation
11. Consolidated Motors
13. Specialty Metals Company
14. Nittany Products
15. Radical Systems
16. Bart Dental
17. Roll Free Tire Company
18. Hanover Pharmaceuticals, Inc.
20. Savannah Steel Corporation
21. J & Roofing
22. Squire Auto Parts Company
23. Atlantic Pharmaceuticals (A)
24. Atlantic Pharmaceuticals (B)
25. Trexler Furniture manufacturing Company
26. Veltri Motors
27. Lippincott Computer
28. Veil Chemical
29. Minifix, Inc.

**SPRING SEMESTER**

1. International Marketing Management
Course Objective
This course offers students a practical understanding of the role of marketing in the achievements of corporate goals and the opportunity to gain an appreciation of the different applications of marketing in consumer, and industrial international markets. Also, it provides students with an understanding of both theory and practice of international and export marketing as well as with the ability to apply this understanding to real and simulated situations.

Prerequisites
Three marketing courses

Course Content
- International Trade.
- Overseas and European environments: cultural, political and economic.
- Information gathering and marketing information systems for international marketing decision-making.
- Methods of market entrance.
- International marketing mix. (Product, Price, Promotion, Place)
- Logistics, subsidiaries, agents, importers and intermediaries.
- Globalization

Recommended Reading Material
- Rugman & Hodgetts International Business 3rd ed. Prentice Hall

Teaching Methods
Lectures, Case studies, Video & Multimedia staff

Assessment Methods
70% written assignment, 30% written exams

2. Money and Capital Markets
Konstantinos Kassimatis
Level: Advanced
6 ECTS Credits

Course Outline
Analysis of the nature and operations of modern money and capital markets. How the markets work and what instruments are used. The money markets, the bond markets, the equity markets and the derivatives markets are covered.

**Evaluation Methods**
Final written exam - 100% of overall assessment (late January or early February, according to the official exams time-table of the University).

**Reading Material**
- Brealey-Myers: Principles of Corporate Finance
- Bodie-Kane-Marcus: Investments (Irwin, 1996)
- Reilly-Brown: Investment Analysis and Portfolio Management (Dryden)
- Fabozzi F.J.: Bond Markets, Analysis and Strategies (Prentice Hall)
- Kolb R.W.: Futures, Options and Swaps (Blackwell, 1999)

### 3. Financial Management
**Panagiotis Diamandis – Konstantinos Drakos**
6 ECTS credits
Level: Intermediate

**Course Outline**
This module examines various items in the area of Corporate Finance. For that reason it is divided into 2 major groups:
- The first group includes the most important methods concerning Investment Appraisal.
- The second group is concerned with Financing Decisions.

**Reading Material**
The required text for the course is:
- Brigham and Erhardt. Financial Management - Theory and Practice. DRYDEN PRESS HARCOURT

Some highly recommended texts are the following:

**Course Components**
The major components of the course are the following:
- Introduction to Investment Appraisal
- Methods and Criteria of Investment Appraisal
- Net Cash Flow Analysis
- Investment Appraisal and Inflation
- Risk Analysis
- Capital Markets
- Bond and Share Valuations
- Cost of Capital
- Capital Structure
- Dividend Policy
- Portfolio Considerations
1. Cost and Management Accounting
Seraina Anagnostopoulou
6 ECTS credits
Level: Intermediate progressing to advanced

Course Objectives – Content
The course is aimed at presenting the key cost and management accounting concepts, used for managerial and business decisions. By the time they complete the course, students should be able to understand the use of internal accounting information -related to costs- to support managerial decisions and facilitate the implementation of business strategy. They should also be able to apply these concepts in relevant case studies or real world examples.

The key concepts that will be analysed include:
- The accountant's role in the organisation
- Cost terms and purposes
- Job costing systems, process costing systems
- Cost allocation, cost-volume-profit relationships
- Determining how costs behave, relevant Information for decision making
- Activity-based costing
- Pricing, target costing
- Budgeting, motivation, and responsibility accounting
- Control systems and transfer pricing
- Control systems and performance measurement

Recommended Reading

Related Reading

Teaching Method
Weekly lectures

Assessment Methods
Final written examination

2. Financial Statement Analysis
Course Content
This course introduces and develops a framework for business analysis and valuation using financial statement data. Four key components of effective financial statement analysis are discussed:

- Business Strategy Analysis
- Accounting Analysis
- Financial Analysis
- Prospective Analysis

Cases are used in course projects and will be assigned to student teams.

Recommended Reading Material
Business Analysis and Valuation, By Palepu, Healy and Bernard

SPRING SEMESTER

1. Derivative Markets
Leonidas Rompolis
6 ECTS credits
Level: Undergraduate/Advanced

Contact Information
Days: Wednesday
Hours: 9.00-12.00 AM
Office hours: 12 Derigni str, 2nd floor, office No 2
Email: rompolis@aueb.gr
Office hours: Tuesday 12.00 – 14.00

Course Content
The course studies the pricing and use of derivative securities (forward/futures contracts, swaps and options), i.e., financial instruments whose value depends on the price of other basic underlying variables (such as stock prices, indices, foreign currencies, interest rates or commodities). The no-arbitrage pricing principle and its use in pricing forward, futures and swap contracts and in deriving option pricing restrictions is first developed together with the Binomial-tree valuation approach and the Black-Scholes option-pricing model. Then, various extensions of the theoretical option models (adjusted for dividends and early exercise) are presented and various applications are provided, in the pricing of options on stock indices, currencies, or futures and in the risk management (e.g., hedging stock market, foreign currency and interest-rate risk exposure)
**Course Objectives**
The course studies the pricing and use of derivative securities (forward/futures contracts, swaps and options), i.e., financial instruments whose value depends on the price of other basic underlying variables (such as stock prices, indices, foreign currencies, interest rates or commodities). The no-arbitrage pricing principle and its use in pricing forward, futures and swap contracts and in deriving option pricing restrictions is first developed together with the Binomial-tree valuation approach and the Black-Scholes option-pricing model. Then, various extensions of the theoretical option models (adjusted for dividends and early exercise) are presented and various applications are provided, in the pricing of options on stock indices, currencies, or futures and in the risk management (e.g., hedging stock market, foreign currency and interest-rate risk exposure).

**Bibliography**

**Class Notes** Class Notes in the web page: [http://eclass.aueb.gr/](http://eclass.aueb.gr/)


**Grading** Problem sets 20%
Exam 80%2

**Week Topics covered**

2 **Chapter 1: Introduction – Institutional Structure**
- Derivative markets
- Forward and futures contracts
- Option contracts
- The use of derivatives
- The operation of the futures markets

Readings: Notes, book (ch. 1, 2).

3 – 4 **Chapter 2: Pricing Forward/Futures Contracts**
- Short – selling and compounding
- Pricing forward/futures contracts
- Synthesis of forward/futures contracts
- Forward/futures contracts on stock indices
- Forward/futures contracts on currencies
- Forward price and expected asset price

Readings: Notes, book (ch. 5), Mc Donald (ch. 5).

4 – 5 **Chapter 3: Forward/Futures Contracts on Commodities**
- Pricing forward/futures contracts on commodities
- The lease rate
- The storage cost
- Examples of forwards/futures contracts on commodities
Readings: Notes, book (ch. 5), Mc Donald (ch. 6).

