INFORMATION SYSTEMS PROJECT MANAGEMENT - MSIS3033

Syllabus

1. GENERAL INFORMATION:

Instructor name: Email:

Credit: 3 (3 lecture).

Prerequisite:

2. COURSE INFORMATION:

- Course description:

To discusses the multi-faceted dimensions critical to successfully leading information systems projects. Topics will include behavioral, strategic, technical, quantitative and communications issues faced by those directing Information Systems projects.

Aim : To develop an awareness of the need for project planning and management. To apply professional attitudes and techniques to managing a project

- Course objectives:

To provide students with an understanding of information systems project management roles and responsibilities. Critical thinking and problem solving will be emphasized throughout this course. Upon completion of this course, students will be able to demonstrate knowledge of project management terms and techniques such as project planning, scheduling, control, and cost estimating. Students will also be able to analyze, synthesize, and communicate in writing and orally various approaches to managing information system projects in modern organizations.

On completion of this module the candidate should be able to:
- Explain the stages in the system development lifecycle and the activities that are carried out to implement an IT application;
- Apply basic project planning techniques
- Demonstrate an understanding of steps needed to build and maintain effective development teams;
- Explain the procedures needed to monitor, control and report upon an IT development project;
- Discuss and where appropriate apply the principles of project risk management.

- Explain the ways in which appropriate quality attributes of the products of an IT development project can be assessed and assured

3. BOOK AND MATERIALS:

- Required textbook:

- Project Management by Mike Field and Laurie Keller, Open University, International Thomson Press, 1998.

- Other materials:

- Project Management: A Quick Start Beginner's Guide For The Serious Project Manager To Managing Any Project Easily by Donald J. Scott, CreateSpace Independent Publishing Platform, 2016.
- Microsoft® Project 2010, Step by Step Book, ISBN: 9780735626959
- Software Project Management (4th Ed) by Hughes, Bob and Cotterell, Mike, McGraw – Hill, 2005, ISBN: 0077109899.
- Project Management for Information Systems by Cadle J. & D. Yeates, Pearson Prentice Hall (5th Ed), 2006, ISBN 978-0-13-206858-1
- Information Systems Project Management by David E. Avison and Gholamreza Torkzadeh, Sage Publications, 2008.

4. GRADING PROCEDURES:

Assignments: 20%

Computer-based testing: 30%

Final Examination: 50%

5. COURSE OUTLINE:

Week	**Topic**
1,2,3,4	1. STAGES OF A PROJECT Feasibility studies and the establishment of a business case for a project Requirements elicitation, analysis and verification: purpose and methods Establishing project objectives, goals and measures of success Stages of a development project: requirements elicitation; requirements analysis; design of software, hardware and networks; system building (including software coding) and integration;

	verification and validation (including testing) ; installation. Adapting the development life cycle to projects where off-the-shelf packages are to be installed Criteria for building or buying in software applications Project management using a lightweight or agile approach with particular reference to the use of time-boxing, prototypes, joint application development and rapid application development. Installation issues, including methods of going live. Project closure and post implementation activities. Selection, acquisition and implementation of off-the-shelf and customised off-the-shelf applications. Project support activities, including configuration management and change control.
5,6,7	2. PROJECT PLANNING AND ESTIMATING Use of product and work breakdown structures (PBS and WBS). Use of (activity on node) precedence plans and network analysis Critical path analysis Gantt charts Resource allocation, including the identification of resource types and the resolution of resource clashes Principles, methods, advantages and disadvantages and relative accuracy of different estimating techniques, including parametric/algorithmic models (based on the identification of size drivers and associated productivity rates), expert judgment, analogy, top-down and bottom-up
8,9	3. HUMAN FACTORS Team building theory and practice, structures and responsibilities, including Belbin's team roles and Tuckman-Jensen stages of team evolution (forming, storming, norming, performing) How to staff a project stage with appropriate skill sets; how and where to obtain skilled personnel Appropriate management styles for development projects Team management, motivation, retention The role, responsibilities and skills of the project manager Management of relationships with the stakeholders within and outside the project team, including users. Project organisation: roles of project boards (or steering committees), user and developer representatives, project managers, team leaders,

	suppliers, programme and project support, project assurance
10,11	4. PROGRESS MONITORING, PROJECT CONTROL AND REPORTING What to monitor and why Where and when to monitor Project control through monitoring Use of plans in project control Reasons for reports: whom to report to and how to report Types of report: exception, progress, management Monitoring and control of project finances and quality Assessment of implications and impact on the project of deviations and changes to project plan
12,13	5. RISK MANAGEMENT Risk identification: types of risk, risk checklists. Risk prioritisation: assessment of likelihood and impact of risk; qualitative and quantitative methods of assessing risk exposure. Risk management tactics, including risk avoidance, risk transfer, risk reduction, risk mitigation and contingency planning. Cost benefit analysis of planned risk reduction actions, risk reduction leverage. Risk registers.
14, 15	6. SOFTWARE QUALITY MANAGEMENT Definition of product quality and software quality. Quality management systems: principles and features, including the principles contained in the ISO 9000 family of standards. System quality specification and measurement, including an overview of ISO 9126 Process and product quality approaches: capability maturity models. Quality assurance and quality control, project audit and quality audit. Methods of enhancing quality: the different types of testing,inspections, reviews, standards. Management and control of testing

6. ACADEMIC INTEGRITY POLICIES:

- Student may not use Vietnamese languague in class, or will be reduced 2% final marks
- Be punctual to come and leave the class.
- Maximum cancellation time per semester is 6 hours per class.

Instructor's Signature