DECISION MAKING

- **Course code**

  8111

- **Type of course (compulsory, optional)**

  Compulsory

- **Level of course**

  First Cycle

- **Year of study**

  2013-2014

- **Semester**

  3rd Semester

- **Number of credits allocated**

  6 ECTS Credits

- **Name of lecturer**

  Kritikos Emmanouil, Lecturer

- **Learning outcomes**

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

This is what this course is all about. The emphasis of the course will be on understanding and formulating complex problems, as they appear in today's business environment, developing the appropriate decision models, and using them for effective decision making.

- **Mode of delivery (face-to-face, distance learning)**

  Face to Face

- **Prerequisites and co-requisites**

  N.A.

- **Recommended optional programme components**

  N.A.

- **Course contents**

The course introduces the student to the methodology of decision making, as well as to the major models used today. The three major categories of models are covered: Linear and Integer Programming, Decision Analysis, and Simulation. In each unit, the student is exposed to a number

of applications, and has the opportunity to apply his/her knowledge to a number of problems and case studies. In addition to developing models, the student is exposed to a number of computer packages, most of them based on Excel, to use in order to solve the problems.

- **Recommended or required reading**

  📖 *Γ. Π. Πραστάκος, «Διοικητική Επιστήμη: Λήψη Αποφάσεων στην Κοινωνία της Πληροφορίας", Εκδόσεις Σταμούλη*

  📖 *Γ. Π. Πραστάκος, «Διοικητική Επιστήμη στη Πράξη: Εφαρμογές στη Σύγχρονη Επιχείρηση», Εκδόσεις Σταμούλη*

  📖 D. Anderson, D. Sweeney, and T. Willians, "Quantitative Methods for Business", South-Western College Publishing

  📖 C. Bonini, W. Hausman, and H. Bierman, "Quantitative Analysis for Management", McGraw-Hill Companies, Inc.

  📖 R. Garfinkel and G. Nemhauser, "Integer Programming", John Wiley & Sons, Inc.

  📖 G. P. Prastacos, " Managerial Decision Making Theory and Practice" , Tsinghua University Press

  📖 W. Winston, "Operations Research Application and Algorithms", Wadsworth Publishing Company

  📖 W. Winston and S. C. Albright, "Practical Management Science Spreadsheet Modelling and Applications", Wadsworth Publishing Company

- **Planned learning activities and teaching methods**

  Teaching will include lectures, tutorial lessons and lab sessions on SOLVER and PRECISION TREE

- **Assessment methods assessment methods and criteria**

  The course grade will be based on a final written exam and on optional individual essays

- **Language of instruction**

  Greek

- **Work placement(s)**

  N.A.