6 Chapter 4: Hedging Strategies
- Basic strategies
- Basis risk
- Cross hedging

Readings: Notes, book (ch. 3).

7 Chapter 5: Swaps
- Swaps on commodities
- Swaps on interest rates
- Swaps on currencies

Readings: Notes, book (ch. 7), Mc Donald (ch. 8).

8 Chapter 6: Introduction to Options
- Types of options and factors affecting their prices
- Properties of option prices
- Trading strategies involving options

Readings: Notes, book (ch. 8, 9, 10), Mc Donald (ch. 3, 9).

9 – 10 Chapter 7: Binomial Trees
- Pricing European-type option contracts
- Pricing American-type option contracts

Readings: Notes, book (ch. 11), Mc Donald (ch. 10, 11).

10 – 11 Chapter 8: The Black-Scholes Model
- The probability distribution of the underlying asset price
- Risk-neutral valuation
- The Black-Scholes formula
- Implied volatility

Readings: Notes, book (ch. 13), Mc Donald (ch. 12).

12 Chapter 9: Applications of the Black-Scholes Model
- Options on stocks/indices paying dividends
- Options on currencies
- Options on futures contracts

Readings: Notes, book (ch. 15, 16), Mc Donald (ch. 12).

13 Chapter 10: The Greeks Letters
- Definition of the greeks
- Delta hedging
- The Black-Scholes analysis
- Gamma hedging
Notes, book (ch. 17), Mc Donald (ch. 12).

Final exam

2. Computational Finance and Econometrics
Stylianos BEKIROS
6 ECTS credits
Level: Advanced

Contact Information
E-mail: bekiros@aueb.gr

Course content
The aim of this course is to provide the student with knowledge of modern computational/econometric techniques in estimating and forecasting financial asset returns and risk (volatility). The course discusses topics such as regression, heteroscedasticity and autocorrelation, ARMA/ARIMA modeling, VAR modeling, cointegration and error correction, causality, ARCH and GARCH models, state space methods, Monte Carlo simulations, principal components analysis, machine learning, Value-at-Risk, portfolio risk measurement, trading strategies etc. It emphasizes intuition and problem solving skills rather than formality. The course familiarizes the student with financial databases and econometric software.

Prerequisites/Curriculum Position
Courses in Financial Econometrics or Quantitative Methods in Economics and Finance at comparable level. Students should also have computing skills.

Format
This is a reading course. You are going to attend 3-4 long lectures and respond to individual and/or team assignment(s).

Assessment
Mid-term and final Individual/team assignment(s) with class presentation sessions, and/or a final exam.

Course material
- Academic papers
1. Marketing of Financial Services
Paulina Papastathopoulou
6 ECTS credits
Level: Advanced

Contact Information
Office: AUEB, 76 Patission, main building, Antoniadou wing (5th floor)
Tel.: 210 8203122
Email: paulinapapas@aueb.gr

Feel free to send me an e-mail with any questions about the course or if you want to arrange an appointment.

Course Objective
The main objective of this course is to adapt well known services marketing concepts into the financial services sector. It will help students to learn, develop, manage market and eliminate financial products in an effective and efficient manner in terms of satisfying the customer’s needs and meet corporate objectives.

Course Description
This course is designed to explore and further your understanding of marketing principles in the financial services field. To assess a sound market presence, position, and appropriate target markets for financial services. To develop skills that allows continuous learning and adaptation to this dynamic competitive environment. The following learning outcomes are specifically associated with this course, and they pertain to the topics and concepts that follow.

Learning Outcomes
1. Understand key terms and concepts in marketing of financial services.
2. Understand and apply marketing concepts to real life situations from consumer and managerial perspectives.

Topics and Concepts
1. Introduction to Financial Services Marketing
   ▪ Providers and customers
   ▪ Characteristics
   ▪ Challenges
   ▪ Quickly changing marketing Environment
   ▪ Categories of Financial Products
2. Segmenting, Targeting and Positioning
   - Definitions
   - Strategic benefits
   - Steps and others

3. The Marketing Mix of Financial Services
   Product/Service
   - Main related concepts
   - Branding
   - New Service Development
   - Product life cycle
   - Service elimination

Pricing
   - Main related concepts
   - Pricing Process

Distribution
   - Strategic Role
   - Alternative Distribution Channels

Promotion
   - Strategic Role
   - Alternative Promotion Tools

People
Process
Physical evidence

**Pedagogical Approach**
This course will use a combination of pedagogical approaches, including lectures, discussions, group Internet assignments and case study analysis. The objective of the lectures, discussions and Internet assignments is to better capture the related concepts and theories. Cases are designed to foster teamwork, to enhance the realism of the learning experience and to sharpen the decision-making skills of students.

The course material for the lectures is in the form of Powerpoint slides available in four different pdf files in the course webpage (e-class platform -> sign up -> course webpage -> Active tools -> Documents). Also, any course announcements will be posted on this webpage.

**Attendance, Class Participation, Group Internet Assignments and Case Studies**

It is imperative that students attend each and every class. Student class presence record will be kept at the beginning of each class session. Absences, excused or not, do not absolve the student from the responsibility for the work done or for any announcement made in his/her absence. Active positive participation is encouraged. Disruptive behavior such as arriving late to class or distracting students sitting around you is viewed as unacceptable negative participation.
Students have to prepare and present in class (Powerpoint slides only) three (3) group Internet assignments which require searching and compiling practical information from Internet. These assignments revolve around the topics of Segmentation, Positioning and Branding respectively.

Students will also have to work in groups to answer questions and present them in class (Powerpoint slides only) regarding two (2) case studies combining various topics of the Marketing of Financial Services.

The number of students in each group will depend on the final number of students attending the course. Usually, groups comprise 3-4 students. Students will have a deadline of one to two weeks, depending on the level of difficulty, to submit the assignments. No late submissions will be accepted.

**Student Evaluation**
The course grade will be based on the group Internet assignments, case study analysis, class attendance/participation and a final exam. The final grade will be determined using the following weights:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>60%</td>
</tr>
<tr>
<td>Group Internet Assignments &amp; Case studies</td>
<td>30%</td>
</tr>
<tr>
<td>Class Attendance/Participation</td>
<td>10%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

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**2. E-business Technology and Development**
Eleanna Kafeza
6 ECTS credits
Level: Intermediate

**Course Objectives** *(expected learning outcomes and competences to be acquired)*
The objective of the course is to examine the use of information systems technologies in e-business. It starts with an introduction to the world of e-business, and continues with the fundamentals of Web-based applications and collaboration environments. It describes the transformation from a traditional business to e-business. The students will learn how enterprises collaborate on the web and what coordination mechanisms are necessary to achieve electronic communication. Social and legal factors that influence e-business communication will be discussed.

