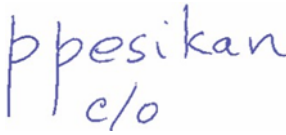


# Course Outline

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School:	Eng. Tech. & Applied Science
Department:	Information and Communication Engineering Technology (ICET)
Course Title:	IT Project Management
Course Code:	CNET 307
Course Hours/Credits:	42
Prerequisites:	CNET 229, COMM 170, COMM 171, COMP 225, ETEC 225, MATH 180
Co-requisites:	N/A
Eligible for Prior Learning, Assessment and Recognition:	Yes
Originated by:	Sam Mikhail
Revised by:	Abidin Akkok
Revision Date:	Summer 2016
Current Semester:	Fall 2018
Approved by:	
	<hr/> Chairperson/Dean

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*PLEASE NOTE THAT THE WINTER 2018 SEMESTER WILL BE 13 WEEKS IN DURATION. THIS MAY AFFECT COURSE HOURS. THIS DOES NOT APPLY TO COURSES IN THE AIRCRAFT MAINTENANCE AND AVIONICS MAINTENANCE PROGRAMS (COURSE CODES AIRC).*

*Students are expected to review and understand all areas of the course outline.*

*Retain this course outline for future transfer credit applications. A fee may be charged for additional copies.*

*This course outline is available in alternative formats upon request.*

## Acknowledgement of Traditional Lands

Centennial is proud to be a part of a rich history of education in this province and in this city. We acknowledge that we are on the treaty lands and territory of the Mississaugas of the Credit First Nation and pay tribute to their legacy and the legacy of all First Peoples of Canada, as we strengthen ties with the communities we serve and build the future through learning and through our graduates. Today the traditional meeting place of Toronto is still home to many Indigenous People from across Turtle Island and we are grateful to have the opportunity to work in the communities that have grown in the treaty lands of the Mississaugas. We acknowledge that we are all treaty people and accept our responsibility to honor all our relations.

## Course Description

Students are taught the concepts and basic functions of Project Management, and the integration of these concepts and functions into a coherent project management system. Also, role of the project manager and the project management team in implementing and controlling projects. Further, the Project Management Body of Knowledge PMBOK® as defined by the Project Management Institute PMI and its application to Project Management.

## Program Outcomes

Successful completion of this and other courses in the program culminates in the achievement of the Vocational Learning Outcomes (program outcomes) set by the Ministry of Advanced Education and Skills Development in the Program Standard. The VLOs express the learning a student must reliably demonstrate before graduation. To ensure a meaningful learning experience and to better understand how this course and program prepare graduates for success, students are encouraged to review the Program Standard by visiting <http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/>. For apprenticeship-based programs, visit <http://www.collegeoftrades.ca/training-standards>.

## Course Learning Outcomes

The student will reliably demonstrate the ability to:

1. Identify the Project Management Profession, its ethics and environmental and social impact.
2. Apply decision analysis methodologies to justify the need for a project.
3. Conclude a feasibility study for the Project
4. Develop a project plan that defines the project's cost and schedule base lines.
5. Produce short- and long-term project's financial impact analysis
6. Identify and quantify the project's risks and develop a risk management plan.
7. Develop a project procurement plan.
8. Identify stakeholders' communication needs and develop a project communication plan.
9. Develop a project quality management plan.
10. Develop a project change control plan

## Essential Employability Skills (EES)

The student will reliably demonstrate the ability to\*:

1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.

2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.
4. Apply a systematic approach to solve problems.
5. Use a variety of thinking skills to anticipate and solve problems.
6. Locate, select, organize, and document information using appropriate technology and information systems.
7. Analyze, evaluate, and apply relevant information from a variety of sources.
8. Show respect for diverse opinions, values belief systems, and contributions of others.
9. Interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.
10. Manage the use of time and other resources to complete projects.
11. Take responsibility for one's own actions, decisions, and consequences.

*\*There are 11 Essential Employability Skills outcomes as per the Ministry Program Standard. Of these 11 outcomes, the following will be assessed in this course.*

## Global Citizenship and Equity (GC&E) Outcomes

The student will reliably demonstrate the ability to\*:

1. Identify one's roles and responsibilities as a global citizen in personal and professional life.
2. Identify beliefs, values and behaviours that form individual and community identities and the basis for respectful relationships.
4. Analyze the use of the world's resources to achieve sustainability and equitable distribution at the personal, professional, and global level.

