INFO20172

IT Project Management using PMP

I: Administrative Information II: Course Details III: Topical Outline(s) Printable Version

Section I: Administrative Information

Program(s): Computer Engineering Technolog, Computer EngineeringTechnician, Computer Programmer, Computer Systems Technician, Computer Systems Technology Ne, Computer Systems Technology SA, IT Support Services, Internet Communications Tecnol
Program Coordinator(s): Paul Kemp, Bill Farkas, Jerry Kotuba, Peter Wheeler, Ann Cadger, Pejman Salehi, Satyendra Narayan
Course Leader or Contact: Multiple Course Leaders
Version: 41.0
Status: Approved (APPR)

Total hours: 42.0
Credit Value: 3.0
Credit Value Notes: N/A
Effective: Winter 2015
Prerequisites: N/A
Corequisites: N/A
Equivalents: N/A
Pre/Co/Equiv Notes: N/A

Section I Notes: Course Leader or Contact: William Barry (Conventional), Susan Burgess (Hybrid) This course is delivered in both classroom (face-to-face) and hybrid modes. The classroom (face-to-face) mode is delivered 3 hours per week in a traditional classroom format. Hybrid means that some sessions are conducted in a classroom while others are completely online, as determined by the course design. The hybrid model is 2 hours in a classroom and 1 hour virtual per week. To take this course in hybrid mode, students will need reliable access to the internet and manage the virtual component to the course.

Section II: Course Details

Detailed Description

Project management involves projects that are made up of a sequence of tasks and subtasks that upon completion mark the end of a project. Management of the processes and resources is also a part of project management. The material included in this course will focus on the deliverables of a project (e.g. Project Charter), creating a work breakdown structure (WBS), and the creation, maintenance and evaluation of a project plan. Students will be required to develop an understanding of both the theory and practice of project management including utilization of scheduling, evaluation and communication tools.

Program Context

Computer Engineering Technolog **Program Coordinator:** Paul Kemp
As business and industry evolves there will continue to be increasing need for graduates from Information Technology Programs to be able to devise, define and track complex deliverables through a variety of iterations and utilization of different personnel. As our graduates become involved in the design, implementation and testing of new processes and systems, project management skills will be a necessary part of their success.

Computer EngineeringTechnician **Program Coordinator:** Paul Kemp
Same as above.

Computer Programmer **Program Coordinator:** Ann Cadger
Same as above.

Computer Systems Technician **Program Coordinator:** Satyendra Narayan
Same as above.

Computer Systems Technology Ne **Program Coordinator:** Pejman Salehi
Same as above.

Computer Systems Technology SA **Program Coordinator:** Jerry Kotuba
Same as above.

IT Support Services **Program Coordinator:** Peter Wheeler
Same as above.

Internet Communications Tecnol **Program Coordinator:** Bill Farkas
Same as Above.

Course Critical Performance and Learning Outcomes

Critical Performance

By the end of this course, students will have demonstrated the ability to:

Apply the project management functions of initiating, planning, executing, monitoring and controlling, and closing a project. They will also understand the importance of quality, communications, human relations, risk, and procurement to the project.

Learning Outcomes:

To achieve the critical performance, students will have demonstrated the ability to:

1. Define and describe all elements of project management and associated process methods.
2. Establish the appropriate terms of reference prior to the start of any project.
3. Define and apply the triple constraint for all projects (schedule/ cost/ scope).
4. Divide a project into manageable stages for more accurate planning, testing and evaluation of success.
5. Assess appropriate methods for planning, costing & resource allocation.
6. Assess, create and communicate all methods for quality check requirements throughout the life of a project.
7. Evaluate associated risks and threats to the success of any given project through the application a variety of risk management techniques.
8. Select, develop and deliver a variety of management reports in both on line and physical format.

Evaluation Plan

Students demonstrate their learning in the following ways:

Conventional:

Midterm	20%
Final Test	25%

5 in class assignments @ 5 marks each	25%
1 major assignment	30%

Hybrid:

Midterm	20%
Final Test	20%
Assignments	30%
Group participation in a project	30%

As this course is offered to multiple programs, a detailed list of topics and testing schedule will be provided in class by instructor.

Faculty members teaching this course agree to the following practices. Sheridan wishes to encourage behaviours that will help students be successful in the workplace, and to ensure that students receive credit for their individual work.