**Course Content**
- The world of e-business
- e-Business models and business processes
- e-business and web technologies
- e-markets
- e-procurement
- e-business networks, trust and collaboration
- e-business: social and legal issues

**Recommended Reading Material**
- Communications of the ACM

**Teaching Methods**
Lectures, case studies

**Assessment Methods**
A two hour written exam (70%) and one project (30%)

3. Entrepreneurship and SMEs
Eleanna Galanaki
6 ECTS credits
Level: Intermediate

**Course Content**
This course provides students with economical, cultural, political, sociological, and psychological perspectives on the creation and evolution of entrepreneurial ventures. It helps students gain an understanding of the business principles necessary to start and operate a business. The students develop an awareness of the opportunities for small business ownership, as well as the planning skills needed to open a small business. Students will explore the traits and characteristics of successful entrepreneurs. They will learn strategies of business management and marketing and the economic role of the entrepreneur in the market system.

Entrepreneurship is designed for students enrolled in marketing, business, and/or other courses who have an interest in developing the skills, attitudes, and knowledge necessary for successful entrepreneurs.

**Course Outline**
(Please note that there may be changes in the order of the following units)

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1:</td>
<td>Introduction to the course, The concept of entrepreneurship</td>
</tr>
<tr>
<td>Week 2:</td>
<td>The concept of Intrepreneurship (Corporate entrepreneurship, The entrepreneurial perspective in individuals</td>
</tr>
<tr>
<td>Week 3:</td>
<td>Creativity and Innovation, SMEs and economy</td>
</tr>
</tbody>
</table>
Week 4: New Ventures: Environmental Assessment, Forms of Ownership and Legal Issues for new Business Ventures

Week 5: New Ventures (contd.): Franchising, Buying an existing business

Week 6: New Ventures (contd.): Sources of Capital, Developing and writing an effective business plan

Week 8: New Ventures (contd.): Developing and writing an effective business plan (contd.)

Week 9: Managing Entrepreneurial Growth, Family Businesses and Management Succession

Week 10: Managing People in a SME (staffing and leading)

Course Objectives

Upon successful completion of this course, the student will be able to:

- Define the role of the entrepreneur in business.
- Describe the entrepreneurial profile and evaluate your potential as an entrepreneur.
- Describe the benefits and drawbacks of entrepreneurship.
- Explain the forces that are driving the growth of entrepreneurship.
- Describe the important role small businesses play in the economy.
- Describe the causes of small business failures and explain how small business owners can avoid them.
- Understand how to identify a company’s SWOT - strengths, weaknesses, opportunities, and threats.
- Explain the advantages and the disadvantages of the three major forms of ownership: the sole proprietorship, the partnership, and the corporation.
- Describe the protection that patents, trademarks, and copyrights offer business owners.
- Describe the seven principal strategies small businesses have for going global: relying on trade intermediaries, joint ventures, foreign licensing, international franchising, counter-trading and bartering, exporting, and establishing international locations.
- Understand the advantages and disadvantages of buying an existing business.
- Explain the process of evaluating an existing business.
- Explain why every entrepreneur should create a business plan.
- Describe the elements of a solid business plan.
- Understand the keys to making an effective business plan presentation.
- Describe the differences between equity capital and debt capital and the advantages and disadvantages of each.
- Explain how to build the kind of company culture and structure which supports the entrepreneur’s mission and goals and motivates employees to achieve them.
- Discuss the ways in which entrepreneurs can motivate their workers to higher levels of performance.
- Explain the challenges involved in the entrepreneur’s role as leader and what it takes to be a successful leader.
- Describe the importance of hiring the right employees and how to avoid making hiring mistakes.
Teaching Method
The delivery of this module will involve formal presentations and classroom discussions in conjunction with case studies, individual and group exercises.

Method of Assessment
The assessment for this course will comprise:
- Written Exams 60%
- Group Assignment 20%
- Oral presentation 20%

Examination
The examination is designed to test that students understand the issues covered during the course lectures. The exam paper includes questions which require short answers and covers the whole range of taught units.

Assignment
The coursework of this module is a group report of 2.000-2.500 words and a presentation of it to the rest of the class.

The format and the content of the assignment are to be explained further in the first lecture.

Recommended Reading Material

Leda Panayiotopoulou
6 ECTS credits
Level: Intermediate

Contact Information
Office: Derigny 12, 7th floor
Tel. 210-8203473
E-mail: ledapan@aueb.gr

Course Objectives
This course aims at familiarizing students with the theoretical background of Human Resource Management. The subjects covered throughout the lectures will introduce students to the current way of managing employees in modern organizations. More specifically, after the completion of the course, the participants will be able to understand:
- The important role of HRM in supporting organizational strategy in the modern firm.
- HRM practices and current trends.

**Course Outline**
The following chapters will be covered:
- Ch. 1: Introduction to HRM
- Ch. 2: HR Planning
- Ch. 4: Recruitment
- Ch. 5: Selection
- Ch. 8: Performance Management
- Ch. 9: Rewarding Employees
- Ch. 10: Learning and Development
- Ch. 12: International Perspective

**Teaching Method**
- Interactive lecture enriched with case studies and group discussions, based on the main textbook.

**Assessment of the Course**
- Class participation → Students with more than 3 absences from the lectures will fail the course, as they will not be allowed to participate to the exam.
- Group assignment → 30% (15% presentation & 15% written assignment).
- Written exam → 60%

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### 5. Consumer Behavior
Kalipso Karantinou
6 ECTS Credits
Level: Advanced

**Contact Information**
E-mail: kkarantinou@aeub.gr

**Course Objectives**
Understanding consumer behaviour is critical for marketing. The study of consumption focuses on search, choice, acquisition and consumption activities and on how possessions influence the way we feel about ourselves and about each other. It is concerned with a variety of consumer buying and having behaviours, which most of us experience. The course analyzes these experiences, using consumer behaviour theory, and provides application of theory and concepts via practical examples. The aim is to provide students with an understanding of the process and nature of consumer behaviour, to acquaint them with the factors which influence consumer behaviour at different stages of the
consumption process, and to contextualize this understanding of consumer behaviour within marketing, so as to enable them to appreciate how a solid understanding of the intricacies of consumer behaviour paves the way for optimum marketing practices.

**Learning Outcomes**

At the end of the course students should have developed a comprehensive understanding of the omnipresence, the process and the nature of consumer behaviour. They should be able to identify and assess the various psychological, economic and sociological factors that influence consumer behaviour at different stages of the consumption process and comprehend how consumer behaviour can be understood and explained by the underpinning disciplines of psychology and social psychology. They should be able to discuss and criticize the assumptions which underlie the consumer behaviour theories and appreciate the links between consumer behaviour and practice and marketing theory and practice.

**Syllabus Outline**

- Models of consumer decision-making
- Pre- and Post-purchase processes: searching, shopping, buying, evaluating and disposing
- Consumers as individuals: what motivates them to buy and how cognitive processes operate
- Social and cultural influences on consumer behaviour: group influences, lifestyle and culture
- Perceived risk: types of perceived risk and implications on consumer behaviour
- Adoption of, resistance to, and diffusion of innovations
- Nudges: subtle but powerful influencers of people’s decisions and choices
- Self concept and self-monitoring
- Images in advertising and social comparison theory
- Symbolic consumption and the meaning of possessions
- Consumerism and public policy issues

**Teaching and Learning Methods and Style**

Sessions will combine lecture style delivery with case studies, practical examples and extensive discussions. Student participation is particularly encouraged and facilitated. Case studies will be provided every week to facilitate understanding of the practical relevance of theoretical concepts and students will be asked to work on them individually or in groups.