*\*There are 6 institutional Global Citizenship & Equity outcomes. Of these 6 outcomes, the following will be assessed in this course.*

## Text and other Instructional/Learning Materials

### Text Book(s):

Marchewka, Jack T. 2015. Information Technology Project Management, 5th Edition. Wiley.  
ISBN 13: 978-1118911013

### Online Resource(s):

The course Project Templates will be posted on eCentennial

### Material(s) required for completing this course:

PMI. 2013. A Guide to the Project Management Body of Knowledge (PMBOK® Guide), 5th Edition.  
Project Management Institute.  
ISBN 13: 978-1935589679

## Evaluation Scheme

- ✧ Quizzes and Tests: Two Quizzes: 10%+10%.  
Two Tests:15%+15%
- ✧ In-class project assignments: Participation and quality of output (25%)
- ✧ Project hardcopy and presentation: Hardcopy and presentation (20%+5%=25%)

Evaluation Name	CLO(s)	EES Outcome(s)	GCE Outcome(s)	Weight/100
Quizzes and Tests	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	1, 2, 4, 5, 7, 11	1	50
In-class project assignments	1, 2, 3, 4, 5, 6, 8, 9, 10	1, 2, 4, 5, 6, 7, 8, 9, 10, 11	1, 2, 4	25
Project hardcopy and presentation	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	1, 2, 4, 5, 6, 7, 8, 9, 10, 11	1, 2, 4	25
Total				100%

If students are unable to write a test they should immediately contact their professor or program Chair for advice. In exceptional and well documented circumstances (e.g. unforeseen family problems, serious illness, or death of a close family member), students may be able to write a make-up test.

All submitted work may be reviewed for authenticity and originality utilizing Turnitin®. Students who do not wish to have their work submitted to Turnitin® must, by the end of the second week of class, communicate this in writing to the instructor and make mutually agreeable alternate arrangements.

When writing tests, students must be able to produce official College photo identification or they may be refused the right to take the test or test results will be void.

## Student Accommodation

Students with permanent or temporary accommodations who require academic accommodations are encouraged to register with the Centre for Students with Disabilities (CSD) located at Ashtonbee (L1-04), Progress (C1-03), Morningside (Rm 190), and Story Arts Campus (Rm 284). Documentation outlining the functional limitations of a disability is required; however, interim accommodations pending receipt of documentation may be possible. This service is free and confidential. For more information, please email [csd@centennialcollege.ca](mailto:csd@centennialcollege.ca).

## Use of Dictionaries

- Any dictionary (hard copy or electronic) may be used in regular class work.
- Only English Language Learner dictionaries are permitted in class work (English words, idioms, and pronunciations are explained).
- English-Additional Language (e.g. English-Chinese) or Additional Language-English (e.g. Russian-English) dictionaries may be used in regular class work.
- Dictionary use is not permitted in test or examination settings.

## Program or School Policies

N/A

## Course Policies

N/A

## College Policies

Students should familiarize themselves with all College Policies that cover academic matters and student conduct.

All students and employees have the right to study and work in an environment that is free from discrimination and harassment and promotes respect and equity. Centennial policies ensure all incidents of harassment, discrimination, bullying and violence will be addressed and responded to accordingly.

Academic honesty is integral to the learning process and a necessary ingredient of academic integrity. Academic dishonesty includes cheating, plagiarism, and impersonation. All of these occur when the work of others is presented by a student as their own and/or without citing sources of information. Breaches of academic honesty may result in a failing grade on the assignment/course, suspension or expulsion from the college.

For more information on these and other policies, please visit [www.centennialcollege.ca/about-centennial/college-overview/college-policies](http://www.centennialcollege.ca/about-centennial/college-overview/college-policies).

Students enrolled in a joint or collaborative program are subject to the partner institution's academic policies.

## PLAR Process

This course is eligible for Prior Learning Assessment and Recognition (PLAR). PLAR is a process by which course credit may be granted for past learning acquired through work or other life experiences. The PLAR process involves completing an assessment (portfolio, test, assignment, etc.) that reliably demonstrates achievement of the course learning outcomes. Contact the academic school to obtain information on the PLAR process and the required assessment.

