CONESTOGA

COURSE OUTLINE

Course   Systems Development: Information Technology Management (2015-2016)

Code / Version   INFO3070 (101)

Total Hours   45

Credits   3

PreRequisite(s)   INFO2080 (101) Systems Development: Design

CoRequisite(s)

Course Description

This course provides the student with an overview of the "best practices" in information technology operations management and project management. Topics such as planning, policy, code of conduct, security, audit and various controls will be presented from an information technology perspective.

PLAR Eligible: Yes

Course Outcomes

Successful completion of this course will enable the student to:

1. Describe the management of Information Technology in a business organization.

2. Describe the roles of strategy and planning for Information Technology.

3. Describe how applications development and acquisition, and computer and data resources are managed.

4. Describe the controls necessary to ensure reliable and effective Information Technology operations.

5. Describe the role of project management in planning and controlling applications development initiatives.

6. Create and maintain a project plan for a typical Information Technology project using an industry standard project management tool.

Essential Employability Skills addressed in this course		Taught	Reinforced	Assessed
Communication	Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience		X	X
	Respond to written, spoken, or visual messages in a manner that ensures effective communication		X	X
Numeracy	Execute mathematical operations accurately		X	X
Critical Thinking and Problem Solving	Apply a systematic approach to solve problems	X		X
	Use a variety of thinking skills to anticipate and solve problems	X		X
Information Management	Locate, select, organize, and document information using appropriate technology and information systems	X		X
	Analyze, evaluate, and apply relevant information from a variety of sources	X		X
Interpersonal	Show respect for the diverse opinions, values, belief systems, and contributions of others		X	X
	Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals		X	X
Personal	Manage the use of time and other resources to complete projects	X		X
	Take responsibility for one's own actions, decisions, and consequences		X	X

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Unit Outcomes

Successful completion of the following units will enable the student to:

1.0   Introduction to Managing Information Technology

     1.1   Explain why information technology is important for organizations and their managers.

     1.2   Describe how IT management has evolved and the types of information systems in use.

     1.3   Describe how IT organizations mature as information technology becomes more pervasive and essential.

     1.4   Explain why user expectations are important and the role they play in IT management.

     1.5   Describe the various options for IT management roles that are available to software development professionals.

     1.6   Explain why management is an attractive option for some software development professionals.

2.0   IT Strategy

     2.1   Describe the strategic systems of a company and their main characteristics.

     2.2   Explain how strategic concerns are related to business issues.

     2.3   Describe the relationships between competition factors, strategic thrusts, and internal/external views of information systems.

     2.4   Demonstrate how IT strategies are aligned with the firm's goals and objectives.

     2.5   List the basic elements of a statement of IT strategy.

     2.6   Describe how strategy guides an organization's actions.

3.0   IT Planning

     3.1   Explain how strategic, tactical, and operational plans fit together.

     3.2   Describe how planning integrates applications, computer operations, resources, people, technology, and finances.

     3.3   Explain how managers use plans to obtain information needed to control their operations.

     3.4   Describe how facilities planning contributes to a successful IT department.

4.0   Managing Software Applications

     4.1   Explain how software applications suffer from rapid depreciation and obsolescence.

     4.2   Explain why most firms have large backlogs of development and maintenance work.

     4.3   Explain why business-based prioritization processes are essential.

     4.4   Describe how most firms apply resources to costly enhancement and maintenance activities.

5.0   Managing Application Development & Acquisition

     5.1   Describe project controls and how resources allocated to development.

     5.2   Identify and quantify development risks.

     5.3   Explain how CASE tools, Agile development, the object paradigm, and prototyping can improve programming productivity and quality.

     5.4   Explain why purchased applications are rapidly becoming very important and what their advantages and disadvantages are.

     5.5   Explain how alliances, joint development activities, and service bureaus can be used to acquire applications.

6.0   Customer Expectations

     6.1   Describe how to handle customer expectations in computer center operations.

     6.2   Describe how service-level agreements are constructed.

     6.3   Explain how to develop and use client satisfaction surveys to improve IT service and customer relations.

7.0   Managing Computer and Data Resources

     7.1   Describe how problem, change, and recovery management are related to and support service-level agreements.

     7.2   Explain how to develop emergency plans, contingency plans, and recovery plans.

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     7.3   Describe the tools and techniques for managing batch and on-line systems.

     7.4   Describe the basics of performance management--how system performance is defined, measured, analyzed, and reported.

     7.5   Demonstrate how system capacity is analyzed and planned.

     7.6   List the disciplines of network management.

8.0   IT Controls & Security

     8.1   Explain the importance and the importance of business controls.

     8.2   Differentiate the control responsibilities of IT management and user management.

     8.3   Explain how controls are applied in the development and operation of application programs.

     8.4   Describe network controls and asset protection controls.

9.0   IT Project Management Theory

     9.1   Explain the characteristics of a software development project.

     9.2   Explain the need for project management.

     9.3   Explain the challenges facing a project manager.

     9.4   Create work breakdown structures and project schedules.

10.0   Using a Project Management Software Tool

     10.1   Navigate the interface.

     10.2   Create tasks, specifying durations and relationships.

     10.3   Specify resources and allocate resources to tasks.

     10.4   Manage the Gantt chart view.

     10.5   Determine the critical path of the project.

     10.6   Determine the estimated total cost of the project.

     10.7   Use the tool to monitor actual progress and costs of the project and to take remedial action where necessary.

11.0   Managing Human Resources

     11.1   Develop performance appraisals for employees, including plans for remedial action, career planning, and training.

     11.2   Explain options for recruiting of new employees, including advertising through HR web sites and newspaper media, promotion of existing employees and social media.

     11.3   Explain options for sources of new employees including experienced professionals, and recent graduates of college and universities.

     11.4   Explain different compensatory packages for employees including contracts, salaried positions, and co-op work terms.

Required Student Resources

Optional Student Resources

Carl Chatfield. Microsoft Project Step by step. Microsoft.

Evaluation

The minimum passing grade for this course is 55 (D).

In order to successfully complete this course, the student is required to meet the following evaluation criteria:

Presentation	10.00
Projects (8@3.75%)	30.00

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MidTerm	30.00
Final	30.00
	100.00 %

Other

Conestoga College is committed to providing academic accommodations for students with documented disabilities. Please contact the Accessibility Services Office.

Students will be required to work in project teams on the assignments, however, tests will be done purely on an individual basis.

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