**Recommended Reading Material**

Students will be given further readings on each lecture, illustrating the discussed concepts and their applications.

**Assessment**
Assessment will be by a combination of:
- Examination (40%),
- Evaluation of the frequency and quality of participation (20%), and
- A term project (40%).

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**6. Global Marketing**
Dionysis Skarmeas
6 ECTS credits
Level: Advanced

**Contact Details**
E-mail: dskarmeas@aueb.gr

**Objectives**
On completion of this module students will be able to:
- exhibit an appreciation of the issues and complexities facing business when moving into global markets;
- apply techniques for the analysis of environmental and competitive forces in a global setting;
- demonstrate an understanding of globalization and the internationalization process of a firm and how they impact on market(s) and entry mode(s) selection;
- show an appreciation of the value of global market intelligence, key data sources and issues of consistency in internationally published data;
- exhibit an appreciation of the importance of understanding different international culture traits, noting the implication for business;
- critically appraise the relevance of key academic literature within global marketing;
- exhibit high quality written and oral communication skills.

**Course Outline**
- Globalization
- Internationalization Process
- Global Marketing Environment
- Global Market Segmentation
- Global Market Selection
- Global Marketing Mix Strategy
- Case studies in Global Marketing

**Assessment Methods**
Individual (3,000 words) or group (5,000 words) assignment (70% written report, 30% presentation)
Reading List

Core reading:

Supplementary reading:

7. Sales Management
Evagelia Katsikea
6 ECTS credits

Contact Details
E-mail: ekt@aueb.gr

Course Objectives
This course concentrates on personal selling and sales management issues. Personal selling is considered as the most effective communication tool, especially in the B2B markets. Personal selling is defined as personal communication with an audience through paid personnel of an organization or its agents in such a way that the audience perceives the communicator’s organization as being the source of the message. Sales management is the management of the personal selling function and sales managers are involved in both the strategy and planning of personal selling as well as evaluating and controlling all personal selling activities. At the end of this course participants will have a sound understanding of the major aspects of personal selling and sales management. Moreover, the aim of this course is to encourage and stimulate critical thinking through the analysis and discussion of up-to-date case studies. Through detailed case study analysis, participants will develop a disciplined approach to personal selling and sales management issues.

Readings
The main readings for this course will be taken from:

Student Teams
Teamwork will be an important aspect of student assessment in this course. You are therefore required to develop groups of 3-5 students by the end of the second class section.

Course Requirements & Student Assessment
- **Project 30%**. Each student group will be required to participate in a group project. Specific guidelines regarding the development of the project will be provided
during the first lecture. Moreover, each team of students will be required to make a presentation of this work.

- **Final Examination 70%**. There will be a final examination that will cover the material delivered in the course. Details and advice regarding the final examination will be provided during the course.

**Course Schedule**

- Session 1. Introduction to sales management.
- Session 2. Salesforce strategic role
- Session 3. Territory management
- Session 4. Salesforce structure
- Session 5. Salesperson recruiting & selection
- Session 6. Leading a salesforce
- Session 7. Salesforce motivation
- Session 8. Compensating the salesforce
- Session 9. Salesperson performance evaluation

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**8. Strategic Marketing Management**
Evaghelia Katsikea
6 ECTS credits

**Contact Details**
E-mail: ekt@aueb.gr

**Course Objectives**

This course synthesizes a wide range of marketing concepts in order to optimize firm strategy and profitability. It includes issues such as the formulation, evaluation and implementation of a marketing strategy and it also focuses to sources of competitive advantage. It is a comprehensive course and consists of lectures, interactive sessions, selected case studies and a comprehensive assignment which synthesizes concepts of both the marketing and the strategic management areas. At the end of this course participants will have a sound understanding of the major priorities affecting the marketing strategy planning and implementation process and will be able to develop effective marketing plans. Moreover, the aim of this course is to encourage and stimulate individual thinking through the analysis and discussion of up-to-date case studies. Through detailed case study analysis, participants will develop a disciplined approach to problem formulation and strategic analysis.

**Readings**
The main readings for this course will be taken from:

Student Teams
Teamwork will be an important aspect of student assessment in this course. You are therefore required to develop groups of 3-5 students by the end of the second class section.

Course Requirements & Student Assessment
- Project 30%. Each student group will be required to develop a marketing plan. Specific guidelines regarding the development of the project will be provided during the first lecture. Moreover, each team of students will be required to make a presentation of this work.
- Final Examination 70%. There will be a final examination that will cover the material delivered in the course. Details and advice regarding the final examination will be provided during the course.

Course Schedule
Session 1  Foundations of strategic marketing management. What is strategy and the strategic management process. Strategic resources and capabilities. Marketing Plan.
Session 2  Business level strategies. Marketing decision making and case analysis.  
**Case:** The World’s Lowest Cost Airline
Session 3  Opportunity analysis, market segmentation and market targeting  
**Case:** Dr. Pepper Snapple Group, Inc.: Energy Beverages
Session 4  Product and service strategy and brand management  
**Case:** Procter & Gamble, Inc.: Scope
Session 5  Integrated marketing communication. Strategy and management  
**Case:** Cadbury Beverages, Inc.: Crush Brand
Session 6  Marketing channel strategy and management  
**Case:** Cardon Carpet Mills, Inc.
Session 7  Pricing strategy and management  
**Case:** Southwest Airlines
Session 8  Marketing strategy reformulation  
**Case:** Goodyear tire and rubber company
Session 9  Global marketing strategy  
**Case:** Chevrolet Europe

9. Retail Sales Promotions
Paris Argouslidis
6 ECTS credits

Course Description and Content
The present course includes 26 2-hour lectures on sales promotions in the sector of retailing. Such promotions can be initiated by manufacturers of consumer products, by retailers or by both of them. The topics to be covered are as follows:
- General principals of retail sales promotions.
• Alternative methods of retail promotions (e.g., price discounts; bonus packs; price bundling; multiple unit pricing; simple coupons; cross-coupons; samples; reward schemes.
• General conditions leading to retail sales promotion campaigns.
• Design and implementation of retail sales promotion campaigns.
• Issues relating to a product’s post-promotion period (e.g. what should manufacturers and retailers expect by the end of a product’s promotional period?).

Course Delivery
Lectures will be based on findings from empirical research published in premier journal outlets, on practical examples and on illustrations of sales promotion programs in retail stores. During lectures students will be asked to actively participate in the discussion. Students will get electronic access to the theoretical material that will be covered during lectures. Specifically, before each lecture the corresponding slides will be uploaded on e-class and students will have register in order to get access and print them out. It is important to note, however, that class attendance is particularly important because it will include additional material (e.g. cases studies, visual illustrations) that will not appear on e-class.

Course Assessment
The course will be evaluated as follows.

First, students will be asked to deliver a power point presentation regarding the design and the implementation of a retail sales promotion campaign. Depending on class size, the assignment will be a group or an individual one (weigh: 30% of the final mark).

Second, students will sit a written exam in the examination period of January-February 2015 (weigh: 70% of the final mark).

