SYLLABUS OF BUSINESS ECONOMICS

ACADEMIC YEAR 2025/2026

Rethymno, 14 February 2026

FINANCIAL MANAGEMENT I - OIK3207

Course Objectives

This course aims to provide students with the necessary skills to make the best financial decisions. The theoretical framework of the Financial Management course and a number of practical applications will attempt to present the value of money over time and the risk/benefit analysis as a basis for financial decision making and evaluation of securities. The way in which a non-financial institution makes decisions will be analysed, taking into account the cost of capital, the impact of decisions on the economic value of the organization, the capital structure and dividend policy. We will refer to financial products and efficient portfolio management techniques.

Instructors

Gaganis Chrysovalantis

Course Web Page

http://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=96

Prerequisites

For more effective course attendance, it is recommended that students have previously attended Econometrics I (ECO2003) and Statistics I (ECO1003).

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:

- How to determine the future value of an investment made today.
- How to determine the present value of cash to be received at a future date.
- How long it takes for an investment to reach a desired value.
- How to determine the future and present value of investments with multiple cash flows.
- How loans payments are calculated, and how to find the interest rate on a loan.
- Bond values and yields, and why they fluctuate.
- How share prices depend on future dividends and dividend growth.
- How the equity market work.
- How to calculate expected returns.
- The impact of diversification.
- The systematic risk principle.
- The security market line and the risk-return trade-off.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Tutorials are not offered for this course.

Basic textbook

Tzavalis, I. and Petralias, A. (2009). **Investment**, Athens University of Economics and Business, Athens (in Greek).

Zopounidis, K. (2013). **Principles of Financial Management**, Kleidarithmos Publishing, Athens (in Greek).

Ross S., Westerfield, W R. and Jaffe, J. (2017). **Corporate Finance**, Broken Hill Publishing, Athens (in Greek).

Supplementary material

Papadamou, S. (2009). **Portfolio Management: A Modern Approach**, Gutenberg Publishing, Athens (in Greek).

Vasileiou, D. and Iriotis, N. (2009). **Investment Analysis and Portfolio Management**, Rosili Publishing, Athens (in Greek).

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week 1: An overview of Financial Management

- What is finance?
- Finance within an organization
- Time lines
- Interest rates

Week 2: Financial Planning

- What is financial planning?
- Three requirements for effectives planning.
- Financial planning models
- Investment criteria

Week 3: Time Value of Money I

- Present value
- Futures values

- Annuities
- Future value of an ordinary annuity
- Future value of an annuity due
- Future value of ordinary annuity and annuity due

Week 4: Time Value of Money II

- Uneven cash flows
- Future value of an uneven cash flow streams
- Solving for IRR with uneven cash flows
- Growing annuities
- Capital rationing

Week 5: Stocks and Their Valuation

- Types of common stock
- Stock price versus intrinsic value
- The discounted dividend model
- Constant growth stocks
- Valuing nonconstant growth stocks

Week 6: Bonds and Their Valuation I

- Who issues bonds ?
- Key characteristics of bonds
- Bond valuation
- Bond yields
- Changes in bond values over time

Week 7: Bonds and Their Valuation II

- Bonds with semiannual coupons
- Assessing a bond's riskiness
- Default risk
- Bond Market

Week 8: Portfolio Theory I

- Measuring market risk
- Risk and return
- Efficient portfolios
- Choosing the optimal portfolio

Week 9: Portfolio Theory II

- Measuring Beta
- Portfolio Betas
- The Capital Asset Pricing Model (CAPM)
- The basic assumption of the CAPM
- CAPM and the Security Market Line

Week 10: Empirical Tests of the CAPM

- Tests of the stability of beta Coefficients
- Tests of the CAPM based on the slope of the SML
- Current status of the CAPM

Week 11: Arbitrage Pricing Theory

- Arbitrage Pricing Theory (APT)
- Disadvantages of the APT
- What is the primary difference between the APT and the CAPM?

Week 12: Performance Measures

- Sharpe's reward -to-variability ratio
- Treynor's reward -to-variability ratio

Week 13: Revision and final exam preparation

BANKING AND FINANCE - OIK3214

Course Objectives

The objective of this course is to provide the students with the necessary conceptual framework to analyze and comprehend the current problems of modern Financial Institutions (FI). It is structured to help them understand the perplexing issues of risk, regulation, technology, and competition that financial-service managers perceive as their greatest challenges for the present and future. The course provides an overview of the financial services industry, the role of the FIs in the economy, and the nature of economic frictions that make them special. It covers topics on the theory and practice of defining and measuring various types of risk FIs can be exposed to, as well as effective policies for successful risk management. At the end of this course, the students will have a deep understanding of the variety and the complexity of risks facing managers of modern FIs. It will become clear that the effective management of these risks is central to a FI's performance and determines its strategic decisions. Finally, students will be introduced to financial crises, with special focus on the recent sub-prime crisis, and the respective consequences on the economy. Each class session will be structured to include lecture, class discussion and problem/case analysis.

Prerequisites

The course has no specific prerequisites.

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:
Understand the key trends and changes in the financial services sector.
Recognize the specialness of FIs and their importance in the economy.
Understand the different types of organizations in the financial services sector.
Realize how FIs operate.
Delve into FI's financial statements and understand how those statements are used by managers in determining FI's performance.
Identify the main types of risk FIs are exposed to.
Discuss the various approaches to analyzing and measuring the risks in the financial services sector.
Understand the variety and complexity of the mechanisms that the FIs adopt in order to manage successfully their risks.
Understand the rationale and the characteristics of regulation in the financial services sector.
Realize why financial and banking crises occur as well as their consequences on the economy.
This course will provide students with an opportunity to develop the general competencies specified below:
Search, analyze, and synthesize information using the appropriate tools and technologies.
Strategic Decision Making.
Critical thinking and problem solving.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Not offered for this course.

Basic textbook

Supplementary material

Course load per semester (in hours)

	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

Lectures

Textbook(s)

Saunders A., Cornett M.M. (2017). Financial Institutions Management: A Risk Management Approach (in Greek).

Sapountzoglou G., Pentotis, X. (2017). Banking Economics (in Greek), Benos G. Publications, Athens.

Additional/ alternative Textbook/Reading References

Ceccheti, S., Schoenholtz K. (2017). Money, Banking and Financial Markets (5th Edition), McGraw Hill Higher Education.

Freixas, X., Rochet, J.C. (2008). Microeconomics of Banking (2nd Edition), MIT Press.

Hempel, G., Simonson, D. (1998). Bank Management: Text & Cases (5th Edition), John Wiley & Sons, Inc., New York.

Mishkin, F.S. (2016). The Economics of Money, Banking, and Financial Markets (11th Edition), Pearson Education.

Week 1: Why are Financial Institutions Special?

The role of Financial Institutions.

The Structure of the Financial Industry: Depository and Non-Depository Institutions.

Transaction Costs: Economies of Scope. Economies of Scale.

Information Asymmetries and Information Costs: Adverse Selection and Moral Hazards. Problems and Solutions.

The transmission of Monetary Policy.

Week 2: Banking and the Management of Financial Institutions

Accounts and Statements: On-balance Sheet Activities: Assets, Equities and Liabilities

Analysis, the Balance Sheet Equilibrium. Off-balance sheet Activities.

Basic Banking and General Principles of Effective Bank Management: Banks and Optimization Policy, Behavioral and Profitability Bank Models, Bank Performance Indexes.

Week 3: Risks of Financial Intermediation

The importance of risk management for Financial Institutions.

Types of risk faced by Financial Institutions: Interest Rate Risk, Market Risk, Credit Risk, Off-balance Sheet Risk, Technology and Operational Risks, Foreign Exchange Risks, Country or Sovereign Risks, Liquidity Risk, Insolvency Risk, Other Risks and the interaction of Risks.

Week 4: Credit Risk

Individual Loan Risk: Credit Quality Problems. Calculating the Return on a loan. Measurement of Credit Risk. Default Risk Models: Qualitative Models, Credit Scoring Models. Newer Models of Credit Risk Measurement and Pricing: Term Structure Derivation of Credit Risk, Mortality Rate Derivation of Credit Risk, RAROC Models, Option Models of Default Risk.

Loan Portfolio and Concentration Risk: Simple models of Loan Concentration Risk. Loan Portfolio Diversification and Modern Portfolio Theory: KMV Portfolio Manager Model, Partial Applications of Portfolio Theory, Loan Loss Ratio-based Models, Regulatory Models.

Week 5: Market Risk

Importance of Market Risk Measurement for Financial Institutions.

The Risk Metrics Model: Daily Earnings at Risk. Market Risk of Fixed-Income Securities, Foreign Exchange Equities. Aggregation.

Historic (Back) Simulation Approach.

Monte Carlo Simulation Approach.

The BIS Standardized framework: Specific risk charge. General market risk charge.

The BIS Regulations and Large Internal Models.

Week 6: Interest Rate Risk

The Repricing Model: Refinancing Risk. Reinvestment Risk. Rate-Sensitive Assets (RSAs). Rate-Sensitive Liabilities (RSLs). Equal versus Unequal changes in rates on RSAs and RSLs. Weaknesses of the Repricing Model.

The Maturity Model: The Maturity Model with a Portfolio of Assets and Liabilities. Weaknesses of the Maturity Model.

The Duration Model: A general formula for Duration. Economic Meaning of Duration. Duration and Immunization of the Balance Sheet of a Financial Institution. Difficulties in Applying the Duration Model.

Week 7: Foreign Exchange Risk

Sources of Foreign Exchange Risk exposure.

Foreign Currency Trading: FX Trading Activities, Profitability of Foreign Currency Trading.

Foreign Asset and Liability Positions: Return and Risk of Foreign Investments, Interest Rate Parity Theorem, Multicurrency Foreign Asset-Liability positions.

Week 8: Liquidity Risk

Causes of Liquidity Risk: Liability-side Liquidity Risk. Asset-side Liquidity Risk.

Measuring liquidity risk exposure: Net Liquidity Statement, Peer group ratio comparisons, Liquidity index, Financing gap, BIS Approach.

Liquidity Risk, Unexpected Deposit Drains, and Bank Runs.

Week 9: Managing Risk through Internal Policies and Procedures

Liability and Liquidity Management: Liquid asset management. Liability structure.

Product diversification: Risks of product segmentation. Issues involved in the diversification of product offerings: Safety and soundness concerns, Economies of scale and scope, Conflicts of interest, Deposit insurance, Regulatory oversight, Competition.

Geographic expansion: Domestic expansion. International expansion.

Week 10: Managing Risk through Financial Instruments

Derivatives: Hedging. Futures and Forwards. Options, caps, floors and collars. Interest Rate and Currency Swaps.

Loan Sales and Securitization: The Bank loan sales market. The pass-through security. Collateralized mortgage obligations. Mortgage-backed bonds. Innovations in securitization.

Week 11: Managing Risk through Regulatory Action

Deposit insurance and other liabilities guarantees: Panic prevention versus moral hazard. Lender of last resort. Other programs.

Capital Adequacy: Capital and Insolvency Risk. Capital standards for depository institutions: Basel I, Basel II, Basel III. National Standards. Capital standards for non-depository institutions financial institutions.

Week 12: Financial Crises

Financial crises and aggregate economic activity.

Factors causing financial crises.

Dynamics of past financial crises in developed countries.

The subprime financial crisis of 2007–8.

Week 13: Revision Week

ECONOMICS OF TOURISM - OIK3215

Course Objectives

Tourism represents a major economic activity at the local, regional and national level. The so-called tourism industry is a combination of various sectors including hospitality, catering, attractions, transportation, events and festivals, supporting services and travel intermediaries.

For a holistic overview of the economics of tourism, one needs to understand the peculiarities and practices of the different sectors. The aim of this module is to provide a critical understanding of the economics of tourism via an exploration of the complex nature of the tourism product, the nature and the impacts of tourism, the way the different sectors operate, along the factors that determine supply and demand, in a constantly changing and dynamic environment.

Instructors

Thomakis Zafeirios

Prerequisites

None

Learning Outcomes and General Competencies

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

- Assess and apply fundamental principles, theories and practices in tourism.
- Acknowledge the key traits of the tourism sectors (hospitality, catering, attractions, transportation, events and festivals, supporting services and travel intermediaries).
- Appreciate the interdependence, synergies and interactions among the tourist enterprises for the development of the tourism product.
- Critically assess the international environment and the way it affects tourism supply and demand.
- Evaluate the economic, socio-cultural and environmental impacts of tourism.
- Recognise the significance of tourism planning with the participation of the various stakeholders for the sustainable development and marketing of tourism.

  Additional skills that the students will acquire after the successful completion of the module include:

- Research, analysis and synthesis of data and information retrieved.
- Work in a multi-disciplinary environment.
- Work in an international environment.
- Group-work

Assessment method

The course will be examined in writing at the end of the semester, and will include the preparation of optional term paper during the semester. Written exams at the end of the semester **100%**, with development questions or **80%** written exams with development questions and **20%** optional term paper.

