

## COURSE OUTLINE: INDUSTRIAL ORGANIZATION

### GENERAL

|                                                                                                                                                                                                                                                                   |                                                                                                  |                              |                |
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| <b>SCHOOL</b>                                                                                                                                                                                                                                                     | Economica and Management                                                                         |                              |                |
| <b>ACADEMIC UNIT</b>                                                                                                                                                                                                                                              | Economics                                                                                        |                              |                |
| <b>LEVEL OF STUDIES</b>                                                                                                                                                                                                                                           | Undergraduate                                                                                    |                              |                |
| <b>COURSE CODE</b>                                                                                                                                                                                                                                                | <b>OA0115</b>                                                                                    | <b>SEMESTER OF STUDY</b>     | 7th (Major C)  |
| <b>COURSE TITLE</b>                                                                                                                                                                                                                                               | <b>Industrial Organization</b>                                                                   |                              |                |
| <b>INSTRUCTOR(S)</b>                                                                                                                                                                                                                                              | <b>Professor V. Zervos</b>                                                                       |                              |                |
| <b>INDEPENDENT TEACHING ACTIVITIES</b><br><i>where credit is awarded for discrete parts of the course e.g. lectures, laboratory exercises, etc. If credit is awarded for the whole course, indicate the weekly teaching hours and the total number of credits</i> |                                                                                                  | <b>WEEKLY TEACHING HOURS</b> | <b>CREDITS</b> |
|                                                                                                                                                                                                                                                                   |                                                                                                  | 3                            | 6              |
| <i>Add rows if necessary. The teaching organisation and the teaching methods used are described in detail in 4.</i>                                                                                                                                               |                                                                                                  |                              |                |
| <b>COURSE TYPE</b><br><i>general background, special background, specialized general knowledge, skills development</i>                                                                                                                                            | <i>general background, special background, specialized general knowledge, skills development</i> |                              |                |
| <b>PREREQUISITE COURSES:</b>                                                                                                                                                                                                                                      | No                                                                                               |                              |                |
| <b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>                                                                                                                                                                                                                  | Greek                                                                                            |                              |                |
| <b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>                                                                                                                                                                                                                  | Yes                                                                                              |                              |                |
| <b>COURSE WEBSITE (URL)</b>                                                                                                                                                                                                                                       | <a href="https://www.econ.uth.gr/">https://www.econ.uth.gr/</a>                                  |                              |                |

### LEARNING OUTCOMES

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| <b>Learning Outcomes</b>                                                              |
| <i>The course learning outcomes, specific knowledge, skills and competences of an</i> |

*appropriate level, which the students will acquire with the successful completion of the course are described.*

*Consult Appendix A*

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

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

Explain the strategic behavior of businesses, describe the market structure and the competitive conditions and conduct.

Calculate and analyze equilibrium conditions of oligopolies and monopoly markets in various industries as well as understand the competitive conditions in which they operate.

Analyze the competitive conditions of various industries as well as make decisions regarding the development of the companies operating in them.

Make decisions regarding production quantities and prices in various models of imperfect competition such as the classical and a modified Cournot, Stackelberg and Bertrand models with the aim of maximizing profits, etc.

### **General Competences**

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

|                                                                    |                                                                    |
|--------------------------------------------------------------------|--------------------------------------------------------------------|
| <i>Search for, analysis and synthesis of data and information,</i> | <i>Project planning and management</i>                             |
| <i>with the use of the necessary technology</i>                    | <i>Respect for difference and multiculturalism</i>                 |
| <i>Adapting to new situations</i>                                  | <i>Respect for the natural environment</i>                         |
| <i>Decision-making</i>                                             | <i>Showing social, professional and ethical responsibility and</i> |
| <i>Working independently</i>                                       | <i>sensitivity to gender issues</i>                                |
| <i>Team work</i>                                                   | <i>Criticism and self-criticism</i>                                |
| <i>Working in an international environment</i>                     | <i>Production of free, creative and inductive thinking</i>         |
| <i>Working in an interdisciplinary environment</i>                 | <i>.....</i>                                                       |
| <i>Production of new research ideas</i>                            | <i>Others...</i>                                                   |
|                                                                    | <i>.....</i>                                                       |

- Promoting free, creative and inductive thinking.
- Generating new research ideas
- Decision-making
- Exercising criticism and self-criticism

## SYLLABUS

### Basic Introductory Concepts and Market Concentration

Theories of market concentration are analyzed, as well as measures and criteria of market concentration. Concentration curves, Hannah and Kay criteria, concentration indices, Hannah and Kay criteria, the Herfindahl-Hirschman index and measures of inequality are also analyzed.

Contestable Markets Theory & Entry Barriers The theory of the contested market is analyzed, as well as the barriers to entry into a market. More specifically, the barriers to entry related to costs, economies of scale of product differentiation and capital requirements will be analyzed.

Dominant firm and competition. The model of the dominant firm in a market is analyzed. It analyzes its advantages, its basic assumptions and its relationship with monopoly.

Game Theory – Analysis of Strategic Behavior Game theory is analyzed. In more detail, regular and extensive form games will be taught. Cooperative games. Dominant strategies and equilibrium analysis. Also, sequential games will be analyzed using commitment and backward induction methodologies. Finally, the Nash equilibrium, the prisoner's model, and game solving methodology when we have mixed strategies will be analyzed.

Oligopoly - collusion and competition - analysis of strategic behavior and pricing models The theory of collusion and competition Oligopoly is analyzed with emphasis on the Cournot, Stackelberg, and Bertrand models.

Monopolistic competition The model of monopolistic competition is analyzed as well as the short-run and long-run equilibrium. Finally, monopolistic competition and economic efficiency in comparison to perfect competition are analyzed.

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## TEACHING and LEARNING METHODS - EVALUATION

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| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <i>Face-to-face</i>                                                                                              |                          |
| <b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b><br><i>Use of ICT in teaching, laboratory education, communication with students</i>                                                                                                                                                                                                                                                                                                                                                                                 | The learning process is supported through the use of the electronic platform e-class and the institutional email |                          |
| <b>TEACHING METHODS</b><br><br><i>The manner and methods of teaching are described in detail.</i><br><br><i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i><br><br><i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i> | <b>Activity</b>                                                                                                  | <b>Semester workload</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Lectures                                                                                                         | 39                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Study at home                                                                                                    | 86                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Preparation / essay                                                                                              | 55                       |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Course total                                                                                                     | <b>180</b>               |
| <b>STUDENT PERFORMANCE EVALUATION</b><br><br><i>Description of the evaluation procedure</i><br><br><i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires,</i>                                                                                                                                                                                                                                                                                                           | Written project with oral presentation and relevant oral examination of the content (100%).                      |                          |

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| <p><i>short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other.</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p> |  |
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#### **ATTACHED BIBLIOGRAPHY**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <p>- Προτεινόμενη Βιβλιογραφία:</p> <p>Cabral Luis (2020) Βιομηχανική Οργάνωση, Εκδόσεις, Κριτική.</p><br><p>-Ξένη Βιβλιογραφία</p> <p>Tirole, J. (1988). The theory of industrial organization. MIT press.</p> <p>Schmalensee, R., Armstrong, M., Willig, R. D., &amp; Porter, R. H. (Eds.). (1989). Handbook of industrial organization (Vol. 3). Elsevier.</p> <p>Gibbons, R., A (1992) Primer in Game Theory, 1st ed., Harvester/Wheatsheaf, New York.</p> <p>Kreps, D. M., (1990) Game Theory and Economic Modelling, Clarendon Press, Oxford</p> |
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