1. For submission of assignments and projects, the faculty member will specify, on the class plan:

a) Due dates and special instructions for submissions

b) Deductions for overdue submissions

2. Exams must be written as scheduled by the faculty member. A makeup exam is at the faculty member¿s discretion provided that the student has an acceptable reason for their absence and may be asked for documented evidence, such as a medical certificate, explaining their absence. These special situations must be discussed with the faculty member immediately once the situation becomes known. Semester time constraints may limit rewrite options.

3. To pass the course, students must achieve at least 50% overall in the course, as well as a 50% weighted average across the tests and the exams combined.

Provincial Context

The course meets the following Ministry of Training, Colleges and Universities requirements:

Essential Employability Skills

Essential Employability Skills emphasized in the course:

X	Communication	X	Critical Thinking & Problem Solving		Interpersonal
X	Numeracy	X	Information Management		Personal

Notes: N/A

Prior Learning Assessment and Recognition
PLAR Contact: Registrar's Office
Students may apply to receive credit by demonstrating achievement of the course learning outcomes through previous life and work experiences. This course is eligible for challenge through the following method(s):

Challenge Exam	Portfolio	Interview	Other	Not Eligible for PLAR
X				

Notes: N/A

Section III: Topical Outline

Some details of this outline may change as a result of circumstances such as weather cancellations, College and student activities, and class timetabling.
Effective term: Winter 2015
Professor: Multiple Professors
Textbook(s):

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REQUIRED: Schwalbe, K, Information Technology Project Management, 7th
Edition, Published by Thomson Nelson Learning, ISBN: 9781133526858.

ADDITIONAL RESOURCE: Microsoft Project 2010 Step by Step, by Carl
Chatfield, Timothy Johnson, ISBN: 9780735626959 - available via Books
24-7, which can be accessed through AccessSheridan, Sheridan Library
Services
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Applicable student group(s): Computer Engineering Technician, Computer Engineering Technology, Computer Programmer, Computer Systems Technology - Systems Analyst, Computer Systems Technology - Systems Analyst Coop, Computer Systems Technician, Computer Systems Technology, Information Technology Support Services, Information Technology Support Services Coop, Internet Communications Technology, Internet Communications Technology Coop.
Course Details:

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Some details of this outline may change as a result of circumstances
such as weather cancellations, College and student activities, and
class timetabling.

Conventional Topical Outline:

THEORY
Project strategic planning
Developing the project plan
Project scope development including methods to develop work breakdown
structures
Project milestones determining project phases
Development of Activity Sequencing including Project test methods
(where applicable PERT/CPM theory (including slack/float times)
Efficient cost and financial management
Human resource implications, team assignment, personality theory
Estimating high-risk projects, life cycle cost analysis, time value
of money, net present value (NPV), Cost of ownership
Theory of versioning control for software development (e.g., CVS, SVN
(Subversion), Clearcase, VooDoo, etc.)
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PRACTICAL
Use of project tool, i.e., MS project, MS Project Server
Creation of a variety of evaluation charts to track progress, identify milestones, resource allocation and utilization
Development of structured queries for use in the development of progress reports
Project finalization
Develop skills for incrementally developong a software product using versioning control tools (e.g., CVS, SVN (Subversion), etc.)

Testing Schedule

Module One: 15%
Definition of Project and need for Project Management.
Current Models and Standards for Project Management
Impact of Organisational Structure/ Culture on Project Management
Project Phases / Life Cycle
Project Selection and Corporate Strategic Planning

Module Two: 45%
Project Management Methodologies
Project Scope and Planning
Project Time Management / Scheduling
Use of software resources for Tracking}

Test One (midterm)

Project Resource Management
Costing Models (i.e., npv)

Module Three: 40%
Quality Control, testing and evaluation procedures, (qualitative v. quantitative)
Project Documentation
Risk Management
Project communication (Ms Project Server)}

Test Two (final)

Hybrid Topical Outline:

THEORY
Project strategic planning
Developing the project plan
Project scope development including methods to develop work breakdown structures
Project milestones
Determining project phases
Development of Activity Sequencing including Project test methods (where applicable PERT/CPM theory (including slack/float times))
Efficient cost and financial management
Quality assurance and control implications
Human resource implications, team assignment, personality theory
Estimating high-risk projects, life cycle cost analysis, time value of money, net present value (NPV), Cost of ownership
Communications planning for a project