Tutoring courses

Not offered for this course.

Basic textbook

Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2019). **Tourism: Principles and Practice**, Broken Hill Publishers, Nicosia (in Greek).

Supplementary material

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

1st – 2nd Week: Introduction to Tourism

- Introduction to the module.
- The nature of the tourism product.
- The complexity of the tourism product.
- Tourism industry and its structure.
- Historical development of tourism.
- Types of tourism.

3rd Week: Tourism demand

- Nature of tourism demand.
- Consumer behaviour.
- Measuring and forecasting demand.

4th – 6th Week: Tourism supply

- Transportation.
- Hospitality.
- Travel intermediaries.
- Attractions.
- Events.
- Public sector.

7th – 8th Week: Tourism Impacts

- Economic.

- Socio-Cultural.
- Environmental.

9th- 10th Week: Tourism Planning and Development

- Fundamental Theories.
- Tourism policy and planning.
- Sustainable tourism development.
- Stakeholder management.

11th Week: Destination marketing

- Destination image.
- Marketing planning.
- Branding.

12th Week: Future of tourism

- Tourism and crisis.
- Crisis management.
- Future of tourism.

13th Week: Revision and Preparation for Exams

MARKETING WITH A FOCUS ON TOURISM - OIK3219

Course Objectives

Nowadays the competition between tourism destinations is fierce, while the tourism businesses need to adjust to an ever-changing environment, whereby consumers actively participate in the design, production and promotion of tourist experiences. The aim of this module is to provide strategic directions and knowledge on how destination management organisations and tourism enterprises can face the challenges and secure a competitive advantage in the tourism market. Through various international examples and case studies the students can understand the tools, practices and applications of marketing that can assist a company to achieve its objectives. The module covers both traditional as well as contemporary tools including digital marketing and social media.

Instructors

Thomakis Zafeirios

Prerequisites

None

Learning Outcomes and General Competencies

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

- Apply fundamental principles and theories of tourism marketing.
- Acknowledge the key steps needed for a strategic marketing plan.
- Analyse the factors that determine consumer behaviour.
- Select the relevant tools and apply them in market research.
- Critically assess the challenges involved in the marketing of diverse tourism destinations.
- Plan marketing campaigns including ones in social media.
- Recognise the value of social media in building long term relationships with consumers.
  Additional skills that the students will acquire after the successful completion of the module include:
- Research, analysis and synthesis of data and information retrieved.
- Work in a multi-disciplinary environment.
- Work in an international environment.
- Group-work.
- Independent work.
- Decision making.

Assessment method

The course will be examined in writing at the end of the semester, and will include the preparation of optional term paper during the semester. Written exams at the end of the semester **100%**, with development questions or **80%** written exams with development questions and **20%** optional term paper.

Tutoring courses

Tutorials are not offered for this course.

| *Basic textbook* | Kotler, P., Bowen, J.T., Makens, J., Baloglu, S. (2019). **Marketing for Hospitality and Tourism (7th eds.)**, Pearson, |

| *Supplementary material* | Fyall, A., Legoherel, P., Frochot, I., & Wang, Y. (2020). **Marketing for Tourism and Hospitality**, Routledge, |

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

1st Week: Introduction to Tourism Marketing

- Key terms.
- Characteristics of the tourism product.
- The role of marketing in tourism.

2nd Week: Strategic planning and market analysis

- Internal and external environment.
- Determinants of demand.
- Need for planning.
- Key steps in planning.
- National, regional and local tourism marketing plans.

3rd Week: Consumer behaviour

- Key theories in tourism motivation.
- Consumer behaviour.
- New trends in demand.

4th Week: Consumer focused strategy

- Market segmentation – segmentation criteria.
- Targeting.
- Positioning.
- Experiential marketing.

5th Week: Marketing Mix

- Product: new product development, product lifecycle.
- Pricing.
- Place/distribution.
- Promotion.

6th – 8th Week: Market Research

- Aim and objectives.
- Sampling.
- Research tools.
- Data analysis.

9th- 10th Week: Digital marketing

- Image and branding.
- Social media.
- Social media and consumer behaviour.
- Social media marketing.
- KPI.

11th – 12th Week: Marketing in Tourism

- Destination marketing.
- Hospitality marketing.
- Marketing in transportation.
- Event marketing.
- Tour operator marketing.

13th Week: Revision and Preparation for Exams

ADVANCED FINANCIAL ACCOUNTING - OIK2202

Basic textbook

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

FINANCIAL ACCOUNTING - OIK2201

Course Objectives

This course aims at introducing students to an integrated methodological framework for the utilization of accounting information. Through a detailed theoretical and practical examination of issues accounting practices and concepts that affect the preparation of financial statements will be presented. Concepts are developed that determine the assets of enterprises, changes in assets are followed through double-entry bookkeeping and the consequences of these changes for the increase or decrease of property.

Instructors

Gaganis Chrysovalantis

Course Web Page

http://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=92

Prerequisites

The course has no specific prerequisites.

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:

- Prepare a simple balance sheet and interpret the information that it contains.
- Discuss the accounting conventions underpinning the balance sheet.
- Discuss the limitations of the balance sheet in portraying the financial position of a business.
- Prepare an income statement from relevant financial information.
- Explain the main accounting conventions underpinning the income statement.
- Prepare an income statement.
- Identify where to report earnings per share information.
- Understand the reporting of accounting changes and errors.
- Prepare a retained earnings statement.
- Explain how to report other comprehensive income and expenses.
- Gather inputs to valuation models and for corporate finance decisions.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Tutorials are not offered for this course.

Basic textbook

Tsaklaganos, A. (2009). **Financial Accounting (based on International Accounting Standards)**, Kyriakidis Bros Publishing, Thessaloniki (in Greek).

Supplementary material	Needles B., Powers M. and Crosson S. (2016). **Principles of Accounting**, Broken Hill Publishing, Athens (in Greek).
	Alifantis, G. (2019). **Financial Accounting (Vol. A, 5th edition)**, Diplografia Publishing, Athens (in Greek).
	Ballas, A. and Hevas, D. (2009). **Financial Accounting**, Georgia Benou Publishing, Athens (in Greek).

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

Week 1: Who Needs Accounting?

- The development of a conceptual framework
- Framework for the preparation and presentation of financial statements
- Users and their information needs
- General purpose or specific purpose financial statements?

Week 2: Regulatory Framework

- Financial reporting – evolution of the regulatory framework in the GR
- Financial reporting – evolution of international standards
- Conceptual framework

Week 3: Balance Sheet I

- The accounting period
- The accounting equation
- Defining assets
- Examples of assets
- Recognition of assets
- Applications

Week 4: Balance Sheet II

- Defining liabilities
- Examples of liabilities
- Recognition of liabilities
- Ownership interest
- Preparation of balance sheet

- Applications

Week 5: Income Statement I

- Role and objective of income statement
- Defining revenue
- Examples of revenue
- Recognition of revenue
- Defining expenses
- Examples of expenses
- Recognition of expenses

Week 6: Income Statement II

- Preparation of income statement
- Critical comment on the accountant's measure
- Applications

Week 7: Accounting framework

- General ledger
- Subsidiary ledger
- Credit and debit
- Credit balance
- Debit balance
- Applications

Week 8: Preparation of published accounts

- Journal entry
- Types of journal
- Trial balance
- Applications

Week 9: Adjusting entry

- Correcting entry
- Reviewing publish financial statements

Week 10: Depreciation – Inventory and valuation rules

- Depreciation methods
- Inventory methods
- Valuation methods
- Applications

Week 11: Accounting process

- Summarizing entry
- Closing entry

Week 12: The Greek uniform chart of accounts

- Balance sheet accounts
- Capital and liability accounts
- Operations accounts
- Independent costing accounts
- Memo accounts

Week 13: Revision and final exam preparation

ECONOMICS OF THE FIRM - OIK3211

Course Objectives	This course is an introduction to empirical industrial organisation and deals with inter alia the following: whether there is competition in the market and to what extent; concentration measures; strategies firms follow to gain and retain monopoly power; the consequences from the lack of competition; and the role of economic policy in creating fair play conditions in the market.
Instructors	Skartados Panagiotis
Course Web Page	http://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=86
Prerequisites	Familiarity with the material covered in Introductory and Intermediate Microeconomics (OIK1005 and OIK2002) is useful for understanding the course matter.

Learning Outcomes and General Competencies

Learning outcomes and general skills:

- Following successful completion of the course the student will be able to do the following:
- To identify the consequences of alternative market structures on the operation of firms and on business decisions.
- To understand the ways in which firms' operation may impact on product market structure
- To acknowledge the strategic interactions between firms
- To acknowledge how uncertainty impacts on business decisions
- To understand the role of regulation and competition policy in shaping market condtions
The general skills students will have upon completion of the course include the use of economic analysis tools in business decisions; search, analysis and synthesis of data and information with the use of economic analysis and technology tools; the development of critical independent economic thinking.

Assessment method	There are two exams. An optional mid-term exam and a final exam. Those successful in the mid-term exam get a bonus for the final grade.
Tutoring courses	None
Basic textbook	Lipczynski, J., J.O.S. Wilson and Goddard, J. (2013). **Industrial Organization: Competition, Strategy and Policy (4th edition)**, Pearson, London.
Supplementary material	

Baye, R.M. (2013). **Managerial Economics and Business Strategy (7th edition)**, McGraw-Hill, New York.

Mankiw, N.G., M.P. Taylor and Ashwin, A. (2013). **Business Economics (2nd edition)**, Cengage Learning, Hampshire.

Pepall I., D. Richards and Norman, G. (2016). **Industrial Organization: Contemporary Theory and Empirical Applications (5th Edition)**, Wiley, New Jersey.

Perloff, M.J. and Brander, A.J. (2018). **Managerial Economics and Strategy**, Pearson, London.

(2023). **Instructors' lecture notes (in Greek)**, Rethymno.

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

1st week – Introduction to Economics of the firm

Lipczynski, Wilson and Goddard (2013) Chapters 1, 2 and 11

- Course goals.
- Conduct-structure-performance paradigm.
- Main concepts: production and cost functions; economies of scale; elasticity of demand.
- Market structure.

2nd week – Market boundaries and market concentation

Lipczynski, Wilson and Goddard (2013) Chapter 8

- Market boundaries.
- Market performance.
- Cross-elasticity of demand.
- Elasticity of supply.
- Measures of market structure.

3rd week - Economies of scale and market structure

Lipczynski, Wilson και Goddard (2013), Section 2.2 and pages 277-280

- Structure, strategy and market efficiency.
- Sources of economies of scale.
- Measurement of economies of scale.

4th week - Barriers to entry and exclusion of new firms

Lipczynski, Wilson και Goddard (2013), ch. 10

- Contestable markets and limit pricing.
- Factors determining barriers to entry.
- Strategies to exclude firms from the market.
- Price discrimination.

5th week - Technological progress

Lipczynski, Wilson και Goddard (2013), ch. 16

- R&D expenditure and market failure.
- Arrow's model of technological competition.
- Adoption of innovations and market structure.

6th week - Product differentiation and advertising

Lipczynski, Wilson και Goddard (2013), ch. 15

- Advertising expenditure and nature of the product.
- Drivers of advertising intensity.
- Returns to advertising: market concentration, barriers to entry, monopoly profits.

7th week - Asymmetric information, prices and quality

Instructors' notes

- Market for lemons.
- Price diversification.

8th week - Business growth

Lipczynski, Wilson και Goddard (2013), chs. 17 & 18

- Vertical integration (definition, motivation, consequences).
- Horizontal integration (definition, motivation, consequences).
- External growth (mergers, takeovers).

9th week - Theories of the firm

Lipczynski, Wilson και Goddard (2013), ch. 4

- Managerial theories of the firm.
- Behavioural theories of the firm.

10th week - Midterm exam

11th week - Regulatory and competition policy

Instructors' lecture notes

- Importance and aims of regulatory and competition policy.
- Pricing policies in the case of natural monopoly.
- Types of policies.
- Implementation of competition policy: measures of lack of competition and policies.

12th week - Competition policy in Greece

Instructors' lecture notes

13th week: Revision and preparation for final exam

FINANCIAL DERIVATIVES ANALYSIS - OIK3216

Course Objectives

In the last 30 years, derivatives have become increasingly important in finance. Futures and options are actively traded on many exchanges throughout the world. We have now reached the stage where those who work in finance, and many who work outside finance, need to understand how derivatives work, how they are used, and how they are priced. The objective of the course is to provide students with the necessary knowledge so that they can understand the role of the financial derivatives in a modern investment environment. Particular emphasis is placed on the mechanisms of the derivatives market and the reasons why investors resort to it. We explain their main categories and characteristics, and analyze the speculative, hedging and arbitrage strategies that can be developed. In addition, we discuss the fundamental (mathematical) models for valuing financial derivatives, their hypotheses and how to apply them. During this course, a focused effort will be made to demystify the concepts related to these financial instruments as well as the properties or difficulties attributed to them.