Key Benefits
Students attending this course will likely get a job with a manufacturer of consumer goods (e.g. grocery or durables) or with a domestic or global retailer. It is, therefore, of particular importance to acquire knowledge about retail sales promotion techniques. By combining empirical evidence with practical illustrations and case studies, this course aims at offering students a thorough understanding of the nature, content and context of retail sales promotions. In particular, by completion of the course, students will be able to know:

1. general principals of sales promotions,
2. alternative methods of sales promotions,
3. conditions justifying a sales promotions campaign,
4. issues relating to the design, implementation, and post-promotion evaluation of sales promotion campaigns,
5. price promotions for perishable grocery products,
6. price promotions for more highly-priced durable products.

Key References


SPRING SEMESTER

1. Marketing of Services
Kalypso Karantinou
6 ECTS credits
Level: Advanced

Contact Information
E-mail: kkarantinou@aueb.gr

Course Objectives
The service sector is the dominant driving economic force worldwide and marketing and management practices in this field are evolving rapidly. There is as a result an increasing academic and business interest in the service sector, where the manufacturing-based models of business and marketing practice are not always useful, relevant and appropriate. Service organizations differ in many important respects, posing a number of interesting challenges to managers, and thus requiring a distinctive approach to the development of marketing strategies. This course aims to provide the students with an extensive understanding of the distinguishing characteristics of services and their implications, and to acquaint students with services marketing theories, models, applications, and best practices, as ways to deal effectively with the unique challenges in services.

Learning Outcomes
At the end of the course students should have developed a comprehensive understanding of the distinguishing characteristics of services, an appreciation of their multifaceted implications, and a resulting insight into the challenges of managing and marketing services. They should be able to identify optimal strategies for services and know how to implement them.

Tsiros M. and Hardesty D. M. (2010), 'Ending a price promotion: retracting it on one step or phasing it out gradually', *Journal of Marketing*, 74 (January), pp. 49-64.
Course Content
- The Uniqueness and Characteristics of Services
- Managerial Implications and Challenges in Marketing Services
- Service Quality - Customer Care - Service Excellence
- Service Failure - Service Recovery
- Service Positioning and Branding
- New Service Development
- Moments of Truth in Services
- The Role of People in Services
- Physical Evidence and Servicescapes
- Using Process as a Distinguishing Advantage in Services
- Handling Distribution in Services
- Communicating an Offering the Customer Cannot See
- Pricing for Optimal Yield and Demand Management
- Loyalty and Relationship Development in Services
- Sector-Specific Analysis: Hospitality and Tourism Services
- Sector-Specific Analysis: Professional Services
- Sector-Specific Analysis: Private Banking
- Sector-Specific Analysis: Consulting Services

Teaching and Learning Methods and Style
Sessions will combine lecture style delivery with case studies, practical examples and extensive discussions of the application of theories in a variety of different sectors and situations. Student participation is particularly encouraged and facilitated. Case studies will be provided every week to facilitate understanding of the practical relevance of theoretical concepts and students will be asked to work on them individually or in groups.

Recommended Reading Material

Additional readings and case studies will be provided every week in the class.

Assessment
Assessment will be by a combination of:
- Examination (40%),
- Evaluation of the frequency and quality of participation (20%), and
- A term project (40%).
1. Examination (40% of the overall course mark)
Students should combine theory with practical examples in their answers to the exam questions. They should demonstrate in-depth understanding and analytical ability.

2. Participation (20% of the overall course mark)
Class participation is encouraged and sought. All students are expected to actively participate in class discussions by asking and answering questions and by offering ideas and examples.

3. Term Project (40% of the overall course mark)
Students, in addition to submitting the written report for assessment (length: 3,000-4,000 words) should be prepared to present their results in class. Students are expected to work in pairs for this assignment.

2. Change Management
Maria Vakola
6 ECTS credits
Level: Advanced

Contact Information
E-mail: mvakola@aueb.gr
Tel: 210-8203 177

General Aim and Rationale
The concept of change is not a new one. Indeed change has always been recognised as necessary and inherent to all aspects of life. However the last decade has, for most organisations, been a time of totally unprecedented and seemingly ever accelerating change so that the phrase "change or die" has increasing resonance. Coping with change has become another element in organisations' battle to compete, thereby focusing attention on the need to manage change effectively. The aim of this reading course is to provide an understanding of the change management process and to present a framework for managing change in order for the participants to further explore advanced issues related to change management such as leadership, resistance to change, communication in a change context etc.

Course Objectives
On successfully completing the module, participants will be able to do the following.

- Present a clear view of the theory and practice of managing change.
- Demonstrate an understanding of the choices and dilemmas facing organisations.
- Explain the nature and history of the theories, approaches and beliefs available to guide their action, in order to make informed choices when instigating and implementing change.
Demonstrate a practical understanding of organizational change, of the approaches to change and the methods of identifying, planning and implementing change.

**Methodology**
The course is based on meetings with the instructor. Please find below a detailed description of these scheduled meetings.

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<thead>
<tr>
<th>Lectures</th>
<th>CONTENT</th>
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</thead>
<tbody>
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<td>1</td>
<td>Introduction to the course</td>
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<td>2</td>
<td>Introduction to change management</td>
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<td>2</td>
<td>Selecting change agents</td>
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<td>3</td>
<td>Culture change</td>
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<td>4</td>
<td>Culture change</td>
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<td>5</td>
<td>The role of culture in mergers and acquisitions</td>
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<td>6</td>
<td>Resistance to change</td>
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<td>7</td>
<td>Resistance to change</td>
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<tr>
<td>8</td>
<td>The role of HR in change</td>
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<td>9</td>
<td>Communication and change</td>
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<tr>
<td>10</td>
<td>Group presentations</td>
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</tbody>
</table>

**Assessment**
Course assessment is based on a group assignment and a group presentation:

**Group report:** In a group of 5-7 people, you try to explore a major change that took place in a European country. The aim is to collect information in order to write a case study of a major change presenting its main phases, ways of change implementation, main obstacles etc. This case study has to be up to 20-25 pages and you will submit it on 12th of May 2011. This report counts for the 70% of your total mark.

**Group presentation:** You need to present to our group you main findings in a 10 minute presentation. This presentation will take place on the 12th of May and counts for the 30% of your total mark. More information will be given in the first lecture.

**Reading**
Change is a broad subject and therefore students need to invest on searching and collecting materials from the library. Please find below some useful papers on various issues of change management.


Some journal titles that will be useful to your search are the following:
- Academy of Management Journal
- Academy of Management Review
- British Journal of Management
- Employee Relations
- European Journal of Work and Organisational Psychology
- Human Relations
- Human Resource Management
- International Journal of Human Resource Management
- International Journal of Selection and Assessment
- Journal of Applied Psychology
- Journal of Managerial Psychology
- Journal of Organisational Behaviour
- Journal of Organizational Change Management
- Journal of Occupational and Organisational Psychology
- Journal of Vocational Behaviour
- Personnel Management
- Personnel Psychology
- Personnel Review

3. Cross-Cultural Communication
Helen Apospori
6 ECTS credits
Level: Advanced

Course Aim
The overall aim of this course is to educate students so that they get basic competences in cross-cultural communication in general and in organizational environment in particular.

