

**DEREE COLLEGE SYLLABUS FOR:**

**CS 4736 STRATEGIC PLANNING FOR INFORMATION SYSTEMS – LEVEL 6**

(Updated Spring 2013)

**UK Credits: 15**

**PREREQUISITES:**

CS 1070 Introduction to Information Systems  
CS 2188 Introduction to Programming  
CS 2140 Electronic Commerce  
MG/CS 3157 Project Management  
CS 3260 Fundamentals of RDBMS  
CS 3275 Communications and Networking Essentials  
CS 4484 Analysis and Design for Information Systems

**CATALOG  
DESCRIPTION:**

The strategic use of information systems as a means for acquiring competitive advantage. Integration of concepts and methodologies with skills acquired in the field of information systems and technology in the development of a comprehensive information systems prototype. Measurable benefits in the alignment of business processes with information systems solutions.

**RATIONALE:**

The capstone course in CIS provides students with the opportunity to apply systems concepts and techniques in the design of an information system.

The course is project-driven and team-oriented. This means that students will work as team participants working with their respective team members. Students will be required to apply project management practices, data and process modelling techniques and also demonstrate software development skills.

**LEARNING OUTCOMES:**

As a result of taking this course, the student should be able to:

1. Revise IS/IT concepts learned in previous subjects.
2. Formulate applicable business/IT solutions through comprehensive analysis of an organisation.
3. Solve problems creatively using appropriate information technologies.
4. Identify the measurable business benefits deriving from the application of IT/IS in business.
5. Synthesize a business information system prototype by applying data modelling tools.
6. Develop a strategic plan for a business information system.

**METHOD OF TEACHING  
AND LEARNING:**

In congruence with the learning and teaching strategy of the College, the following tools/activities are used:

- Lectures, class discussions of recent information systems' developments and best practices. Laboratory practical sessions on IS modeling and prototyping.
- Office hours held by the instructor to provide further assistance to students.
- Use of the Blackboard Learning platform to further support communication, by posting lecture notes, assignment instruction, timely announcements, and online submission of assignments.

**ASSESSMENT:**

**Summative:**

Midterm Examination (1-hour): short answers to essay questions.	<b>30</b>
Research Project: literature review/process and data modelling/cost-benefit analysis/requirements analysis/system specifications/prototype development/documentation	<b>70</b>

**Formative:**

Coursework: case problem analyses	<b>0</b>
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The coursework aims to prepare students for the research project.  
The midterm examination tests Learning Outcomes 1-4.  
The research project tests Learning Outcomes 1-6.

(Guidelines and assessment rubrics are distributed on the first day of classes along with the course outline.)

**INDICATIVE READING:**

**REQUIRED READING:**

Lynda M. Applegate, Robert D. Austin, Deborah L. Soule. Corporate Information Strategy and Management, Text and Cases, Mc Graw Hill, Eighth edition, 2009, ISBN: 9780071263191.

**RECOMMENDED READING:**

- Ward J.& Peppard J. Strategic Planning for Information Systems, Wiley Series in Information Systems, latest edition
- Cassidy A. A Practical Guide to Information Systems Strategic Planning. Auerbach Publications; 2<sup>nd</sup> ed.
- Glen P. et al, Leading Geeks: How to Manage and Lead the People Who Deliver Technology, Jossey-Bass; 1 edition.
- Earl, M. J. (1993). Experiences in Strategic Information System Planning. MIS Quarterly, 1-24.
- The **value and impact of information** / edited by M. Feeney

and M. Grieves. - London: Bowker Saur, 1994. - ISBN 1 85739 084 9.

- The **value of information to the intelligent organisation**. - Hatfield : University of Hertfordshire Press, 1994. - ISBN 0 900458 54 2.
- Porter, M. E. (1985). Competitive Advantage: Creating and Sustaining Superior Performance. New York, N.Y.: Collier Macmillan.
- Senge, P. (1994). The Fifth Discipline: The Art and Practice of the Learning Organisation. New York: Currency Doubleday

**COMMUNICATION  
REQUIREMENTS:**

Use of Blackboard CMS.  
Use of word processing and/or presentation graphics software for documentation of assignments

**SOFTWARE  
REQUIREMENTS:**

CAs All Fusion Data Modeller or similar, latest version  
CAs All Fusion Process Modeller, latest version  
MS-Project, latest version

**WWW RESOURCES:**

[www.managementhelp.org/plan\\_dec/str\\_plan/models.htm](http://www.managementhelp.org/plan_dec/str_plan/models.htm)  
[www.practitionerresources.org/cache/documents/36796.pdf](http://www.practitionerresources.org/cache/documents/36796.pdf)  
[www.opengroup.org/architecture/togaf8-doc/arch/](http://www.opengroup.org/architecture/togaf8-doc/arch/)  
[www.c3i.osd.mil/org/cio/i3/AWG\\_Digital\\_Library/index.htm](http://www.c3i.osd.mil/org/cio/i3/AWG_Digital_Library/index.htm)  
[www.oracle.com](http://www.oracle.com)  
[www.microsoft.com](http://www.microsoft.com)  
[www.asptutorial.info](http://www.asptutorial.info)  
[www.w3schools.com/asp/default.asp](http://www.w3schools.com/asp/default.asp)  
[www.macromedia.com](http://www.macromedia.com)

**INDICATIVE CONTENT:**

1. Introduction to strategic information systems
2. Business environment issues
3. The process of strategic information systems planning
4. Current business situation analysis
5. Identify an opportunity
6. The role of business information systems
7. Information systems strategies
8. Strategic information systems management
9. Organization of the information systems technologies
  - 9.1. Software
  - 9.2. Hardware

- 9.3. Database
- 9.4. Communications
- 9.5. Networking
- 10. Evaluation of possible IS solutions
  - 10.1. Project Management
  - 10.2. Cost Benefit Analysis example (a ready spreadsheet)
  - 10.3. Functional requirement
  - 10.4. System specifications
- 11. Information systems benefits
- 12. Strategic information management
- 13. Managing the information resource.