Instructors

Daskalaki Charoula

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/course/view.php?id=112

Prerequisites

Sufficient knowledge of mathematical calculus is required.

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:

- Distinguish the main categories of financial derivatives and their characteristics.
- Understand how derivatives markets operate in an international level.
- Understand the importance of derivatives markets and the mechanisms that govern them.
- Understand the use of derivatives as modern investment and risk management tools.
- Understand the process of implementing speculative, arbitrage and hedging strategies.
- Apply the various valuation models for financial derivatives.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Tutorials are not offered for this course.

Basic textbook

Hull, J.C. (2017). **Fundamentals of Futures and Options Markets**, Kleidarithmos Publishing, Athens (in Greek).

Aggelopoulos, P. (2011). **Introduction to Financial Derivatives Products**, Stamoulis Publishing, Athens (in Greek).

(2018). **Lecture Notes (in Greek) by the Instructor (can be found in the course's electronic page).**, Rethymno.

Supplementary material

Dubofsky D. (2004). **Options and Financial Futures –Valuation and Uses**, McGraw-Hill,

Rubinstein M. (1999). **Derivatives: A PowerPlus Picture Book. Volume 1: Futures, Options and Dynamic Strategies**,

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week 1: Introduction to Financial Derivatives

(Lecture notes, Hull, ch.1)

- Derivatives Securities: Definition, Underlying assets.
- Exchange markets vs. Over the counter markets.
- Traders in the Derivatives Markets: Hedgers, Speculators, Arbitrageurs.
- Forwards, Futures, Options and Swaps: Basic characteristics, payoffs, profit/loss, counterparties.

Week 2: Mechanics of Futures Markets

(Lecture notes, Hull, ch.2)

- Specification of a Futures Contract: Underlying Asset, Contract Size, Delivery Arrangements.
- Convergence of futures price to spot price.
- The operations of margins: Daily Settlement, Clearing House and Clearing Margins, Credit Risk.

- Hedging Strategies using Futures Contracts: Basic principles, Long Hedge, Short Hedge, Arguments for and against hedging, Basis Risk, Cross Hedging.

Week 3: Determination of Forward and Futures Prices

(Lecture notes, Hull, ch.5)

- The difference between investment and consumption assets.
- Short selling, Assumptions, Delivery options.
- Forward price for an investment asset: Known income, Known yield.
- Futures prices on stock indices.
- Forward and futures contracts on currencies.
- Futures on commodities.

Week 4: Mechanics of options markets

(Lecture notes, Hull, ch.9)

- Types of options, Underlying assets and Option positions: Long call, Short call, Long put, Short put.
- Payoffs and Profit/Loss functions.
- Intrinsic Value and Time Value: At-the-money, In-the-money, Out-of-the-money Options.
- Margin requirements.
- Hedging Strategies using Options.

Week 5: Properties of stock options

(Lecture notes, Hull, ch.10)

- Factors affecting option prices: Stock Price and Strike Price, Time to Expiration, Volatility, Risk-Free Interest Rate, Amount of Future Dividends.
- Upper and lower bounds for option prices.
- Put–call parity.
- Violations of pricing equations: Arbitrage strategies.

Week 6: Trading Strategies Involving Options

(Lecture notes, Hull, ch.11)

- Trading an option and the underlying asset: covered call, protective put.
- Spreads: Bull Spreads, Bear Spreads, Box Spreads, Butterfly Spreads.
- Combinations: Straddle, Strips and Straps, Strangles.

Week 7: Coxx-Ross-Rubinstein Valuation model (1979)

(Lecture notes, Hull, ch.12)

- A one step binomial model and the no arbitrage condition, Replicating portfolio, Risk neutral valuation.
- The two-step binomial model: A generalization, Backward Induction, Delta Hedging, Pricing European and American Options.
- Matching volatility with u and d.
- The binomial tree formulas.
- Increasing the number of steps.

Week 8-9: The Black–Scholes–Merton model

(Lecture notes, Hull, ch.13)

- The Markov Property, Continuous time stochastic processes, Wiener processes, Ito process & Lemma.
- The idea behind the Black-Scholes-Merton Model.
- The differential equation of Black-Scholes-Merton and the valuation formulas: Assumptions, Derivation & Properties.
- Risk neutral valuation.
- Volatility: Estimating Volatility from Historical Data, Implied Volatility.

Week 10: The Greek Letters

(Lecture notes, Hull, ch.17)

- Definition of Greek Letters: Delta, Gamma, Vega, Theta, Rho.
- Delta Hedging: Delta of European Stock Options, Dynamic Aspects of Delta Hedging, Delta of a Portfolio.
- Gamma: Making a Portfolio Gamma Neutral, Calculation of Gamma.
- Theta and Rho coefficients.
- Relationship between delta, Theta and Gamma.
- The realities of hedging.
- Stock market volatility.

Week 11-12: Swaps

(Lecture notes, Hull, ch.7)

- Mechanics of Interest rate swaps: Using Swaps to Transform a Liability, Using Swaps to Transform an Asset, the role of Financial Intermediary.
- The comparative advantage argument: Criticism of the Argument.
- Valuation of interest rate swaps: Valuation in Terms of Bond Prices, Valuation in Terms of FRAs.
- Mechanics of Currency Swaps: Using Swaps to Transform a Liability, Using Swaps to

Transform an Asset, the role of Financial Intermediary.

- Valuation of currency swaps: Valuation in Terms of Bond Prices, Valuation as Portfolio of Forward Contracts.
- Credit risk.
- Other types of swaps.

Week 13: Revision Week

MARKETING - OIK3217

Course Objectives

This module will introduce the students to the principles of marketing. The students will explore the nature of the marketing phenomenon, as well as its role and function within organisations. Emphasis will be given to marketing of both products and services, highlighting similarities and differences between the two.

Instructors

Spyriadis Thanasis

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=373

Prerequisites

The course necessitates competence in English language, as well as in basic management or business terms. For easier course attendance, it is recommended that students have previously attended Management I.

Learning Outcomes and General Competencies

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

1. Describe the role and function of marketing within an organisation.
2. Explain the factors that influence customer behaviour
3. Outline the key elements of a customer value-driven strategy and mix
4. Discuss the importance of sustainable marketing practices

Assessment method

The course is assessed with a written assignment or a re-sit exam, which is the 100% of the final mark. For the written assignment, students will work in pairs. Both students will receive the same mark for their submitted work. The re-sit exam will take place in accordance with the exam timetable of the Department of Economics. The re-sit exam will include multiple choice questions, or open questions, or questions on a case study pertinent to marketing.

Tutoring courses

The course is delivered via lectures and does not have any seminar sessions. The lectures that will be delivered over 13 weeks (see below) will support students' understanding, assessment preparation, and application of the theory of marketing.

Basic textbook

Armstrong, G., Kotler, P. and Opresnik, M.O. (2017). **Marketing: An Introduction (13th ed)**, Pearson, Essex.

Cannon, P., J., Perreault D., W. and McCarthy, E., J. (2024). **Essentials of Marketing**, Εκδόσεις Επίκεντρο, (in Greek).

Supplementary material

Svend, H. (2020). **DiΔιεθνἐς Μάρκετινγκ**, DaVinci, (in Greek).

Kotler, P., Kartajaya, H. and Setiawan, I. (2020). **ΜΑΡΚΕΤΙΝΓΚ 4.0: Η Μετάβαση από το Παραδοσιακό στο Ψηφιακό Μάρκετινγκ**, Εκδόσεις Κλειδάριθμος, (in Greek).

Jobber, D. and Ellis-Chadwick, F. (2019). **Principles and Practice of Marketing (9th ed.)**, Mcgraw-Hill, London.

Lovelock, C., Wirtz, J. and Chew, P. (2009). **Essentials of Services Marketing**, Pearson, Singapore.

Palmer, A. (2008). **Principles of Services Marketing (5th ed.)**, McGraw-Hill, Berkshire.

Dibb, S., Simkin, L., Pride, W., M. and Ferrell, O.C. (2021). **Marketing: Concepts and Strategies (5th European ed.)**, Houghton Mifflin, Boston.

Wirtz, J. and Lovelock, C. (2018). **Μάρκετινγκ Υπηρεσιών**, Εκδόσεις Δίσιγμα, (in Greek).

Βασιλειάδης, Λ (2021). **Μάρκετινγκ Μάνατζμεντ. Σύγχρονες προσεγγίσεις και στρατηγικές εν καιρώ αλλεπάλληλων παγκοσμίων κρίσεων**, Εκδόσεις Τσότρας Αθανάσιος, (in Greek).

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	13	98	150

Lectures

1st week

Armstrong et al. (2017, chapter 1)

- Introduction to the Marketing course
- Defining marketing and the marketing process

- Understanding the marketplace and customer needs
- Exchanging market value through Products, Services and Experiences
- The changing marketing landscapes

2nd week

Armstrong et al. (2017, chapter 2)

- Marketing's role in strategic planning
- Partnering to build customer relationships
- Marketing strategy and the marketing mix
- Managing and measuring the marketing effort

3rd week

Armstrong et al. (2017, chapter 3)

- Analysis of the marketing environment
- The macro-environment
- The micro-environment
- The internal environment

4th week

Armstrong et al. (2017, chapter 4)

- Managing marketing information and customer insights
- Assessing marketing information needs
- Marketing research

5th week

Armstrong et al. (2017, chapter 5)

- Understanding consumer behaviour
- Defining the consumers
- Factors that influence consumers' behaviour

6th week

Armstrong et al. (2017, chapter 5)

- Understanding business behaviour
- Characteristics of the Business-to-Business (b2b) markets

- Factors that influence businesses' behaviour

7th week

Armstrong et al. (2017, chapter 6)

- Designing a customer value-driven strategy and mix
- Market segmentation
- Market targeting
- Differentiation and positioning

8th week

Armstrong et al. (2017, chapter 7)

- Building customer value
- Products
- Services, and experiences
- Branding strategy

9th week

Armstrong et al. (2017, chapters 8 and 9)

- New product development
- Product life cycle
- Pricing strategies

10th week

Armstrong et al. (2017, chapters 10 and 12)

- Distribution Channels: Supply chains and value delivery network
- Distribution management decisions
- Communicating Customer Value: Integrated marketing communications

---

11th week

Armstrong et al. (2017, chapter 16)

- Social criticisms of marketing
- Social responsibility and ethics
- Consumer and business actions towards sustainable marketing

---

12th week

- Key skills for marketing managers
- Marketing career options

13th week: Revision and Exam preparation

ENTREPRENEURSHIP - OIK3220

Course Objectives

Entrepreneurship is a major catalyst of economic and social development. This module aims to introduce the nature of entrepreneurship and the factors that affect it, as well as its role in contemporary society and the economy. The module also aims to support students examine the application of entrepreneurial thinking, taking into account the diversity of entrepreneurs and the multiple levels of application of entrepreneurial thinking. Emphasis will be placed on connecting entrepreneurship and innovation, designing entrepreneurial models, managing entrepreneurial risks and failures, entrepreneurial idea funding strategies, as well as marketing entrepreneurial plans.

Instructors

Spyriadis Thanasis

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/course/view.php?id=375#section-0

Prerequisites

For effective module attendance, it is advisable that students have previously successfully completed the module(s) Management I and/or Management II.

Learning Outcomes and General Competencies

Upon successful completion of the module, students are expected to have the following knowledge and abilities:

1. Explain the meaning and nature of entrepreneurship
2. Recognise the main models of entrepreneurial thinking
3. Determine the "dark side" of entrepreneurship
4. Connect entrepreneurship to innovation
5. Examine the environment of entrepreneurship
6. Discuss creative thinking tools
7. Outline entrepreneurial models
8. Describe entrepreneurial plan design processes
9. Discuss ways of assessing the sustainability of entrepreneurial ideas
10. Explore the diversity of entrepreneurship
11. Apply critical thinking and knowledge

Assessment method

The assessment of the module involves a final and a re-sit examination. The final or re-sit examination will take place in accordance with the exam timetable of the Department of Economics. The exam will involve multiple choice questions or open questions or case study questions that relate to entrepreneurship.

Tutoring courses

The module will be delivered in thirteen (13) sessions, which aim (a) to support the understanding and application of the relevant theory; and (b) to support the students' preparation for the assessment of the module.

Basic textbook

Neck, H.M., Neck, C.P., and Murray, E.L. (2020). **Επιχειρηματικότητα: Νοοτροπία και Πρακτική**, Εκδόσεις Κριτική, Αθήνα (In Greek).