PRACTICAL
Use of project tool, i.e., MS Project 2010
Creation of a variety of evaluation charts to track progress,

identify milestones, resource allocation and utilization
Track costs and scope. Project closure.
Develop

Testing Schedule

Module One: 3%
Introduction to Project Management
Definition of Project and Portfolio Management
Role of the Project Manager
Project Management Profession
Introduction to MS Project 2010

Module Two: 5%
Systems View of Project Management
Understanding Organizations
Stakeholder Management
Project Phases and the Project Life Cycle
Context of Information Technology Projects
Recent Trends
Continued learning of MS Project 2010

Module Three: 3%
Project Management Process Groups
Mapping the Process Groups to the Knowledge Areas
Developing an Information Technology Project Management Methodology
Project Pre-Initiation and Initiation
Project Planning
Project Execution
Project Monitoring and Controlling
Project Closing
Continued learning of MS Project 2010

Module Four: 3%
Project Integration Management
Strategic Planning
Developing a Project Charter
Developing a Project Management Plan
Directing and Managing Project Execution
Monitoring and Controlling Project Work
Performing Integrated Change Control
Closing Projects or Phases
Continued learning of MS Project 2010

Module Five: 9%
Scope Management
Collecting Requirements
Defining Scope
Creating a WBS
Verifying Scope
Controlling Scope
Continued learning of MS Project 2010
Project Time Management / Scheduling

Module Six 1%
Project Schedules
Defining Activities
Sequencing Activities
Estimating Resources
Estimating Durations
Developing the Schedule

Controlling the Schedule

Test One (midterm) 20%

Module Seven: 2%
Importance of Cost Management
Basic Principles of Cost Management
Estimating Costs
Determining the Budget
Controlling Costs

Module Eight: 1%
The Importance of Project Quality Management
What is Project Quality Management?
Planning Quality
Performing Quality Assurance
Performing Quality Control
Tools and Techniques for Quality Control
Modern Quality Management
Improving Information Technology Project Quality

Module Nine: 1%
The Importance of Human Resource Management
Definition of Human Resource Management
Keys to Managing People
Developing the Human Resource Plan
Acquiring the Project Team
Developing the Project Team
Managing the Project Team

Module Ten: 1%
The Importance of Project Communications Management
Identifying Stakeholders
Planning Communications
Distributing Information
Managing Stakeholders
Reporting Performance
Suggestions for Improving Communications

Term Project: Status Report 5%

Module Eleven: 1%
The Importance of Project Risk Management
Planning Risk Management
Common Sources of Risk on Information Technology Projects
Identifying Risks
Performing Qualitative Risk Analysis
Performing Quantitative Risk Analysis
Planning Risk Responses
Monitoring and Controlling Risk

Module Twelve:
The Importance of Project Procurement Management
Planning Procurements
Conducting Procurements
Administering Procurements
Closing Procurements

Term Project: Final Report 20%

Test Two (final) 20%

Term Project: Lessons Learned Report 5%

Sheridan Policies
The principle of academic integrity requires that all work submitted for evaluation and course credit be the original, unassisted work of the student. Cheating or plagiarism including borrowing, copying, purchasing or collaborating on work, except for group projects arranged and approved by the professor, or otherwise submitting work that is not the student's own violates this principle and will not be tolerated. Students who have any questions regarding whether or not specific circumstances involve a breach of academic integrity are advised to review the Academic Integrity Policy and procedure and/or discuss them with the professor.

Sheridan is committed to provide a learning environment that supports academic achievement by respecting the dignity, self-esteem and fair treatment of every person engaged in the learning process. Behaviour which is inconsistent with this principle will not be tolerated. Details of Sheridan's policy on Harassment and Discrimination, Academic Integrity, and other academic policies are available on the Sheridan policy website.

The information contained in this Course Outline including but not limited to faculty and program information and course description is subject to change without notice. **Any changes to course curriculum and/or assessment shall adhere to approved Sheridan protocol**. Nothing in this Course Outline should be viewed as a representation, offer and/or warranty. Students are responsible for reading the Important Notice and Disclaimer which applies to Programs and Courses.

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