**Course Content**
Topics that will be covered:

1. **Introduction to Communication**

**Aim**
To analyse various approaches to and concepts of communication in order to become clear the complexity and multi-dimensionality of communication and its mechanisms

1.1 Basic Concepts
- Problems in Communication
- Noise in Communication
- Communication – Semiotics

1.2 The Five Rules of Communication
1.3 Definition of Cross – Cultural Communication

2. **Theories of Cross Cultural Communication**

**Aim**
To study
- How traits and states affect the nature and effectiveness of cross cultural communication.
- Theories concerned with the cognitive and affective responses of individuals in intercultural communication.
- Theories concerned with intercultural interactive behaviour.
  - 2.1 Definitions and Concepts
  - 2.2 States, Traits, Styles and Situations
  - 2.3 Communication Resourcefulness
  - 2.4 Episode Representation Theory
  - 2.5 Constructivist Approach
  - 2.6 Expectations Theories
  - 2.7 Anxiety/ Uncertainty Management Theory
  - 2.8 Cultural Identity Negotiation Theory
  - 2.9 Communication Accommodation Theory
  - 2.10 Ellingsworth’s Adaptation Theory
  - 2.11 Network Theory
  - 2.12 Intercultural Communication Effectiveness

3. **Organizational Culture**

**Aim**
- To define and analyse the concept of organizational culture.
- To examine the role of organizational culture in the organization.
- To look at when and why understanding the organizational culture is important for the manager.
3.1 Introduction
3.2 Organizational Culture as Tool of Management

4. Diversity Management

Aim:
To study
- The concept and dimensions of diversity
- Changes that lead to diversity
- Models of diversity management
- Strategies of diversity management
- Obstacles in diversity management
- Benefits and costs of diversity
- The role of Human Resource Management in diversity
  4.1 Introduction: Concept and Dimensions of Diversity
  4.2 Changes That Lead to Diversity
  4.3 Models of Diversity Management
  4.4 Diversity Management Practices
  4.5 Obstacles
  4.6 Benefits
  4.7 Costs
  4.8 HR and Diversity Management

Evaluation Methods
Students Evaluation will be based on:
- Quizzes/ exams 30%
- Term papers 40%
- Presentations 30%

Indicative Reading Material
Incoming Erasmus students who speak Greek may attend any of the undergraduate courses of the Department of Informatics (7 or 6 ECTS credits each); their descriptions (in Greek) can be found at: http://www.cs.aueb.gr/el/content/programma-spoydon

Incoming students who speak English may also attend any of the following courses, which are offered as reading courses.

FALL SEMESTER

1. Elementary Mathematics of Finance
   Evangelos Magirou
   6 ECTS credits
   Level: Intermediate

  Communication with the Lecturer
  efm@aueb.gr

  Course Description

  Suggested Textbook
  D. Luenberger, Investment Science, Oxford University Press

2. Computer Graphics (6 ECTS credits)
   George Papaioannou
   6 ECTS credits
   Level: Advanced

  Communication with the Lecturer
  gepap@aueb.gr

  Course Description
  Digital imaging synthesis, applications and representation models. Basic drawing algorithms, antialiasing and supersampling. 2D and 3D transformations and coordinate systems, kinematic chains, scene graphs and modeling. Culling, viewing transformations and projections. Data structures for polygonal models. Back face removal. Hidden surface
elimination and depth sorting. Scanconversion and the Z-buffer algorithm. Illumination models, the bidirectional reflectivity distribution function and empirical local illumination models and algorithms. Texturing: Texture maps, texture coordinates and transformations, antialiasing and procedural textures. Introduction to shaders. Animation techniques and motion synthesis. Shadow generation: Shadow volumes and the stenciled shadow volumes algorithm. Shadow maps. Hardware implementation of the above topics. Ray tracing. Optional graphics programming project in OpenGL.

3. Wireless Networks and Mobile Communications
Vassilios Siris
6 ECTS credits
Level: Advanced

Communication with the Lecturer
vsiris@aueb.gr

Course Description
The course’s goal is an in depth discussion of the fundamental principles, architectures, and functionalities of wireless networks and mobile communications. The course discusses not only how wireless networks operate, but also why they operate in a particular way. Moreover, the course highlights key trends which include cross-layer dependence of functions in wireless networks and the integration of fixed/wired with wireless and mobile communications.

4. Data and Web Mining
Michalis Vazirgiannis
6 ECTS credits
Level: Advanced

Communication with the Lecturer
mvazirg@aueb.gr

Course Description
Data Science ecosystem & project life cycle/management, Data pre-processing (normalization, feature selection & creation, descriptive data quality), Data exploratory analysis (summary statistics, correlation, ANOVA), Visualization, Introduction to machine learning (supervised & unsupervised), Data Visualization, Introduction to Big data (Hadoop, Mapreduce)

5. Distributed Systems
George Xylomenos
6 ECTS credits
Level: Intermediate

**Communication with the Lecturer**
xgeorge@aueb.gr

**Course Description**
The purpose of this course is to integrate the theory and practice of distributed systems with focus on recent developments and state-of-the-art practical systems. The topics we will cover include middleware architectures, process management, replication, consistency and group communication protocols, peer-to-peer systems, real-time scheduling, programming frameworks such as MapReduce, file systems and caching, and distributed sensor systems. We will discuss detailed case studies that illustrate the concepts for each major topic.

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**6. Diploma Thesis**

**6 ECTS credits**
Interested students should contact directly the faculty members: T. Kalamboukis (tzk@aueb.gr), A. Kastania (ank@aueb.gr), G. Polyzos (polyzos@aueb.gr), V. Vassalos (vassalos@aueb.gr), M. Vazirgiannis (mvazirg@aueb.gr), G. Xylomenos (xgeorge@aueb.gr).

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**SPRING SEMESTER**

**1. Digital Design**
Anastasia Kastania
7 ECTS credits
Level: Intermediate

**Communication with the Lecturer**
ank@aueb.gr

**Course Description**
Principles of binary logic, Boole Algebra and logic gates, Transistors and CMOS technology. Logic functions, circuits and designing with don't cares. Logic design simplification methods for circuits and functions with Karnaugh maps. Design of combinational blocks (adders, multiplexers, encoders, ROM memories). Memory elements (flip flops). Design of synchronous sequential circuits (registers, counters, RAM memories). Implementation of simple processors, PLAs, PLDs, and FPGAs. Design and simulation of digital circuits with Quartus II CAD package from Altera using the VHDL programming language. Design with schematics. Steps of design cycle, verification and test with CAD tools.

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**2. Operating Systems**
George Xylomenos
7 ECTS credits
Level: Intermediate

**Communication with the Lecturer**  
xgeorge@aueb.gr

**Course Description**  

**Suggested Textbook**  
A. S. Tanenbaum, Modern Operating Systems

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**3. Java Programming**  
Vassilios Siris  
7 ECTS credits  
Level: Intermediate

**Communication with the Lecturer**  
vsiris@aueb.gr

**Course Description**  
The course's goal is the in-depth study of objective oriented programming and advanced programming techniques based on the Java language. Even though the course focuses on the Java programming language and discusses Java packages (libraries), it analyses techniques and methodologies that are applicable to any object oriented programming languages, such as C++.