Supplementary material

Bessant, J. R. and Tidd, J. (2017). **Καινοτομία & Επιχειρηματικότητα (3η έκδοση)**, Εκδόσεις Τζιόλα & Υιοί, Θεσσαλονίκη (In Greek).

Burns, P. (2020). **Επιχειρηματικότητα και Μικρές Επιχειρήσεις: Εκκίνηση, Ανάπτυξη και Ωριμότητα (4η έκδοση)**, Εκδόσεις Κλειδάριθμος, Αθήνα (In Greek).

Fayolle, A. (2019). **Επιχειρηματικότητα: Θεωρία και Πρακτική. Πρακτικές εφαρμογές για να μάθετε το Επιχειρείν (3η έκδοση)**, Εκδόσεις Προπομπός, Αθήνα (In Greek).

Αποστολόπουλος, Ν., Δερμάτης, Ζ. και Λιαργκόβας, Π.Γ. (2020). **Κοινωνική Οικονομία και Κοινωνική Επιχειρηματικότητα: Η Ευρωπαϊκή και η Ελληνική Εμπειρία**, Εκδόσεις Πατάκη, Αθήνα (In Greek).

Μουρδουκούτας, Π., Παπαδημητρίου, Σ. και Ιωαννίδης, Α. (2004). **Επιχειρηματικότητα: Θεσμοί και Πολιτικές**, Εκδόσεις Κλειδάριθμος, Αθήνα (In Greek).

Κώτσιος, Π. (2019). **Επιχειρηματικότητα & Καινοτομία: Σύλληψη, Σχεδιασμός, Υλοποίηση και Λειτουργία (3η έκδοση)**, Εκδόσεις Κώτσιος, Λάρισα (In Greek).

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week 1

Neck et al. (2020, ch. 1)

- Introduction to the Entrepreneurship module
- The nature of entrepreneurship
- Entrepreneurship as a global social phenomenon

- Regulatory environment and international policy for entrepreneurship

---

Week 2

Neck et al. (2020, ch. 2)

- Practical approaches to entrepreneurship
- Forms of entrepreneurship:
1. Start-ups
2. Interorganisational entrepreneurship
3. Acquisition of enterprises
4. The family environment and entrepreneurship
5. Social entrepreneurship

Week 3

Neck et al. (2020, ch. 3)

- The development of an entrepreneurial mindset
- Characteristics and skills of entrepreneurs
- Entrepreneurship as "habit":
1. Self-leadership / creativity / improvisation skills
2. Transition from entrepreneurial mindset to entrepreneurial action
- Entrepreneurial behaviour and ethics

Week 4

Neck et al. (2020, ch. 4)

- Forms of social entrepreneurship:
1. Social purpose entrepreneurship
2. Entrepreneurship and social impact
3. Entrepreneurship for non-profit organisations
4. Hybrid models of social entrepreneurship
5. Differences with corporate social responsibility

Week 5

Neck et al. (2020, ch. 5)

- Entrepreneurship and innovation
- Creation of a new idea
- Recognising the "opportunity"
- Transition from the creation of a new idea to recognising an opportunity

---

Week 6

Neck et al. (2020, ch. 6)

- The meaning of design thinking
- Application of design thinking and design logic tools

Week 7

Neck et al. (2020, ch. 8,9)

- The business model
- Variety of market segments and value propositions
- Business model types

1. Business model canvas
2. TRIM (Team, Resources, Idea, Market) system
3. Mind mapping
4. Brief business plan
5. Feasibility study
6. Brief business idea presentation (pitch deck)
7. Detailed business plan

Week 8

Neck et al. (2020, ch. 10)

- Revenue generation
- Revenue generation models

Week 9

Neck et al. (2020, ch. 11)

- Entrepreneurship, risk and failure
- The spectrum of failure
- The value of failure

Week 10

Neck et al. (2020, ch. 12,13)

- Funding of start-ups
1. Funding through own resources
2. Crowdfunding
3. Crowdsourcing
4. Equity financing for entrepreneurial activities

Week 11

Neck et al. (2020, ch. 14)

- The meaning of networking in entrepreneurship
- Entrepreneurial network development

Week 12

Neck et al. (2020, ch. 16)

- The meaning of marketing in entrepreneurship
- Basic principles of marketing of entrepreneurial ideas

Week 13

- Revision and overview of the module learning outcomes
- Guidance for exam preparation

CORPORATE FINANCE - OIK3221

Course Objectives

This course aims to provide students with fundamental concepts, practices, and techniques related to corporate finance. Students should understand the importance of Capital Structure and Cost Structure in efficiently operating and growing a business. Additionally, they will become familiar with modern alternative financing tools, such as Factoring, Leasing, Venture Capital, and Franchising, which will be evaluated in comparison with traditional forms of financing.

Prerequisites

For more effective course attendance, it is recommended that students have previously attended Financial Management I (ECO3207).

Learning Outcomes and General Competencies

On completion of the course, students will be able to:
- Understand the fundamental principles of Corporate Finance.
- Analyze a company's capital structure.
- Evaluate dividend policy options.
- Explore the processes of long-term business financing.
- Understand the basic principles of short-term financing.
- Analyze the impact of financial distress on businesses.
- Compare modern forms of corporate financing.
- Apply financial models and methods of financial analysis.
- Integrate theoretical and practical knowledge in the analysis of real financial issues.
- Enhance their critical thinking and ability to make well-informed business decisions.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Tutorials are not offered for this course.

Basic textbook

Ross S., Westerfield, W R. and Jaffe, J. (2024). **Corporate Finance**, Broken Hill Publishing, Athens.

Supplementary material

Berk J., DeMarzo P., Harford J. (2024). **Fundamentals of Corporate Finance**, Pearson,

Vasileiou, D. and Iriotis, N. (2018). **Investment Analysis and Portfolio Management**, Rosili Publishing, Athens.

Course load per	Lectures	Tutorials	Individual effort	Total
semester (in hours)	39	0	111	150

Lectures

Week 1: Introduction to Corporate Finance

- What is Corporate Finance?
- The Cost of Capital
- Patterns of Financing

Week 2: Capital Structure I

- The Capital Structure and the Pie Theory
- Financial Leverage and Firm Value
- Modiliani and Miller: Proposition I

Week 3: Capital Structure II

- Modiliani and Miller: Proposition II
- Cost of Financial Distress
- Integration of Tax Effects and Financial Distress Cost
- The Pecking-Order Theory
- How Firms Establish Capital Structure

Week 4: Dividend Policy

- Dividend Policy
- Dividends vs Stock Repurchases
- Personal Tax, Dividends, and Stock Repurchases
- Dividend Policy and Behavioral Challenges

Week 5: Long – Term Financing I

- Raising Capital
- Stages of Financing
- The Public Issue
- The Announcement of New Equity and the Value of the Firm

Week 6: Long – Term Financing II

- Types of Leases
- Reasons for Leasing
- Taxes and Leases
- Dept Displacement and Lease Valuation

Week 7: Short-Term Finance and Planning I

- Tracing Cash and Net Working Capital
- Some Aspects of Short-Term Financial Policy
- The Short-Term Financial Plan

Week 8: Short-Term Finance and Planning II

- Cash Management
- Understanding Float
- Analyzing Credit Policy
- Optimal Credit Policy

Week 9: Mergers, Acquisitions, and Divestitures

- The Basic Forms of Acquisitions
- Synergy and Synergy
- Do Mergers Add Value?
- The Tax Forms of Acquisitions
- Divestitures

Week 10: Financial Distress

- What is Financial Distress?
- What Happens in Financial Distress?
- Bankruptcy Liquidation and Reorganization
- The Z-Score Model

Week 11: Modern Methods of Corporate Finance

- Factoring
- Leasing
- Venture Capital
- Franchising

Week 12: Financial Statements Analysis and Financial Models

- Financial Statements Analysis
- The DuPont Identity
- Financial Planning Models

Week 13: Revision and Preparation for Exams

INDUSTRIAL ORGANIZATION I - OIK3201

Course Objectives

The objective of this course is to convey to the students the methodology of approach as well as the tools of analysis of the modern – imperfectly competitive – markets/ industrial sectors. That is, of markets/sectors wherein there exists strategic interdependence amongst the rival firms – the latter in fact being what effectively shapes the structure of the particular market – in contrast to what is typically assumed in conventional Microeconomics, i.e., that firms "blindly" adjust their behavior to an exogenous market structure. Regarding its scope, the course can therefore be considered as a profound extension of Microeconomic theory, such that the functioning of firms and markets to be more realistically approached. For that, part of the course regards the development and understanding of the basic elements of non-cooperative game theory with a view to apply them in to appropriate model building.

Instructors

Skartados Panagiotis

Course Web Page

http://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=88

Prerequisites

Sufficient knowledge of the fundamental Microeconomic models and basic skills of differential calculus and analytical geometry.

Learning Outcomes and General Competencies

On successful completion of the course, students will be able to:

- Understand and interpret the functioning of the modern, imperfectly competitive, markets/industrial sectors, identify and sort their behavioral and structural features, and cohere those features with the stylized facts.
- Combine the definitions and the basic theoretical notions with the methodology and the tools of analysis, with a view to successful transition from theory to practice, so that to evaluate and design market-intervention policies.
- Apply the basic elements of the "non-cooperative game theory" so that to understand the firms' strategic behavior and interdependence, and by these means unfold, interpret and evaluate – in terms of social welfare – the emerging economic outcomes.
- Identify, describe, cohere and interpret the fundamental hypotheses about strategic interdependence in imperfectly competitive markets/industrial sectors (e.g., Cournot-Nash, Bertrand-Nash, Stackelberg, Hotelling, etc.)
- Identify, combine, compare and evaluate the emerging outcomes of the former fundamental hypotheses, under alternative structural and timing premises (capacity constraints, homogenous or differentiated products, linear or cyclical location of firms/ products, horizontal and/or vertical differentiation, static or dynamic rivalry, etc.)
- Profoundly examine special topics of Industrial Organization, like: Collusion, Horizontal and Vertical integration, Contestability and Entry Deterrence, Mergers and Acquisitions, Technological Rivalry, Advertising, etc.
  Regarding the acquired general skills, students will be able to:
- Search, analyze, combine and compose data and information elements, by making use of

the available tools and technology.

- Make Decisions
- Adapt to new circumstances
- Produce ideas for further research

Assessment method

The assessment is based on a written exam (in the form of multiple choice questions) held upon the completion of the course at the end of the semester.

Tutoring courses

Not offered for this course.

Basic textbook

Supplementary material

Carlton D.W. and Perloff J.M. (2017). **Modern Industrial Organization**, Broken Hill Publishing, Nicosia (in Greek).

Katsoulakos, J. (2015). **Theory of Industrial Organization**, Gutenberg Publishing, Athens (in Greek).

(2023). **Lecture Notes (in Greek) by the tutor (can be found in the course's electronic page).**, Rethymno.

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week/Lecture 1: Introduction – Review of key Microeconomic notions

- Economies of Scale and Economies of Scope
- Profit Maximization/Loss Minimization Conditions and Stay on/Seize Business Conditions
- Example(s)

Week/Lecture 2: The Theoretical Foundations of the modern approach to the Operation of Firms and Markets

- Market: Structure -Conduct- Performance
- Elements of "non-cooperative game theory" and their application(s) in Industrial Organization

- Economic (in) efficiency- measurement and principles of market intervention/regulation

---

Week/Lecture 3 : The Fundamental Hypotheses of Industrial Organization 1

- Bertrand-Nash with homogenous products
- Cournot-Nash with homogenous products
- Stackelberg with homogenous products

Week/Lecture 4: The Fundamental Hypotheses of Industrial Organization 2

- Rivalry under Capacity Constraints
- The Kreps-Scheinkman model
- Bertrand versus Cournot

Week/Lecture 5: Product Differentiation 1 (homogenous consumers)

- Monopolistic Competition
- Cournot-Nash with differentiated products
- Bertrand-Nash with differentiated products

Week/Lecture 6: Product Differentiation 2 (homogenous consumers)

- Stackelberg –rivalry in quantities
- Stackelberg – rivalry in prices

Week/Lecture 7: Product Differentiation 3 (homogenous/ heterogeneous consumers)

- Vertical product differentiation
- Hotelling-"linear city" –with exogenous and endogenous location(s)
- Salop – "cyclical city"

Week/Lecture 8: Dynamic Rivalry and Collusion

- Rivalry and Collusion with infinite number of rivalry periods
- Rivalry and Collusion with finite number of rivalry periods

---

Week/Lecture 9: Contestability

- Optimal Number of Firms versus Equilibrium Number of Firms
- Contestable Markets
- Entry Deterrence/Entry Accommodation

Week/Lecture 10: Special topics of Industrial Organization 1

- Strategic Advertising
- Vertical Relations and Vertical Integration
- Horizontal Mergers

Week/Lecture 11: Special topics of Industrial Organization 2

- Multiple Product Monopoly
- Durable Goods Monopoly
- Price Differentiation/Dispersion

Week/Lecture 12: Special topics of Industrial Organization 3

- Innovation and Patents
- Licensing and Franchising
- Technological Rivalry and Social welfare

Week/Lecture 13: Revisions and Exams Preparation

MASS MEDIA AND ENTERTAINMENT ECONOMICS - OIK3212

Instructors	Tzouvelekas Vangelis

Course Web Page	http://economics.soc.uoc.gr/moodle/course/view.php?id=75

Basic textbook

Supplementary material

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

FINANCIAL INSTITUTIONS MANAGEMENT - OIK3214

Course Objectives

The objective of this course is to provide the students with the necessary conceptual framework to analyze and comprehend the current problems of modern Financial Institutions (FI). It is structured to help them understand the perplexing issues of risk, regulation, technology, and competition that financial-service managers perceive as their greatest challenges for the present and future. The course provides an overview of the financial services industry, the role of the FIs in the economy, and the nature of economic frictions that make them special. It covers topics on the theory and practice of defining and measuring various types of risk FIs can be exposed to, as well as effective policies for successful risk management. At the end of this course, the students will have a deep understanding of the variety and the complexity of risks facing managers of modern FIs. It will become clear that the effective management of these risks is central to a FI's performance and determines its strategic decisions. Finally, students will be introduced to financial crises, with special focus on the recent sub-prime crisis, and the respective consequences on the economy. Each class session will be structured to include lecture, class discussion and problem/case analysis.

