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:**

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<th>Summative:</th>
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<td>Midterm Examination (1-hour): short answers to essay questions.</td>
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<tr>
<td>Research Project: literature review/process and data modelling/cost-benefit analysis/requirements analysis/system specifications/prototype development/documentation</td>
<td>70</td>
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<th>Formative:</th>
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<td>Coursework: case problem analyses</td>
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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:**

**RECOMMENDED READING:**
• The *value and impact of information* / edited by M. Feeney

COMMUNICATION REQUIREMENTS: Use of Blackboard CMS.
SOFTWARE REQUIREMENTS: Use of word processing and/or presentation graphics software for documentation of assignments
SOFTWARE REQUIREMENTS: CAs All Fusion Data Modeller or similar, latest version
SOFTWARE REQUIREMENTS: CAs All Fusion Process Modeller, latest version
SOFTWARE REQUIREMENTS: MS-Project, latest version
WWW RESOURCES: www.managementhelp.org/plan_dec/str_plan/models.htm
WWW RESOURCES: www.practitionerresources.org/cache/documents/36796.pdf
WWW RESOURCES: www.opengroup.org/architecture/togaf8-doc/arch/
WWW RESOURCES: www.c3i.osd.mil/org/cio/i3/AWG_Digital_Library/index.htm
WWW RESOURCES: www.oracle.com
WWW RESOURCES: www.microsoft.com
WWW RESOURCES: www.asptutorial.info
WWW RESOURCES: www.w3schools.com/asp/default.asp
WWW RESOURCES: 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.