Global Learning Semesters Course Syllabus Course: ITM-570 Decision-Making Methods and Tools Department: Computer Science Host Institution: Intercollege, Nicosia, Cyprus



| Course Summary | | |
|-------------------|-----------------------------------|--------------------------|
| Course Code | Course Title | Recommended Credit Hours |
| ITM-570 | Decision-Making Methods and Tools | 3 |
| Semester Offered | Contact Hours | Prerequisites |
| Please contact us | 42-45 | None |
| Department | Level of Course | Language of Instruction |
| Computer Science | Upper Division | English |

Course Description

This course aims to provide an introduction to decision-making methods and tools, as they are used in business and management. The course takes a business perspective and concentrates on how quantitative methods can be used in problem solving and decision making. The course focuses on how managers can use a scientific approach to solve problems, although it is recognized that not all problems can be solved by quantitative means.

The course follows on the topics that students covered in the introductory course Foundations in Statistics and Research (MBA-530) or its equivalent. The course has three parts. The first part introduces students to a number of important topics on statistics and probability theory. The second part introduces students to the basic principles of forecasting and familiarises them with a number of statistical forecasting methods. The last part of the course introduces students to the basic principles of optimisation and decision theory. By the end of this course, students should be able to recognise business problems and to analyse them using appropriate management science tools.

Prerequisites

None

Readings and Resources

Required Text Book/Other Readings

• Newbold, Carlson and Thorne (2003) Statistics for Business and Economics, 5th Edition, Prentice Hall.

Recommended Readings

Other relevant books are listed below. These are not required for the course, but are helpful.

- Anderson, Sweeney and Williams (2002), Statistics for Business and Economics, Thomson Publications.
- Hanke, Wichern & Reitch (2001) Business Forecasting, Prentice Hall.