Instructors

Daskalaki Charoula

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=106

Prerequisites

The course has no specific prerequisites.

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:

- Understand the key trends and changes in the financial services sector.
- Recognize the specialness of FIs and their importance in the economy.
- Understand the different types of organizations in the financial services sector.
- Realize how FIs operate.
- Delve into FI's financial statements and understand how those statements are used by managers in determining FI's performance.
- Identify the main types of risk FIs are exposed to.
- Discuss the various approaches to analyzing and measuring the risks in the financial services sector.
- Understand the variety and complexity of the mechanisms that the FIs adopt in order to manage successfully their risks.
- Understand the rationale and the characteristics of regulation in the financial services sector.
- Realize why financial and banking crises occur as well as their consequences on the economy.
  This course will provide students with an opportunity to develop the general competencies specified below:
- Search, analyze, and synthesize information using the appropriate tools and technologies.

- Strategic Decision Making.
- Critical thinking and problem solving.

Assessment method

The assessment is based on a written exam held upon completion of a course at the end of the semester.

Tutoring courses

Not offered for this course.

Basic textbook

Saunders A., Cornett M.M. (2017). **Financial Institutions Management: A Risk Management Approach (in Greek)**,

Sapountzoglou G., Pentotis, X. (2017). **Banking Economics**, Benos G. Publications, Athens (in Greek).

Supplementary material

Ceccheti, S., Schoenholtz K. (2017). **Money, Banking and Financial Markets (5th Edition)**, McGraw Hill Higher Education,

Freixas, X., Rochet, J.C. (2008). **Microeconomics of Banking (2nd Edition)**, MIT Press,

Hempel, G., Simonson, D. (1998). **Bank Management: Text & Cases (5th Edition)**, John Wiley & Sons, Inc., New York.

Mishkin, F.S. (2016). **The Economics of Money, Banking, and Financial Markets (11th Edition)**, Pearson Education,

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week 1: Why are Financial Institutions Special?

- The role of Financial Institutions.

- The Structure of the Financial Industry: Depository and Non-Depository Institutions.
- Transaction Costs: Economies of Scope. Economies of Scale.
- Information Asymmetries and Information Costs: Adverse Selection and Moral Hazards. Problems and Solutions.
- The transmission of Monetary Policy.

Week 2: Banking and the Management of Financial Institutions

- Accounts and Statements: On-balance Sheet Activities: Assets, Equities and Liabilities Analysis, the Balance Sheet Equilibrium. Off-balance sheet Activities.
- Basic Banking and General Principles of Effective Bank Management: Banks and Optimization Policy, Behavioral and Profitability Bank Models, Bank Performance Indexes.

Week 3: Risks of Financial Intermediation

- The importance of risk management for Financial Institutions.
- Types of risk faced by Financial Institutions: Interest Rate Risk, Market Risk, Credit Risk, Off-balance Sheet Risk, Technology and Operational Risks, Foreign Exchange Risks, Country or Sovereign Risks, Liquidity Risk, Insolvency Risk, Other Risks and the interaction of Risks.

Week 4: Credit Risk

- Individual Loan Risk: Credit Quality Problems. Calculating the Return on a loan. Measurement of Credit Risk. Default Risk Models: Qualitative Models, Credit Scoring Models. Newer Models of Credit Risk Measurement and Pricing: Term Structure Derivation of Credit Risk, Mortality Rate Derivation of Credit Risk, RAROC Models, Option Models of Default Risk.
- Loan Portfolio and Concentration Risk: Simple models of Loan Concentration Risk. Loan Portfolio Diversification and Modern Portfolio Theory: KMV Portfolio Manager Model, Partial Applications of Portfolio Theory, Loan Loss Ratio-based Models, Regulatory Models.

Week 5: Market Risk

- Importance of Market Risk Measurement for Financial Institutions.
- The Risk Metrics Model: Daily Earnings at Risk. Market Risk of Fixed-Income Securities, Foreign Exchange Equities. Aggregation.
- Historic (Back) Simulation Approach.
- Monte Carlo Simulation Approach.
- The BIS Standardized framework: Specific risk charge. General market risk charge.
- The BIS Regulations and Large Internal Models.

Week 6: Interest Rate Risk

- The Repricing Model: Refinancing Risk. Reinvestment Risk. Rate-Sensitive Assets (RSAs). Rate-Sensitive Liabilities (RSLs). Equal versus Unequal changes in rates on RSAs and RSLs. Weaknesses of the Repricing Model.
- The Maturity Model: The Maturity Model with a Portfolio of Assets and Liabilities. Weaknesses of the Maturity Model.
- The Duration Model: A general formula for Duration. Economic Meaning of Duration. Duration and Immunization of the Balance Sheet of a Financial Institution. Difficulties in Applying the Duration Model.

Week 7: Foreign Exchange Risk

- Sources of Foreign Exchange Risk exposure.
- Foreign Currency Trading: FX Trading Activities, Profitability of Foreign Currency Trading.
- Foreign Asset and Liability Positions: Return and Risk of Foreign Investments, Interest Rate Parity Theorem, Multicurrency Foreign Asset-Liability positions.

Week 8: Liquidity Risk

- Causes of Liquidity Risk: Liability-side Liquidity Risk. Asset-side Liquidity Risk.
- Measuring liquidity risk exposure: Net Liquidity Statement, Peer group ratio comparisons, Liquidity index, Financing gap, BIS Approach.
- Liquidity Risk, Unexpected Deposit Drains, and Bank Runs.

Week 9: Managing Risk through Internal Policies and Procedures

- Liability and Liquidity Management: Liquid asset management. Liability structure.
- Product diversification: Risks of product segmentation. Issues involved in the diversification of product offerings: Safety and soundness concerns, Economies of scale and scope, Conflicts of interest, Deposit insurance, Regulatory oversight, Competition.
- Geographic expansion: Domestic expansion. International expansion.

Week 10: Managing Risk through Financial Instruments

- Derivatives: Hedging. Futures and Forwards. Options, caps, floors and collars. Interest Rate and Currency Swaps.
- Loan Sales and Securitization: The Bank loan sales market. The pass-through security. Collateralized mortgage obligations. Mortgage-backed bonds. Innovations in securitization.

Week 11: Managing Risk through Regulatory Action

- Deposit insurance and other liabilities guarantees: Panic prevention versus moral hazard. Lender of last resort. Other programs.
- Capital Adequacy: Capital and Insolvency Risk. Capital standards for depository institutions: Basel I, Basel II, Basel III. National Standards. Capital standards for non-

depository institutions financial institutions.

Week 12: Financial Crises

- Financial crises and aggregate economic activity.
- Factors causing financial crises.
- Dynamics of past financial crises in developed countries.
- The subprime financial crisis of 2007–8.

Week 13: Revision Week

MACHINE LEARNING WITH APPLICATIONS TO ECONOMICS I - OIK3502

Course Objectives

The objective of this course is to introduce the student to advanced concepts of statistics such as logistic regression and variable selection and basic concepts of machine learning, such as non-linear models, cross-validation, performance estimation, and dimensionality reduction. Applications of algorithms in various fields of economics will be presented and discussed via the statistical language R.

Instructors

Tsagris Michail

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/course/view.php?id=378

Prerequisites

Sufficient knowledge of statistics and mathematics obtained from Mathematics I (ECO1001) and II (ECO1004) and Statistics I (ECO1003) and II (ECO1006) are useful for successful comprehension of the content of this course. Specifically, linear algebra, inferential statistics, random variables, and their distribution. Further, a thorough understanding of Econometrics I (ECO2003) and II (ECO2006) is necessary. Knowledge of R is desirable but not necessary.

Learning Outcomes and General Competencies

On successful completion of the course, the students will be able to:

- Have grasped basic concepts of machine learning.
- Choose the suitable method for real problems.
- Perform variable selection with various algorithms.
- Apply non-linear methods to real problems.
- Evaluate the algorithms' predictive performance.
- Interpret and assess empirical studies.
- Be able to use machine learning tools with real data.
- Work independently.
- Make decisions.

Assessment method

The assessment is based on a mandatory midterm exam, final exams at the end of the spring semester, and if necessary, resit exams in September.

Tutoring courses

Not offered for this course.

Basic textbook

Bersimis, S., Bartzis, G., Papadakis, G. and Sachlas, Ath. (2021). **Applied Statistics and Statistical Machine Learning using IBM SPSS Statistics, R, Python**, Tziola

Publishing, Athens (in Greek).

Tsagris, M. (2021). **Lecture notes**, Retjymno.

Supplementary material

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week 1: Introduction I

(Chapters 17-18)

- Association measures for continuous variables.
- Association measures for categorical variables.
- Graphical visualization of pairs of variables.
- Simple linear regression.
- Applications in economics: car prices and characteristics.

Week 2: Introduction II

(Chapters 17-18)

- Elements of multiple linear regression.
- Non-linear regression.
- Applications in economics: car prices and characteristics.

Week 3: Non-linear regression

(Lecture notes)

- Non-linear regression.
- Newton-Raphson algorithm for non-linear regression.
- Applications in economics: car prices and characteristics.

Week 4: Logistic regression

(Chapter 19)

- Basic concepts and parameter estimation using the Newton-Raphson algorithm, interpretation.
- Applications in economics: prediction of company bankruptcy.

Week 5: Poisson and quasi-Poisson regression

(Lecture notes)

- Basic concepts and parameter estimation using the Newton-Raphson algorithm, interpretation.
- Applications in economics: prediction of the number of cyber-security breaches.

Week 6: Variable selection

(Lecture notes)

- FBED algorithm.
- LASSO algorithm.
- γ-OMP algorithm.
- Applications in economics: Selection of car characteristics affecting the car price.

Week 7: k-NN algorithm

(Chapter 28)

- Basic concepts.
- Applications in economics: prediction of NBA player salaries based on their performance statistics on court.

Week 8: Midterm exam

Week 9: Predictive performance estimation of linear and non-linear models

(Chapter 16, lecture notes)

- K-fold cross-validation
- Bootstrap bias correction
- Applications in economics: applications in the previous examples.

Week 10: Dimensionality reduction

(Chapter 24, lecture notes)

- Multivariate data.
- Principal component analysis.
- Principal coordinate analysis.
- Non-linear principal component analysis.
- Applications in economics: applications in the previous examples.

Week 11: Demonstration of the algorithms using R I

Week 12: Demonstration of the algorithms using R II

Week 13: Revision and preparation for the exams

MACHINE LEARNING WITH APPLICATIONS TO ECONOMICS II - OIK3503

Course Objectives

This course is a continuation of the course Machine Learning with Applications in Economics I. It introduces students to additional advanced concepts and models of machine learning, such as analysis of categorical and ordinal variables, Bayesian analysis, variable selection and selection of functional form, as well as modern methods of machine learning which are not based on statistical concepts (neural networks and random trees/forests). The methods covered include both supervised and unsupervised (classification) learning and applications of the algorithms in various areas of economics will be presented using the R programming language.

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/course/view.php?id=367

Prerequisites

Basic concepts of statistics and mathematics, as these are covered in Mathematics I (OIK1001) and II (OIK1004) and in Statistics I (OIK1003) and II (OIK1006) are useful for following the course. Additionally, understanding and familiarity with the content of Econometrics I (OIK2003) and II (OIK2006) is necessary. Finally, students must be familiar with the basic concepts of machine learning, as these are covered in Machine Learning with Applications in Economics I, as well as with the R programming language, at the level presented in the above course.

