



MIS-450: EMERGING TECHNOLOGIES FOR BUSINESS

Course Code MIS 450	Course Title Emerging Technologies for Business	Credits /ECTS 6
Department Management & MIS	Semester Fall/Spring	Prerequisites SMT 300
Type of Course Required	Field MIS/SMT	Language of Instruction English
Level of Course 1 st Cycle	Year of Study	Lecturer Dr. Soulla Louca
Mode of delivery Face-to-face	Work Placement N/A	Co-requisites N/A
Recommended Optional Programme Components: N/A		

Objectives of the Course:

Effective corporate E-Business strategies demand on an in-depth understanding of the various technology solutions that enable electronic business. This course will provide a panorama review of the current and emerging technologies involved in a contemporary business such as Web 2.0/3.0 and Social Media, Service Oriented Architecture, Cloud and Grid Computing, pervasive computing, mobile computing and RFID. We will examine how these new technologies impact industry, corporate strategy, and competitive dynamics, and create organizational efficiencies. In particular it will look at the issues of the social needs for security in a cloud environment, as well as the benefits of cloud as a provider of network facilities and the metamorphosis of fixed to variable costs for business. They will be exposed to the concept of IT strategy and the concept of value creation and business innovation through the new technologies.

Learning Outcomes:

- Upon completion of this course students are expected to be able to:
1. *Appreciate* the fundamentals of technological innovation.
 2. *Be aware* the major emerging technologies such as cloud computing, grid computing, cognitive radio and RFID.
 3. *Realize* how emerging technological trends in E-business impact industry, corporate strategy, and competitive dynamics, i.e. the economics of the emerging technologies
 4. *Understand* how to evaluate current tools and resources available, and how to capitalize on these emerging technologies/capabilities to create business efficiencies.
 5. Understand security and privacy issues associated with E-business and the related

technologies

Course Contents:

1. **Web 2.0/3.0 and Social Media.** Web 2.0 applications, power of crowds, web 2.0 in the business.
2. **Cloud Computing Architectural Framework** - Cloud Computing Evolution, Cloud Benefits, Business scenarios, Essential Characteristics of Cloud Computing, Cloud deployment models, Cloud Service Models, Cloud computing vendors, Security in the cloud, Legal issues of cloud computing..
3. **Grid computing.** Business and technological drivers of grid computing, Grid business models, Legal issues of grid computing.
4. **Future Internet (Internet of Things...).** The emerging global internet-based architecture for facilitating the exchange of goods and services and its impact on various areas of our lives will be studied
5. **Other emerging technologies** - e-Infrastructures, ICT for Networked Enterprise and RFID, Security and Identity Management, will be studied along with their impact on today's businesses, Green ICT in business.
6. Understand the concept of IT strategy and the concept of value creation and business innovation through the new technologies.
7. **Emerging technologies addressing societal challenges.** How the new technologies help the businesses become ecologically friendly. Topics such Sustainable Environment and green technologies will be considered.

Learning Activities and Teaching Methods:

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

Assessment Methods:

Final Examination (1)
Mid-Term (1)
Assignments/Homework/Project

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Vince Casarez,	Reshaping Your	McGraw	2009	978-0-07-

Billy Cripe, Jean Sini, Philipp Weckerle	Business with Web 2.0: Using New Social Technologies to Lead Business Transformation	Hill		160078-1
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Recommended Textbooks/Reading:

Author	Title	Publisher	Year	ISBN
Shelly Cashman, Mark Frydenberg	Web 2.0: Concepts and Applications	Cengage Learning Inc.	2011	13-978-1-4390-4802-3
Krishna Sankar , Susan A. Bouchard	Enterprise Web 2.0 Fundamentals	Cisco Press	2009	13-978-1-58705-763-2
Katarina Stanoevska-Slabeva, Thomas Wozniak, Santi Ristol	Grid and Cloud Computing: A Business Perspective on Technology and Applications	Springer Verlag	2010	978-3-642-05192-0
David Sterling	Dancing On A Cloud: A Framework for Increasing Business Agility	Xilibris Corporation	2011	978-1-4653-9366-1
Ramjee Prasad	Future Trends and Challenges for ICT Standardization	River Publishers	2010	ISBN-13: 9788792329387 ISBN-10: 8792329381
Michael H. Hugos, Derek Hultzky	Business in the Cloud: What Every Business Needs to Know About ...	John Wiley & Sons	- 2010 -	0470616237