



MIS-456 Management Information Systems

Course Code MIS-456	Course Title Management Information Systems	Credits (ECTS) 6
Department Management and MIS	Semester Spring	Prerequisites MIS-351
Type of Course Requirement	Field MIS	Language of Instruction English
Level of Course 1 st Cycle	Year of Study 3 or 4	Lecturer Prof. A. I. Kokkinaki
Mode of Delivery Face-to-face	Work Placement N/A	Office EU-209c

Objectives of the Course:

This course aims to enable students understand issues, problems and opportunities that senior managers and information system (IS) executives face today when managing information and telecommunications technological (ICT) resources in organizations. It explains the relevant issues of effective management of ICT and highlights the areas of greatest potential.

The main objectives of this course are to:

- Describe and apply conceptual tools used to examine the efficiency and effectiveness of the management of ICT resources as well as its alignment to the general management's strategy, needs and values.
- Demonstrate and use techniques and tools used for improved management and control of ICT resources.

Learning Outcomes:

Upon completion of this course, students are expected to be able to:

1. Develop structured frameworks to manage of ICT resources as well as their alignment to the general management's strategy, needs and values.
2. Explain tactics and tools used to ensure that the organization targets its ICT applications development efficiently and effectively.
3. Examine if a given organization is being affected competitively either by failing to implement the required ICT applications or by faulty implementation of strategic applications.
4. Develop the firm's ICT planning and control processes.
5. Examine whether the firm's ICT activity is sufficiently insulated against the risks of a major disaster and develop or amend a Recovery Development Plan.
6. Define metrics that demonstrate how effectively the IT assets of a firm are managed and to what extent they are sufficiently and appropriately allocated within the firm.
7. Discuss the "best practice" tools, methods, and approaches that are most applicable for a given managerial aspect of ICT resources.

Course Contents:

- **The Importance of ICT and CIO in an organization**
How the role of IT has evolved over time?
How does the management of IT differ in scope and complexity from the other business functions?
Why does the view of IT by IT executives differ from the views of other business executives?
What has to be done to better manage the IT resource?
What are some of the key issues in the management of IT organizations?
Why is the successful management of IT important?
- **IT Strategy**
Modern business environment and IT strategy.
Definitions of IT strategy.
The role of IT strategy in an organization.
The concept of Strategic Alignment and the Strategic Alignment Model.
The process and considerations involved in developing an IT strategy.
- **Strategic Alignment Maturity**
The importance of IT and business alignment.
Enablers and inhibitors to alignment.
The concept of alignment maturity and the importance of alignment maturity.
The five levels of Strategic Alignment Maturity.
The six criteria to characterize each level of Strategic Alignment Maturity.
Assessing Strategic Alignment Maturity
Strategic Alignment Maturity as a process.
- **The Role of the CIO**
The role of the Chief Information Officer in an organization.

How the role of the CIO has evolved over time?
The key characteristics of effective CIOs.
Relationship of the CIO to the need for alignment.

- **IT Processes**

IT processes at the strategic level.
IT processes at the tactical level.
IT processes at the operational level.
Why is planning important?
Critical success factors for IT processes.
Who owns each of these processes?
How much resources should be applied to each of the IT processes?
Effectiveness of IT processes.
Prioritization of IT processes.

- **Planning Related IT Processes**

Why planning is important to the management of IT organizations and why it is different from other types of business planning?
The levels of IT planning in organizations and the implications of each level.
Strategic-level IT planning.
Tactical-level IT planning.
Operational-level IT level.
Global considerations in IT planning.

- **Managing Emerging Technologies**

Why is it important to understand emerging technologies?
Should an organization be a pioneer, leader, or follower?
When is the best time to adopt a new technology?
How can a new technology be introduced and appropriately applied?

- **Organizing IT**

What is Organization Theory and how can it be applied?
What are the classical organizational structures common to business firms?
What are the common ways that IT is organized today?
What is the federalist IT model?
How do you determine the best organizational structure for the IT organization?
Can the appropriate organizational structure improve IT and the firm?

- **Measuring Reporting and Controlling**

The importance of measurement
What and how to measure
Quality and efficacy of measures
Controlling IT through effective Service Level Agreement (SLAs)
Negotiating a service level agreement
Making SLAs work – metrics
Introducing internal SLA to the firm
Using SLAs to measure external vendors and internal suppliers
Who owns measurements?
What to do with the measurements?
When measurements should be done?

- Whether the enterprise can succeed with or without measurements?
- Assessing the Value of IT**
 - Importance of assessing IT value
 - Traditional financial measures to show values
 - Applying an improved financial measure: options
 - Evaluating a portfolio of IT investment projects
 - Activity-based measurement
 - Leveraging the assets of IT for competitive advantage

Teaching Methods:

- Faculty Lectures and Guest-Lectures Seminars
- Directed and Background Reading
- Case-studies
- In-class Exercises
- Student-led Presentations

Assessment Methods:

Mid-Term Exam, Final Exam, Case Studies, Homework Assignments.

Required Textbooks:

Authors	Title	Publisher	Year	ISBN
Baltzan, P.	M: Information Systems, 3 rd Edition	Mc Graw-Hill Education	2014	ISBN 9-78-007337691-2

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Austin, R.D., Nolan, R. L. and O'Donnell S.	The Adventures of an IT Leader	Harvard Business Press	2009	978-1422146606
A series of articles and best practices approaches on students' intranet.				