Learning Outcomes and General Competencies

After successful completion of the course students will be able to:

- describe and discuss basic concepts from machine learning
- choose the appropriate method of analyzing data in real problems
- choose the appropriate independent variables and functional form using machine learning algorithms
- apply the techniques to real problems
- assess the predicting performance of the algorithms
- interpret and assess empirical studies
  The general skills that students will have after completion of the course are:
- ability to use machine learning techniques on real data
- independent study
- decision making

Assessment method

Learning is assessed via a written examination in the middle of the semester, which is compulsory for all students, and a final written examination, which will be timetabled in accordance with the Department's procedure for scheduling of examination periods. These examinations, which will include short-answer questions and solutions to longer problems, will assess the students' understanding of the concepts and their ability to use mathematical tools for solving problems relevant to economics. The intermediate examination will take place during the 8th week of the semester and the exact date and time will be announced by the Secretariat, at least 15 days prior to the examination. In the September resit examination period, the mark of the intermediate examination will not be counted in the course's final mark.

Tutoring courses

Not offered for this course.

Basic textbook

Bersimis, S., Bartzis, G., Papadakis, G. and Sachlas Ath. (2021). **Applied Statistics and Statistical Machine Learning using IBM SPSS Statistics, R, Python**, Tziola Publishing, Athens (in Greek).

Emvalomatis, G. (2021). **Lecture notes**, Rethymno.

Supplementary material

Nikolaou, Ch. (2019). **Data Analysis using R**, Disigma Publishing, Thessaloniki (in Greek).

Rasmussen, C.E. (2004). **Gaussian Processes in Machine Learning**, Rasmussen, C. E. (2004) Gaussian Processes in Machine Learning, Max Planck Institute for Biological Cybernetics, Tübingen, Germany.

Sala-i-Martin, X.X. (1997). **I Just Ran Two Million Regressions**, American Economic Review, 87(2), pp. 178-183,

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

1st Week: Introduction and review of basic concepts

(Lecture notes)

- Introduction to the course.

- Brief review of basic concepts form statistics and machine learning.
- Review of maximum likelihood as an estimation method.
- Basic concepts in numerical optimization.

2nd Week: Logistic regression

(Bersimis et al., Chap. 19)

- Categorical dependent variables and logistic regression.
- Relation to models of consumer behavior.
- Models with more than two categories.

3rd Week: Models for ordered data

(Lecture notes)

- Ordinal dependent variables.
- Ordered logistic regression and alternatives.
- Application to the analysis of questionnaires.

4th Week: Bayesian analysis I

(Lecture notes)

- Introduction to Bayesian inference.
- Main differences between Bayesian and classical methods.
- A simple example.
- Computations in Bayesian inference.

5th Week: Bayesian analysis II

(Lecture notes)

- Linear regression using Bayesian methods.
- Complex models and data augmentation.
- Logistic regression using Bayesian methods.

6th Week: Variable selection and prediction from multiple models

(Lecture notes and Sala-i-Martin, 1997)

- Model comparison using Bayes factors.
- Predictions and Bayesian model averaging.
- BIC (Bayesian Information Criterion) and its use in classical statistics.

7th Week: Non-parametric regression

(Lecture notes and Rasmussen, 2004)

- Gaussian processes.
- Gaussian process regression.
- Predictions and interpretation beyond predictions.

8th Week: Intermediate examination

9th Week: Introduction to neural networks I

(Bersimis et al., Chap. 27)

- Basic principles and terminology of neural networks.
- Applications of neural networks.
- The first generation of neural networks.

10th Week: Introduction to neural networks II

(Bersimis et al., Chap. 27)

- Computational problems in neural networks.
- The computational revolution and "Deep Learning".

11th Week: Random trees and random forests

(Bersimis et al., Chap. 30)

- Classification and Regression Trees (CART).
- Random trees and random forests.
- Predictions using random forests.

12th Week: The EM algorithm for classification

(Lecture notes)

- Latent variables and the Expectation Maximization (EM) algorithm.
- Combination of EM with other statistical models.

13th Week: Revision and preparation for the final exam

- OIK3222

Instructors	Daskalaki Charoula

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	0	0	0	0

MANAGEMENT I - OIK3202

Course Objectives	Management is generally defined as working with and through other people to accomplish the objectives of both the organization and its members. Such an accomplishment of objectives involves both a practical and a scientific understanding of actively working with others. This is the purpose of this course. We will understand management as the accomplishment of an organization's goals by the defining of goals, organization of work, motivation of others, staffing of the positions, the control of the labor, material, and evaluation of the completed effort.
	Accordingly, since managers are managers because of what they do, the task of this course is to describe and analyze functions of management so that the student will be able to describe the tasks of the modern executive. Further, because our modern understanding of management did not develop full-blown but rather evolved since the beginning of the 20th century, the history of that development is presented and analyzed in several different areas. Plus, since the modern manager must function within an increasingly complex global world, the environments of business (economic, technological, sociological, demographic, legislative, etc.) the course pays particular attention in describing these complex structures and the way they relate to the contemporary business organization. The emphasis will be on practical examples that are summarized and understood within the rigid academic framework provided by the course book.

Instructors	Panagopoulos Andreas

Course Web Page	http://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=87

Assessment method	There will be one final assessment in the form of a written exam. The dates of the exam will be set by the registrar office. The structure of the exam will be clearly outlined in the first lecture.
	The student should be advised that relying on a good understanding of the material included in the book does not necessarily imply that she will be able to understand the exam questions. As management is by all means a practical science the exam questions will rest on contemporary practical issues that will have been thoroughly outlined in class. This means that it is very hard for students to achieve a passing grade unless they have participated in lectures. Therefore student participation in class is encouraged.

Tutoring courses	Not offered.

Basic textbook	Montana, P.J. Charnov, B.H. (2002). **Business Review Books Management (3rd edition)**, Kleidarithmos Publishing, Athens (in Greek).

Course load per semester (in hours)	

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Lecture 1: Introduction to the course

Montana and Charnov, Chapter 1

- An outline of the course objectives
- An outline of the exam structure
- The Managerial Role
- Management Activities vs. Technical Activities
- Introduction to the Management Process
- Management Skills and Competencies
- Personal Competencies for Managerial Success

Lecture 2: Classical Schools of Management Theory

Montana and Charnov, Chapter 2

- The Management of Work
- The Management of Organizations
- Evaluation of the Classical School
- The Behavioral School of Management Theory
- Evaluation of the Behavioral Approach
- Management Science Approach
- Evaluation of Management Science Approach
- The Contingency Approach
- Evaluation of the Contingency Approach
- Theory Z: The Techniques of Japanese Management

Lecture 3: Social Responsibility

Montana and Charnov, Chapter 3

- Arguments against Social Responsibility for Business
- Arguments for Social Responsibility for Business
- Degrees of Corporate Social Responsibility Involvement
- The Social Obligation Approach
- The Social Responsibility Approach
- The Social Responsiveness Approach
- The Social Actions Management Process
- The Action Phase
- The Evaluation Phase

Lecture 4: Management and the Environments

Montana and Charnov, Chapter 4

- Management and the Environments of Business
- Open Systems Model
- The External Environments of Business
- Sociological Factors
- Political Factors
- Economic Factors
- Technological Factors
- The Internal Environments of Business
- Financial Resources 78 Physical Resources
- Human Resources
- Technological Resources

Lecture 5: Decision-Making

Montana and Charnov, Chapter 5

- Ways of Thinking about Business Decision-Making
- Linear Thinking
- Systems Thinking
- Types of Managerial Decisions
- Programmed Decisions
- Nonprogrammed Decisions
- Levels of Decision-Making in an Organization
- Strategic, Administrative, Operational Decision-Making
- Styles of Decision-Making
- Decision-Making under Different Conditions
- Conditions of Certainty, Uncertainty and Risk
- Steps in the Decision-Making Process
- Page v Situational Analysis
- Setting Performance Standards
- Generation of Alternatives
- Consequences Evaluation
- Pilot-Testing and Full Implementation

Lecture 6: Functions of Management

Montana and Charnov, Chapter 6

- An Overview of the Functions of Management
- The Management Process
- Planning-Controlling-Evaluation and Feedback
- A System for Managing for Results
- The Psychological Contract

Lecture 7: Planning-I

Montana and Charnov, Chapter 7

- Planning
- Importance of Planning
- The Planning Framework
- Strategic Planning
- Long-Range Planning
- Operational Planning
- The Planning Function
- On the Corporate Level
- On Each Manager's Level
- The Plan for Planning
- The Planning Process and Results

Lecture 8: Planning-II

Montana and Charnov, Chapter 8

- Planning: Strategy Formulation
- Gap Analysis, An Approach to Provisional Planning
- Identifying a Planning Gap
- Filling the Planning Gap
- SWOT
- Interview Executives
- Gather Information
- Use the Provisional Planning Issue Form
- Organize Data
- Provide Feedback
- Criteria for Evaluating Management Strategy
- A Framework for Evaluating Managerial Effectiveness

Lecture 9: Planning-III

Montana and Charnov, Chapter 9

- Strategy Implementation
- Types of Objectives
- Criteria for Evaluating Objectives
- Writing Objectives
- Potential Exception to the "Result Rather Than Activity" Criterion for Writing Objectives
- Performance Contract
- Statement of Responsibilities
- Standards of Performance

- Negotiating the Performance Contract
- Techniques of Negotiating
- The Appraisal Process

Lecture 10: Basic Concepts of Organizing

Montana and Charnov, Chapter 10

- Basic Concepts of Organizing
- Why Organize?
- Basic Concepts
- Guidelines for Organizing

Lecture 11: Organizational Structures -I

Montana and Charnov, Chapter 11

- Concepts and Formats
- Departmentalization
- Functional Structure
- Divisional Structure
- Process, Product, Market, Customer, Geographic Area
- Matrix (Project Organization)
- Combination Approach
- Other Developments in Organizational Structures
- Team Organization
- Virtual Organization (Boundaryless)
- Delegation, The Art of Managing
- Delegation Process, Authority, and Accountability
- Risks in Delegation
- Techniques of Delegation

Lecture 12: Organizational Structures -II

Montana and Charnov, Chapter 12

- Parity of Authority and Responsibility
- Scalar Principle
- Centralization versus Decentralization
- Organizational Structures
- Major Types of Organizational Structure
- Organizational Structure and Environment and Technology
- Contingency Approach
- Investigating Competitive Advantage
- The Value Chain

Lecture 13: Revisiting lectures 1 to 12, answering questions, clarifying the exam structure

MANAGEMENT II - OIK3209

Course Objectives

What are the forces governing firm success? How about firm failure? Further, what are a firm's targets? Above all, if there are forces that make firms constantly miss their targets, which ones are they? These questions constitute the focal point of a firm's strategy, which is broadly defined as: the firm's working plan for achieving its vision, prioritizing objectives, competing successfully, and optimizing financial performance with its business model. Accordingly, this curse will focus on how resources can be leveraged in allowing a firm a competitive advantage in the long term. The external and internal environment of the firm, competencies, technologies and tastes, as a well as rivals' strategies play an important role in defining such a competitive advantage. These forces are inter-connected and above all dynamic, they therefore demand an understanding that is based on the firm theoretical structure that the course book allows for, complemented by practical contemporary examples that capture the aforesaid dynamics. As the analysis will build on an understanding of basic managerial principles it is strongly suggested that students have first followed Management –I (EMNO 2018).

Instructors

Panagopoulos Andreas

Course Web Page

http://econservices.soc.uoc.gr/econ_classes/course/view.php?id=95

Assessment method

There will be one final assessment in the form of a written exam. The dates of the exam will be set by the registrar office. The structure of the exam will be clearly outlined in the first lecture.
The student should be advised that relying on a good understanding of the material included in the book does not necessarily imply that she will be able to understand the exam questions. As management is by all means a practical science the exam questions will rest on contemporary practical issues that will have been thoroughly outlined in class. This means that it is very hard for students to achieve a passing grade unless they have participated in lectures. Therefore student participation in class is encouraged.

Tutoring courses

Not offered.

Basic textbook

Johnson, G., Scholes, K. and Whittington, R. (2011). **Exploring Corporate Strategy**, Kritiki Publishing, Athens (in Greek).