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**4. Operations Research**  
E. Magirou  
6 ECTS credits  
Level: Intermediate

**Communication with the Lecturer**  
efm@aueb.gr
**Course Description**

Problem formulation in operations research and problem solving software. Optimization: unconstrained optimization, optimization under equality constraints (theory and algorithms), constrained optimization (the Karush-Kuhn-Tucker conditions), algorithmic implementation. Linear Programming: LP problem formulation, Simplex Method (phase I and phase II). Inventory theory: deterministic models (economic ordering quantity), stochastic models, (s,S) policies. Dynamic programming: characteristics, implementations, deterministic models, stochastic models. Application to dynamic inventory models, the Wagner-Whitin algorithm.

**Suggested Textbook**

Hillier Lieberman, Introduction to Operations Research

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**5. Software Verification, Validation & Maintenance**

Nikolaos Malevris  
6 ECTS credits  
Level: Advanced

**Communication with the Lecturer**

ngm@aueb.gr

**Course Description**


**Suggested Textbooks**

M. PEZZE, M. YOUNG, «Software Testing and analysis: Process, Principles and Techniques» (WILEY) or  
P.AMMANN, J.OFFUTT, Indroduction to Software Testing (CAMBRIDGE UNIVERSITY PRESS)

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**6. Topics in Algorithms**

Ioannis Milis  
6 ECTS credits  
Level: Intermediate
Communication with the Lecturer
milis@aueb.gr

Course Description

7. Diploma Thesis
6 ECTS credits
Interested students should contact directly the faculty members: T. Kalamboukis (tzk@aueb.gr), A. Kastania (ank@aueb.gr), G. Polyzos (polyzos@aueb.gr), V. Vassalos (vassalos@aueb.gr), G. Xyloomenos (xgeorge@aueb.gr).
DEPARTMENT OF STATISTICS

FALL SEMESTER

1. Applied Linear Models (Reading Course)
Vasilios Vasdekis
8 ECTS credits
Level: Advanced

Course Content
Linear models definition, examples, least squares solution using matrices, ML solution, Hypothesis testing, the general linear hypothesis, F criterion, distributions of quadratic forms, ANOVA of linear models and goodness-of-fit, choice of models, residuals and diagnostic graphs, transformations of dependent and independent variables, sensitivity analysis, hat matrix, influential points, multicollinearity, parameterization of ANOVA models, contrasts, non-balanced models.

Bibliography
Montgomery, Peck and Vining (2001). Introduction to linear regression analysis, Wiley
Cook and Weisberg (1982). Residuals and Influence in regression, Chapman and Hall

2. Computational Statistics (Reading Course)
Dimitrios Karlis
8 ECTS credits
Level: Advanced

The course has the following parts
I. Kernel density estimation
II. Randomizations tests
III. Monte Carlo tests
IV. Jackknife and Cross Validation
V. Bootstrap methods

The course show how we can proceed to statistical inference making use of computing. During the course there are 3-4 projects. The projects need computing in R. Special functions to do so are supplied.

3. Stochastic Models and Simulations (Reading Course)
Petros Dellaportas
8 ECTS credits
Level: Advanced
Course Content
The course is concerned with a series of simulation techniques. First, algorithms for simulation from random variables including inversion method and rejection algorithm are studied. Then, Monte Carlo techniques including importance sampling and variance reduction strategies are of interest. In the last part of this course Markov chain Monte Carlo simulation algorithms are discussed and modern variance reduction strategies are studied.

4. Multivariate Statistical Techniques (Reading Course)
Dimitrios Karlis
8 ECTS credits
Level: Advanced

The course has the following parts
- Cluster analysis (hierarchical, K-means, model based clustering)
- Correspondence analysis and MCA
- Discriminant analysis and related methods (k-nn and other classification methods)

During the course there are 3-4 projects. The projects need computing in R.

5. Introduction to Mathematical Analysis (Reading Course)
Athanasios Giannakopoulos
8 ECTS credits
Level: Advanced

Course Content
This is an introduction to real analysis as opposed to calculus. Its aim is to familiarize the student with the concepts of real analysis so as to be able to proceed to advanced courses in probability, statistics, optimization, mathematical economics, finance etc.

The syllabus is as follows

1. Sequences and series
2. Continuous and convex functions
3. The Stieltjes integral
4. Introduction to Metric spaces
5. Inner product spaces

6. Stochastic Finance (Reading Course)
Athanasios Giannakopoulos
8 ECTS credits
Level: Advanced

Course Content
This is an introduction to the modern theory of stochastic finance. The aim of the course is to introduce the students to the basic concepts of this field, which are to be used in asset pricing, portfolio optimization etc.

The syllabus is as follows

1. Introduction, assets and assets markets
2. Arbitrage and the pricing kernel
3. Stochastic models for stocks
4. Derivative pricing, the binomial and the Black – Scholes model – martingale pricing and the equivalent martingale measure
5. Introduction to bond pricing
6. Introduction to portfolio theory

7. Sampling techniques and sample surveys (Reading Course)
   Ioulia Papageorgiou
   8 ECTS credits
   Level: Advanced

   **Course Content**

   **Bibliography**
   Pascal Ardilly, Yves Tillé. Sampling Methods: Exercises and Solutions.

8. Actuarial Mathematics of Accident Insurance (Reading Course)
   Alexandros Zimbidis
   8 ECTS credits
   Level: Advanced

   **Course Content**
- Frequency, severity and pricing methodology premium adjustments, Projections and trends for the final payments by using linear and other models
- Reserving methods, Analysis of Insurance Data, Triangular methods and olistic methods of reserving, Discounting reserves, and Confidence Intervals

9. Risk Theory (Reading Course)
Alexandros Zimbidis
8 ECTS credits
Level: Advanced

Course Content
- ‘Risk’ and pricing principles, theory of utility of money (Utility Theory), and premium calculations.
- Description and foundation of the Individual Model, Distribution of the aggregate claims S, safety loading.
- Description and foundation of the Collective Model, Compound distributions (Binomial, Poisson and negative binomial) and their properties and joint distributions and their applications, the standard approach of the individual from the collective model
- Extension of the collective model beyond a certain period, the surplus process (in discrete and continuous time), probability of ruin, Definition of the functions ψ(u) and δ(u), adjustment coefficient R, Probability of ruin for the compound Poisson
- Practical applications to insurance problems. Reinsurance Schemes.

SPRING SEMESTER

1. Multivariate Statistical Analysis (Reading Course)
Dimitrios Karlis
8 ECTS credits
Level: Advanced

Communication with Lecturer
e-mail: karlis@aueb.gr

The course has the following parts
- Multivariate descriptive and graphs
- Multivariate normal and related distributions
- Hypotheses tests for multivariate data
- MANOVA
- Multivariate Linear model
- Principal Components Analysis
- Factor Analysis

During the course there are 3-4 projects. The projects need computing in R.

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2. Introduction to Measure Theory & Integration with Applications to Probability Theory (Reading Course)
Athanasios Yannacopoulos
8 ECTS credits
Level: Advanced

**Communication with Lecturer**
e-mail: ayannaco@aueb.gr

**Course Content**
This is an introduction to measure theory that will allow students to follow the advanced courses in probability theory, stochastic processes etc as well as applications to statistics or mathematical finance.