Supplementary material

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

Lecture 1: Introducing Strategy -I

Johnson, G., Scholes, K., και Whittington, R., Chapter 1

- What is strategy?
- The characteristics of strategic decisions
- Levels of strategy

Lecture 2: Introducing Strategy -II

Johnson, G., Scholes, K., και Whittington, R., Chapter 1

- The vocabulary of strategy
- Strategic management
- The strategic position
- Strategic choices
- Strategy in action
- Strategy as a subject of study

Lecture 3: Introducing Strategy -III

Johnson, G., Scholes, K., και Whittington, R., Chapter 1

- Strategy as a job
- The strategy lenses
- Summary
- Case study (the case study will focus on a contemporary example and not on the study offered by the book)

Lecture 4: The Environment -I

Johnson, G., Scholes, K., και Whittington, R., Chapter 2

- The macro-environment
- The PESTEL framework

Lecture 5: The Environment -II

Johnson, G., Scholes, K., και Whittington, R., Chapter 2

- Building scenarios
- Industries and sectors
- Competitive forces – the five forces framework
- The dynamics of industry structure
- Competitors and markets
- Strategic groups
- Market segments

Lecture 6: The Environment -III

Johnson, G., Scholes, K., και Whittington, R., Chapter 2

- Identifying the strategic customer
- Understanding what customers value – critical success factors
- Opportunities and threats
- Summary
- Case study (the case study will focus on a contemporary example and not on the study offered by the book)

Lecture 7: Strategic Capability -I

Johnson, G., Scholes, K., και Whittington, R., Chapter 3

- Foundations of strategic capability
- Resources and competences
- Threshold capabilities
- Unique resources and core competences
- Cost efficiency

Lecture 8: Strategic Capability -II

Johnson, G., Scholes, K., και Whittington, R., Chapter 3

- Capabilities for achieving and sustaining competitive advantage
- Value of strategic capabilities
- Rarity of strategic capabilities
- Inimitable strategic capabilities
- Non-substitutability of strategic capabilities
- Dynamic capabilities
- Organisational knowledge
- Diagnosing strategic capability
- The value chain and value network
- Activity maps

Lecture 9: Strategic Capability -III

Johnson, G., Scholes, K., και Whittington, R., Chapter 3

- Benchmarking
- Managing strategic capability
- Limitations in managing strategic capabilities
- Developing strategic capabilities
- Managing people for capability development
- Summary
- Case study (the case study will focus on a contemporary example and not on the study offered by the book)

Lecture 10: Strategic Purpose -I

Johnson, G., Scholes, K., και Whittington, R., Chapter 4

- Corporate governance
- The governance chain
- Corporate governance reforms
- Different governance structures
- How governing bodies influence strategy

Lecture 11: Strategic Purpose -II

Johnson, G., Scholes, K., και Whittington, R., Chapter 4

- Ownership choices
- Business ethics and social responsibility
- Corporate social responsibility
- The role of individuals and managers
- Stakeholder expectations
- Stakeholder mapping
- Power

Lecture 12: Strategic Purpose -III

Johnson, G., Scholes, K., και Whittington, R., Chapter 4

- Organisational purposes: values, mission, vision and objectives
- Corporate values
- Mission and vision statements
- Objectives
- Summary
- Case study (the case study will focus on a contemporary example and not on the study

offered by the book)

Lecture 13: Revisiting lectures 1 to 12, answering questions, clarifying the exam structure

---

Lecture 13: Revisiting lectures 1 to 12, answering questions, clarifying the exam structure

ECONOMICS OF INNOVATION AND NEW TECHNOLOGIES - OIK3210

Course Objectives

This course aims at offering an economic analysis of the process of innovation. The starting point of the analysis focuses on the characteristics of innovation and the driving forces behind innovation, asking the question is innovation plagued by market failures that need to be addressed? Intellectual property, in its all its guises (patents, trade secrets, trademarks and copyrights), as well as prizes, will be an area that the course pays particular attention. Through this analysis the student will come to terms with R&D incentives and the role of markets in promoting or hindering the innovation process. The course is not only micro-oriented. In fact, the macro side of innovation in the form of national systems of innovation and trade (e.g. the TRIPS agreement and its various manifestations) will also be outlined in a way that allows the student to make comparisons between countries and regions. The last lectures will focus on contemporary issues involving innovation policy. Central will be the analysis of artificial intelligence, its role as a general purpose technology, the effects it may have on the labour market, the barriers to entry that dominant firms are raising, as well as the role of data and the cloud will be explained in some detail.

It is advisable that the student has a good understanding of first and second year macro and micro theory, otherwise it will be hard for students to follow the course's fine details. A good understanding of mathematics and of game theory is recommended because the course will venture into the details of some of the most influential papers, mainly the work of Suzan Scotchmer, Nancy Galini, Anton and Yao, as well as Henry and Ponce.

Instructors

Panagopoulos Andreas

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=89

Prerequisites

Most of the material needed will be delivered through a set of slides that can be found in Moodle. However, it should be stressed the course material provided by the slides will be updated weekly with contemporary practical examples. Due to the emphasis on contemporary examples, the course will constantly employ the internet in search for data, examples, and best practices. Accordingly, it is a prerequisite for students to bring with them their laptop or tablet. For the purpose of this course the internet access abilities of smart phones are simply insufficient.

Assessment method

There will be one final assessment in the form of a written exam. The dates of the exam will be set by the registrar office. The structure of the exam will be clearly outlined in the first lecture.

The student should be advised that relying on a good understanding of the material included in the slides does not necessarily imply that she will be able to understand the exam questions. In its essence the economics of innovation have a practical component i.e. innovation. As innovations are constantly developed and reshaped, the course will equally update its material in a weekly fashion. This inevitably implies that the exam questions will rest on contemporary practical issues that will have been thoroughly outlined in class. Thereby, it is very hard for students to achieve a passing grade unless they have participated in lectures. Hence, student participation in class is encouraged.

Tutoring courses	Not offered for this course.

Basic textbook	Greenhalgh, C. and Rogers, M. (2010). **Innovation, Intellectual Property, and Economic Growth**, Princeton University Press, USA.

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	0	111	150

Lectures

Week 1: Introduction I

Slide set 1

- What is innovation.
- Definitions.
- The role of innovation in the economy.
- The role of innovation in business.
- The innovation process.
- Diffusion

Week 2: Introduction II

Slide set 1

- The role of scientists.
- Public goods.
- Private goods.
- Market failure.
- Externalities.
- Various forms of innovation.
- Drastic innovations

Week 3: Intellectual Property I

Slide set 2

- Types of Intellectual Property Rights.
- The evolution Intellectual Property.
- Patents, the intuition behind them and how they are granted.
- The role of patents as R&D incentives.

Week 4: Intellectual Property II

Slide set 2

- Controversies.
- TRIPS.
- Trademarks.
- Copyrights.
- Main indicators.

Week 5: Measuring Innovation

Slide set 3

- How to measure innovation?
- Various indicators.
- The problem of using patent counts.
- The role of citations in measuring innovation.
- Suggested reading:
1. Hall, B.H., Jaffe, A. & Trajtenberg, M. (2005), "Market Value and Patent Citations", Rand Journal of Economics, 36(1), 16-38.
2. Bessen, J., & Hunt, R. (2007), "An Empirical Look at Software Patents", Journal of Economics & Management Strategy, 16(1), 157-189.

Week 6: Productivity

Slide set 3

- How to measure productivity?
- Productivity and growth.
- The Solow paradox.
- Total factor productivity.
- Measuring productivity at the firm level.
- Measuring productivity at the industry level.
- Comparing productivity across countries.
- Suggested reading:
1. Brynjolfsson, E. (1993), "The Productivity Paradox of Information Technology", Communications of the ACM, 36(12), 66–77.

Week 7: National Systems of Innovation

Slide set 4

- Defining National Systems of Innovation.
- The triple helix model.

- The role of Business.
- The role of Policy makers.
- The role of civil society.
- How do the helixes bond?
- Who funds R&D.
- Funding methods.
- Suggested reading:

1. Goto, A. (2000), "Japan's National Innovation System: Current Status and Problems", Oxford Review of Economic Policy, 16(2), 103-113.

Week 8: The Role of Universities in the Innovation Process

Slide set 4

- Where does research takes place at?
- The role of Universities.
- University patenting.
- The Bayh Dole Act.
- Problems.
- Trends.
- The innovation's path from the university lab to production.
- Anti-commons.
- Standard setting.
- Suggested reading:

1. David, P.A. (1985), "Clio and the Economics of QWERTY". The American Economic Review, 75(2), 332-337.
2. Link, A.N., Scott, J.T. & Danziger, R.S. (2018), "Is the Bayh-Dole Act Stifling Biomedical Innovation?" Issues in Science and Technology, 34(2).
3. Heller, M.A., and Eisenberg, R.S. (1998), "Can Patents Deter Innovation? The Anticommons in Biomedical Research", Science, 280(5364), 698-701.

Week 9: The Role of Markets

Slide set 5

- Reasons to innovate.
- Demand pull or supply driven.
- The role of entrepreneurship.
- The role of the entrepreneur innovator.
- Markets and innovation.
- Business stealing effect, Appropriability effect, Spillovers effect.
- Schumpeter's view.
- The role of large firms.
- The role of market power.
- Competition and innovation: a non-linear relationship.

- Suggested reading:

1. Jones, C.I., & Williams, J.C. (2000), "Too Much of a Good Thing? The Economics of Investment in R&D", Journal of Economic Growth, 5(1), 65-85.
2. Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2002), "Competition and Innovation: An Inverted U Relationship (No. w9269), National Bureau of Economic Research.

Week 10: The Patent Paradox

Slide set 6

Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">

Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome,

SCIENCE VOL 310 14 OCTOBER 2005

- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">

Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">

Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.

- " class="span12">

  Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.

- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.

- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.

- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.

- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27

- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005

- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425

- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.

- " class="span12">

  Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.

- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.

- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.

- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.

- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27

- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005

- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425

- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.

- " class="span12">

  Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.

- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">

  Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">

  Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.

- Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
- Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
- Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.

- Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
- Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
- Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
- Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
- Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.
- " class="span12">
- The patent Paradox
- Navigating the patent thicket
- The tragedy of anticommons
- DNA patents
- Royalty stacking
- The role of copyright in science
- Suggested reading:

1. Lanjouw, Jean O. and Schankerman, Mark (2004) Protecting intellectual property rights: are small firms handicapped? The Journal of Law and Economics, 47 (1). 45-74.
2. Hall and Ziedonis: The patent paradox revisited: an empirical study of patenting in the U.S. semiconductor industry, 1979–1995.
3. Gans, J. S., & Stern, S. (2003). The product market and the market for "ideas": commercialization strategies for technology entrepreneurs. Research policy, 32(2), 333-350.
4. Shapiro, Carl. "Navigating the patent thicket: Cross licenses, patent pools, and standard setting." Innovation Policy and the Economy, Volume 1. MIT press, 2001. 119-150.
5. Heller, Michael A., and Rebecca S. Eisenberg. "Can patents deter innovation? The anticommons in biomedical research." Science 280.5364 (1998): 698-701.
6. Williams, Heidi (2013) "Intellectual Property Rights and Innovation: Evidence from the Human Genome," Journal of Political Economy, 121: 1-27
7. Kyle Jensen and Fiona Murray, Intellectual Property Landscape of the Human Genome, SCIENCE VOL 310 14 OCTOBER 2005
8. Robert Cook-Deegan and Christopher Heaney, Patents in Genomics and Human Genetics, Annu. Rev. Genomics Hum. Genet. 2010. 11:383–425
9. Lemley, M. A., & Shapiro, C. (2006). Patent holdup and royalty stacking. Tex. L. Rev., 85, 1991.

Week 11: Patents vs. Trade Secrets

Slide set 6

- Are patents critical to innovation?
- Can trade secrets also incentivize innovation: Free riding.
- Open innovation.
- Open source.

- Trolls.
- The cost of intellectual property.
- Intellectual property strategies.
- Suggested reading:

1. Cohen, W.M., Nelson, R.R. & Walsh, J.P. (2000), "Protecting their Intellectual Assets: Appropriability Conditions and Why US Manufacturing Firms Patent (or Not)", National Bureau of Economic Research, w7552.
2. Anton, J.J., & Yao, D. A. (1994), "Expropriation and Inventions: Appropriable Rents in the Absence of Property Rights", The American Economic Review, 84(1), 190-209.
3. Henry, E., & Ponce, C.J. (2011), "Waiting to Imitate: On the Dynamic Pricing of Knowledge", Journal of Political Economy, 119(5), 959-981.

Week 12: Artificial Intelligence

Slide set 7

- Defining AI.
- The role of Data.
- The role of infrastructure (the cloud, processing power).
- Barriers to entry.
- Main innovation indicators.
- A general purpose technology.
- The future of labour demand and supply in the AI era.
- Suggested reading:

1. Acemoglu, D., & Restrepo, P. (2018), "Demographics and Automation", National Bureau of Economic Research, w24421.
2. Cockburn, I.M., Henderson, R., & Stern, S. (2018), "The Impact of Artificial Intelligence on Innovation", National Bureau of Economic Research, w24449.
3. Bresnahan, T.F., & Trajtenberg, M. (1995), "General Purpose Technologies 'Engines of Growth'?", Journal of Econometrics, 65(1), 83-108.
4. Webb, M., Short, N., Bloom, N., & Lerner, J. (2018), "Some Facts of High-Tech Patenting", National Bureau of Economic Research, w24793.