The syllabus is as follows

1. Discrete measures
2. Lebesgue measure, construction and properties
3. Lebesgue integration
4. Convergence theorems for the Lebesgue integral
5. Introduction to Lebesgue spaces
6. Hilbert spaces and the projection theorem – Applications in probability
7. Radon-Nikodym derivatives of measures – Applications in probability

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3. Theoretical Statistics (Reading Course)
Ioulia Papageorgiou
8 ECTS credits
Level: Advanced

**Communication with Lecturer**
e-mail: ioulia@aueb.gr

The course is an advanced course in Mathematical Statistics.
Topics that will be covered:

1. Point estimation. Methods of evaluating the estimates. Bias, minimum mean square error, sufficiency, completeness, consistency, efficiency. Methods of finding the estimates. Methods of moments, Maximum Likelihood. Fisher’s information,


**Bibliography**

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4. **Actuarial Mathematics of Life Insurance** (Reading Course)
Alexandros Zimbidis
8 ECTS credits
Level: Advanced

**Communication with Lecturer**
e-mail: aaz@aueb.gr

**Course Content**
- Life annuities with one or more payments annually, Relationship between annuities, life insurance of various kinds, Relationship annuities and insurance, interest rate movements and mortality.
- Net premiums and gross premiums, concept and process of calculating reserves, Relationship between successive stock price.
- Tables and Actuarial functions for two or more persons, contingent actuarial functions.

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5. **Actuarial Statistics** (Reading Course)
Alexandros Zimbidis
8 ECTS credits
Course Content

- Measurements of mortality, Form of age specific mortality, mortality comparisons and methods of standardization, life tables and multiple risks.
- Selection of life tables (Control x2, individual standard deviations, individual absolute standard deviations, cumulative deviations, sign, change sign, steven’s test).
- Exposed to risk population (Full-accurate method, the inventory method based on lx).
- Empirical data smoothing techniques (graphical methods, Parametric models, Moving averages - Smoothing with reference to a typical table epiviosis).
- Technical spread table survival (Method Lagrange, Parametric model).

6. Bayesian Statistics (Reading Course)
Petros Dellaportas
8 ECTS credits
Level: Advanced

Communication with Lecturer
e-mail: petros@aueb.gr

Course Content
Objective and subjective probability, interpretation of the Bayes, rule, inference based on the Bayesian rule, conjugate priors and non informative distributions, point estimation and confidence, intervals, predictions, tests on simple and multiple hypotheses, Lindley’s paradox, linear regression, model selection, sequential hypothesis testing, Wald’s identity (equation), expected value of random sample size.

7. Survival Analysis (Reading Course)
Katerina Dimaki
8 ECTS credits
Advanced Level

Communication with Lecturer
e-mail: dimaki@aueb.gr

Course Content
Censored Data, Functions of Survival Time, Relationships of the Survival Functions, Examples of Survival Data Analysis, Some Well-Known Survival Distributions and Their Applications, Graphical Methods for Survival Distribution Fitting and Goodness-of-Fit
8. Probability Models in Sampling (Reading Course)
Evdokia Xekalaki  
3 ECTS credits  
Level: 4th year/graduate

Web Site
http://stat-athens.aueb.gr/~exek/ProbModelsInSampling-erasmus-14-15.htm (to be published at the beginning of the semester, around February 2015)

Communication with Lecturer
e-mail: oxek@aueb.gr

Course Content
The course consists of a series of topics on the question of the existence of discrepancies between observed and anticipated variability in the data under a hypothesized model. The topics include:

Recommended Reading
• Ord K (1972). Families of frequency distributions. Griffins
• Research Papers: A collection of research papers related to the above topics can be found at the course website
**Students’ Assessment**
Written exam

**Learning Outcomes**
Upon successful completion of this course students should be able to:
- demonstrate knowledge, understanding and ability to identify situations where the observed variability in data differs from that expected under a hypothesized model and be able to use various modelling approaches in tackling such situations.
- produce a well structured, well written expository essay about a particular situation and the approach chosen to tackle it.

**Prerequisites**
Students should be familiar with the content of the courses: 6001, 6031, 6142, 6012, 6144, 6126, 6014.

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**9. Projects on Linear Regression**
J. Panaretos
Intermediate level (Reading Course)
Fall semester 2014-15 & Spring Semester 2014-15
8 ECTS credits

**Web site**

**Communication with Lecturer**
e-mail: opan@aueb.gr

**Course Content**
A series of 8-10 assignments. Each one of them will require students to study a series of scientific papers on an issue of current interest. They will need to write an essay summinating the main points of the papers and critically discuss the statistical techniques the papers employ (mainly on regression methods). They will also been asked to present their findings in the class and discuss them with the rest of the students.

Students’ assessment will be based on projects that will be assigned during the course and on the project presentation in class. All these projects are compulsory and they will be announced in the course’s web site, along with the deadline for their submission.

**Learning Outcomes**
At the end of the course, those students that will successfully have taken it will be able to use the methods of Linear Regression to solve real life problems in cases where Linear Regression methods can apply. In particular they will be able to critically assess the data available for a problem and to decide whether any of the methods learned in the course can be applied to better understand and interpret the data. Moreover, they will be able to have a good grasp of the theory behind the possible models that can be used in such problems.

**Prerequisites**
Linear models and linear regression (estimation, testing of hypothesis, confidence intervals and prediction intervals), dummy variables, correlation coefficient, coefficient of determination, the use of statistical packages in linear regression (MINITAB, SAS), serial correlation coefficient, the Durbin-Watson test, monotone regression, the general linear model, statistical inference in linear regression, the bivariate normal distribution, analysis of variance (one way and two way analysis of variance), multiple regression, model selection (forward procedure, backward elimination procedure, stepwise regression, the Mallows Cp criterion), the use of matrices in regression, multicolinearity problem.

10. Short Course: Statistics in the 21st Century
J. Panaretos
Advanced level (Reading Course)
Spring semester 2014-15
3 ECTS credits

Web site
This year’s English web site: http://stat-athens.aueb.gr/~jpan/short-course-STAT21st_en-14-15.htm

Communication with Lecturer
e-mail: opan@aueb.gr

Course Content
A series of assignments. Each one of them will require students to study a series of scientific papers on an issue of current interest. They will need to right an essay summating the main points of the papers and critically discuss the statistical techniques the papers employ. They will also been asked to present their findings in the class and discuss them with the rest of the students.

The statistical topics that the assignments will be based on will include:
Students' assessment will be based on projects that will be assigned during the course and on the project presentation in class. All these projects are compulsory and they will be announced in this site, along with the deadline for their submission.

**Learning Outcomes**
Students who will complete this course will acquire knowledge of the latest developments in statistical theory and applications and they will be able to use these developments in tackling statistical problems in a better way than with the methods that they have learned by taking the traditional statistical courses.

**Prerequisites**
Students should be familiar with the content of the courses 6001, 6031, 6041, 6051, 6142, 6012, 6042, 6023, 6033, 6014, 6005

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Athens, July 2nd, 2014

*From the Erasmus Office*