Week 13: Revisiting Lectures 1 to 12, Answering Questions, Clarifying the Exam Structure

---

STRATEGIC CHANGE MANAGEMENT - OIK3218

Course Objectives

In an ever-changing market environment, the ability to design, develop and implement strategic change initiatives can lead an organisation or business to success and sustainability. Strategic change initiatives often concern a shift in the strategic direction of an organization either due to choosing to take advantage of an existing market opportunity, or due to the emergence of a market crisis. In any case, any strategic change affects processes, practices, systems, and possibly organisational culture. The aim of this course is to support students understand the nature of strategic change, explore the fundamentals of strategic change management, and develop strategic transition planning, management, and evaluation skills.

Instructors

Spyriadis Thanasis

Course Web Page

https://econservices.soc.uoc.gr/econ_classes/enrol/index.php?id=376

Prerequisites

For more effective course attendance, it is recommended that students have previously attended Management I and/or Management II.

Learning Outcomes and General Competencies

Upon successful completion of this course, students are expected to possess the following knowledge and skills:

1. Acknowledge the value of strategic management thinking
2. Discuss strategy as a concept and as a management process
3. Describe the nature and patterns of strategic change
4. Examine the importance of change in a modern organisation
5. Identify the different types of strategic change
6. Evaluate multiple change implementation choices
7. Analyse the change context and determine its effect on strategic change
8. Explore the design aspects of the transition during strategic change

Assessment method

The course is assessed with a final or re-sit exam, which is the 100% of the final mark. The final or re-sit exam will take place in accordance with the exam timetable of the Department of Economics. The exam will include multiple choice questions, or open questions, or questions on a case study related to strategic change management.

Tutoring courses

The course will include up to thirteen (13) seminar sessions, which will aim to support students' understanding and application of the theory of strategic change management.

Basic textbook

De Wit, B. (2017). **Strategy: An International Perspective (6th ed.)**, Cengage Learning, Hampshire.

Balogun, J., Hailey, V., H. and Gustafsson, S. (2016). **Exploring Strategic Change (4th ed.)**, Pearson, Harlow.

Supplementary material

Feurer, R. and Chaharbaghi, K. (1995). **Performance Measurement in Strategic Change**, Benchmarking for Quality Management & Technology, Vol. 2(2), pp. 64-83,

Fobres (2019). **Why Do Change Programmes Fail?**, Available from: https://www.forbes.com/sites/sallypercy/2019/03/13/why-do-change-programs-fail/#bf31a912e48b,

Johnson, G., Scholes, K. and Whittington, R. (2017). **Exploring Strategy: Text and Cases (11th ed.)**, Perason, Harlow.

Lynch, R. (2015). **Strategic Management (7th ed.)**, Pearson, Harlow.

Neuman, J., Robson, A., and Sloan, D. (2018). **Monitoring and evaluation of strategic change programme implementation—Lessons from a case analysis**, Evaluation and Program Planning, Vol. 66, pp. 120-132,

Piercy, N. (2016). **Market-led Strategic Change: Transforming the Process of Going to Market (5th ed.)**, Routledge, London.

Rumelt, R. (2011). **Good Strategy, Bad Strategy (1st ed.)**, Crown Business, New York.

Smith, R., King, D., Sidhu, R., and Skelsey, D. (2014). **The Effective Change Manager's Handbook: Essential Guide to the Change Management Body of Knowledge**, Kogan Page Limited, London.

Voehl, F., and Harrington, H.J. (2016). **Change Management: Manage Change or it will Manage You**, CRC Press, Florida.

Course load per semester (in hours)	Lectures	Tutorials	Individual effort	Total
	39	13	98	150

Lectures

1st week

De Wit, B. (2017, chapters 1 and 2)

- Principles of strategy and strategic thinking
- Strategy as a concept and as a management process
- Strategy tensions and paradoxes
- Business ethics and strategy

2nd week

De Wit, B. (2017, chapters 10, 11 and 12)

- Strategy context
- The nature and characteristics of the business environment
- Key tools for business environment analysis

3rd week

De Wit, B. (2017, chapter 3); Lynch (2017, chapters 5, 6 and 7)

- Strategy purpose
- The nature of competition and its impact on strategy
- Prescriptive, emergent, or hybrid approaches?
- Communicating strategic purpose

4th week

De Wit, B. (2017, chapters 4, 5 and 6); Lynch (2017, chapter 8 and 9)

- Strategy content
- Applying strategy at various organisational levels
- Applying strategy at various organisational functions

5th week

De Wit, B. (2017, chapter 1); Lynch (2017, chapter 13, 14 and 15)

- Strategy process
- Shaping organisations through strategic decisions and strategic actions
- Realisation of strategy through action and strategy formation
- Reviewing key paradoxes of strategic process

6th week

Balogun et al. (2016, chapter 1)

- The nature of strategic change
- The need for evolving strategies
- Defining change
- The change kaleidoscope
- Change dimensions (by Nature and by End Result)

7th week

Balogun et al. (2016, chapter 1)

- Types of strategic change
- Adaptation
- Reconstruction
- Evolution
- Revolution

8th week

Balogun et al. (2016, chapters 2 and 3)

- Change implementation choices
- The change path – a fundamental choice
- Other change design choices
  - Change start-point
  - Change style
  - Change target
  - Change levers
  - Change roles

9th week

Balogun et al. (2016, chapter 4)

- Making context-sensitive design choices
- The key features of the change context and their effect on strategic change

---

10th week

Balogun et al. (2016, chapter 5)

- Designing the transition
- Devising the implementation path
- Building enabling conditions – developing a vision
- Employee and stakeholder engagement
- Change levers

11th week

Balogun et al. (2016, chapters 6 and 7)

- Transition management
- Strategic leadership
- Middle management involvement
- Organisational climate

12th week

Balogun et al. (2016, chapter 8); Johnson et al. (2017, chapter 12)

- Evaluation of strategic change management performance
- Principles of evaluation and performance management
- Reviewing the change flow chart

13th week – Revision and exam preparation

- Overview of the key learning outcomes of the course
- Guidance for exam preparation

DIGITALIZATION AND THE ECONOMY I - OIK3504

Course Objectives   --

Basic textbook

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

ECONOMICS OF PROFESSIONAL SPORTS - OIK3203

Course Objectives

The objective of this course is to convey to the students the methodology of approach as well as the tools of analysis of the economics of professional sports, with an emphasis on the functioning of firms/professional sports clubs in coherence with the functioning of the markets/professional sports leagues wherein the former firms operate. Such markets/leagues are considered to be the major sports leagues of North America and Europe: NBA, Premier League, etc. The most significant characteristics which render this industry a peculiar character, leading to the need for a special economics topic, are the following: First that – in contrast to what happens in conventional industries – more than one productive processes – conducted by separate firms/clubs – are needed in order a single (sports) product to be supplied to consumers. Second that, the further apart in efficiency/performance those separate productive processes are –across clubs –, the less attractive the (joint) sports product becomes for the consumers. These idiosyncratic properties of the professional sports industry deliver in turn particular theoretical issues to resolve, and questions to answer, moreover leading to the need for market interventions and institutional resolutions, in this industry, which are rather different than those applied in the conventional industries.

Course Web Page

http://econservices.soc.uoc.gr/econ_classes/course/view.php?id=99

Prerequisites

Sufficient knowledge of Microeconomics, and basic skills of differential calculus and analytical geometry.

Learning Outcomes and General Competencies

On successful completion of the course, students will be able to:

- Understand and interpret the functioning of the modern market of professional sports, identify and sort its behavioral and institutional features, and cohere those features with the stylized facts.

- Combine the definitions and basic theoretical notions with the methodology and the tools of analysis, with a view to successful transition from theory to practice, so that to evaluate and design intervention policies to the market(s) of professional sports.

- Establish/specify demand and supply functions of athletic talent, which to base on the theory of consumer's utility and the production and costs theory, respectively.

- Identify, outline, interpret and evaluate the competition circumstances– coherently – in the markets of athletic talent and athletic product.

- Analyze on the basis of economic theory special topics which coherently relate with the product, as well as the labor, markets in professional sports. Such as winning premiums, transfers, institutional obstacles in the athletes' mobility, international sports markets, stadium capacity, TV-rights, uncertainty of outcome, salary caps.

- Apply the models and make use of the economic theory premises in order to conduct case studies for sports clubs and leagues with an emphasis on the professional team sports industry.

Regarding the acquired general skills, students will be able to:

- Search, analyze, combine and compose data and information elements, by making use of the available tools and technology.

- Make Decisions
- Adapt to new circumstances
- Produce ideas for further research

Assessment method

The assessment is based on a written exam (in the form of multiple choice questions) held upon the completion of the course at the end of the semester.

Tutoring courses

Not offered for this course.

Basic textbook

Vlassis, M. (2021). **The Economics of Professional Sports Leagues**, Electronic Textbook, Rethymno (in Greek).

Vlassis, M. (2015). **The Economics of Professional Sports**, Kallipos (Electronic Textbook), Athens (in Greek).

Supplementary material

Blair, R.D. (2012). **Sports Economics**, Cambridge University Press, Cambridge.

Kesenne, S. (2007). **The Economic Theory of Professional Team Sports**, Edward Elgar,

---

Course load per semester (in hours)

Lectures	Tutorials	Individual effort	Total
39	0	111	150

Lectures

Week/Lecture 1: The Economic Agents/Units in Professional Sports – Fundamental behavioral assumptions

- Consumer of the sports product –sports fan
- Producer of the sports product – professional sports club
- Carrier of athletic talent – professional athlete/player

Week/Lecture 2: Athletic talent, sports product and ticket pricing

- Club owners' goals and optimal employment of athletic talent
- Ticket pricing in profit/win/revenue maximization sports leagues
- Stadium capacity constraints and ticket pricing

Week/Lecture 3: Athletic Talent Market Equilibrium in Profit Maximization Sports Leagues

- Demand for sports product and demand for athletic talent
- Athletic talent market equilibrium
- Competitive balance and quality of the league

Week/Lecture 4: Athletic Talent Market Equilibrium in Win Maximization Sports Leagues

- Athletic talent market equilibrium
- Competitive balance and quality of the league
- Profit maximization vs. Win maximization sports leagues; comparison

Week/Lecture 5: Athletic Talent Market Equilibrium when club owners maximize (some) Profit-Win Combination

- Profit-Win Linear Combination – Maximization
- Profit maximization vs. win maximization vs. profit-win linear combination – maximization; comparison
- Operational costs and athletic talent market equilibrium

Week/Lecture 6: Athletic Talent and Ticket Pricing

- Athletic Talent and ticket pricing in profit-maximization sports leagues
- Athletic Talent and ticket pricing in win-maximization sports leagues
- Competitive balance/quality of the league and ticket prices

Week/Lecture 7: Nash Equilibrium in the Market for Athletic Talent in Profit-Maximization Sports Leagues

- Game theory and Nash equilibrium
- Nash Equilibrium in the market for athletic talent under conditions of variable supply of athletic talent
- Nash Equilibrium in the market for athletic talent under conditions of fixed supply of athletic talent
- Nash vs. Walras equilibrium in the market for athletic talent under conditions of fixed supply of athletic talent

Week/Lecture 8: Nash Equilibrium in the Market for Athletic Talent in Win-Maximization Sports Leagues

- Win-maximization Nash equilibrium
- A simple example of Nash equilibrium
- Exploring parameter –effect in the Nash equilibrium

Week/Lecture 9: The labor Market of Professional Sports Leagues

- Idiosyncratic characteristics and institutional regulations
- Athletic talent- Monopsony in profit-maximization sports leagues
- Athletic talent- Monopsony in win-maximization sports leagues

---

Week/Lecture 10: Athletic Talent Supply Management, Players' Contracts, and "Winning-Premiums"

- Monopoly in the market for athletic talent
- Asymmetry/uncertainty and players' contracts
- Bargaining in the market for athletic talent
- Performance incentives: "Winning-premiums"

Week/Lecture 11: National and International Markets for Sports Product and Athletic Talent

- Asymmetric leagues under conditions of national and international markets for the sports product
- Asymmetric leagues under conditions of national and international markets for athletic talent
- Asymmetric leagues under conditions of national and international markets for both the athletic talent and the sports product

---

Week/Lecture 12: Professional Sports Leagues and the TV-Market

- The market for the sports product and the TV-market
- Centralized vs. Decentralized management of the TV-rights
- Pay vs. free TV
- Management of TV-revenues

Week/Lecture 13: Uncertainty of Outcome and Salary Caps

- Uncertainty of outcome and athletic talent - market equilibrium
- Salary caps as a fixed percentage of the league revenues
- Salary caps and ticket prices
- Salary caps in European soccer