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Semester: Winter 2018  
 Section Code: 006  
 Meeting Time & Location: Monday  
 3:30 pm-6:20 pm  
 PR B3-09

Professor Name: Zahid Ali  
 Contact Information: zali42@my.centennialcollege.ca  
 Office Hours: Thursday 1:30-3:30 pm

## Topical Outline (subject to change):

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name	Evaluation Date
1 1/22/2018	The Nature of Information Technology Projects	Marchewka: Chapter 1, PMBOK: Chapters 1, 2	<ul style="list-style-type: none"> <li>• Understand why information technology (IT) projects are organizational investments.</li> <li>• Understand why projects are planned organizational change and why they must align with an organization's business strategy.</li> <li>• Define what a project is and describe the attributes of a project.</li> <li>• Define the discipline called project management.</li> <li>• Understand the relationship among project portfolios, programs, and projects.</li> <li>• Understand how the disciplines of information technology and project management have evolved together and have led to how we manage projects today</li> <li>• Understand the current state of IT project management.</li> <li>• Understand why some projects fail and how to improve the likelihood of success.</li> </ul>	Instructor-led presentation Group work Group discussion	Students form project teams consisting of 5-7 students per team. Topics discussion in teams	current week
2 1/29/2018	Project Methodologies and Processes	Marchewka: Chapter 2, PMBOK: Chapter 3	<ul style="list-style-type: none"> <li>• Define what a methodology is and describe the role it serves in IT projects.</li> <li>• Describe the project life cycle (PLC).</li> <li>• Describe the Project Management Body of Knowledge (PMBOK®) and be familiar with its knowledge areas and process groups.</li> <li>• Describe PRINCE2® and be familiar with its core principles, processes, and themes.</li> <li>• Describe the Systems Development Life Cycle (SDLC).</li> <li>• Describe the Waterfall method for</li> </ul>	Instructor-led presentation Group work Group discussion	Topics discussion in teams	current week

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name	Evaluation Date
			<ul style="list-style-type: none"> <li>• Describe the Waterfall method for developing the project's product or system.</li> <li>• Describe the Agile approach for developing the project's product or system as well as two commonly used approaches called eXtreme Programming (XP) and Scrum..</li> <li>• Describe and apply the concept of Leaning Cycles and lessons learned.</li> </ul>			
3 2/5/2018	Measurable Organizational Value and the Business Case	Marchewka: Chapter 3	<ul style="list-style-type: none"> <li>• Describe and develop a project's MOV.</li> <li>• Understand the purpose of a business case.</li> <li>• Prepare a business case.</li> <li>• Distinguish between financial and scoring models.</li> <li>• Understand how projects are selected.</li> </ul>	Instructor-led presentation Group work Prof. feedback	In-class assignment	current week
4 2/12/2018	Project Planning: The Project Infrastructure	Marchewka: Chapter 4, PMBOK: Chapter 4	<ul style="list-style-type: none"> <li>• Describe the planning phase of the project life cycle (PLC)</li> <li>• Define the project's infrastructure.</li> <li>• Describe project governance and its role.</li> <li>• Understand the roles of the project manager and how the project team is selected.</li> <li>• Understand how a project acquires both internal and external resources.</li> <li>• Understand and describe the project environment.</li> <li>• Describe three general categories for procurement-type contracts.</li> <li>• Develop a project charter and understand its relationship to the project plan.</li> </ul>	Instructor-led presentation Quiz	Quiz #1	current week
5 2/19/2018	Project Planning: Scope and the Work Breakdown Structure	Marchewka: Chapter 5, PMBOK: Chapter 5	<ul style="list-style-type: none"> <li>• Understand and describe the relationship among scope, schedule, and budget.</li> <li>• Understand the processes and apply several tools for defining and managing the scope of a project.</li> <li>• Understand the difference between project scope (i.e. project deliverables) and product scope (i.e. features and functionality of the product or system).</li> <li>• Develop a Work Breakdown Structure (WBS).</li> <li>• Differentiate between an deliverable and a milestone.</li> <li>• Describe and apply several project estimation methods.</li> </ul>	Instructor-led presentation Group work Prof. feedback	In-class assignment	current week



Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name	Evaluation Date
6 3/5/2018	Project Planning: The Schedule and Budget	Marchewka: Chapter 6, PMBOK: Chapters 6, 7	<ul style="list-style-type: none"> <li>• Develop a GANTT chart.</li> <li>• Develop a project network diagram using a technique called activity on the node (AON).</li> <li>• Identify a project's critical path and explain why it must be controlled and managed.</li> <li>• Develop a PERT diagram.</li> <li>• Describe the concept of precedence diagramming and identify finish-to-start, start-to-start, finish-to-finish, and start-to-finish activity relationships.</li> <li>• Describe the concept of critical chain project management (CCPM).</li> <li>• Describe the various types of costs that make up the project's budget.</li> <li>• Define what is meant by the baseline project plan.</li> </ul>	Instructor-led presentation Group work Prof. feedback	In-class assignment	current week
7 3/12/2018	Managing Project Risk	Marchewka: Chapter 7, PMBOK: Chapter 11	<ul style="list-style-type: none"> <li>• Describe the project risk management planning framework introduced in this chapter.</li> <li>• Apply risk identification tools and understand the causes, effects, and the integrative nature of project risks.</li> <li>• Apply several qualitative and quantitative analysis techniques that can be used to prioritize and analyze various project risks.</li> <li>• Describe the various risk strategies, such as insurance, avoidance, or mitigation.</li> <li>• Describe risk monitoring and control.</li> <li>• Describe risk evaluation in terms of how the entire risk management process should be evaluated in order to learn from experience and to identify best practices.</li> </ul>	Instructor-led presentation Test	In-class Assignment	current week
8 3/19/2018	Managing Project Stakeholders and Communication	Marchewka: Chapter 8, PMBOK: Chapters 10, 13	<ul style="list-style-type: none"> <li>• Describe the informal organization.</li> <li>• Develop a stakeholder analysis.</li> <li>• Develop a project communications plan that includes tracking the project's progress to the baseline plan and the distribution of this information to the stakeholders.</li> <li>• Apply several types of reporting tools that support the communication plan.</li> <li>• Apply the concept of earned value and discuss how earned value provides a means of monitoring and forecasting a project's</li> </ul>	Instructor-led presentation Group work Prof. feedback	Test #1 (Midterm)	current week



Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name	Evaluation Date
			<p>progress.</p> <ul style="list-style-type: none"> <li>• Describe how information may be distributed to the project stakeholders and the role information technology plays to support project communication.</li> </ul>			
9 3/26/2018	Managing Project Quality	Marchewka: Chapter 9, PMBOK: Chapter 8	<ul style="list-style-type: none"> <li>• Describe project quality management (PQM) in terms of planning for quality, quality assurance, and quality control to continuously improve the project's products and supporting processes.</li> <li>• Identify several quality gurus or founders of the quality movement, and their role in shaping quality philosophies that can be applied to project management.</li> <li>• Define process capability and maturity defined under a quality management system called the capability maturity model integrated (CMMI).</li> <li>• Distinguish between validation and verification activities and how these activities support project quality management.</li> <li>• Apply the quality concepts, methods, and tools introduced in this chapter to develop a project quality plan.</li> </ul>	Instructor-led presentation Group work Group discussion Prof. feedback	In-class assignment	current week
10 4/2/2018	Leading the Project Team	Marchewka: Chapter 10, PMBOK: Chapter 9	<ul style="list-style-type: none"> <li>• Define leadership and understand its role and importance in successfully managing projects.</li> <li>• Describe the five approaches to exemplary leadership.</li> <li>• Describe six leadership styles.</li> <li>• Define the concept of emotional intelligence and how it can help one to become a more effective leader.</li> <li>• Define ethics and understand its importance in project leadership.</li> <li>• Understand some of the ethical challenges that you may face as a project leader or project team member.</li> <li>• Describe a process for making ethical decisions.</li> <li>• Define the difference between a work group and a team.</li> <li>• Understand culture and diversity as well as</li> </ul>	Instructor-led presentation Quiz	Quiz #2	current week

Week	Topics	Readings/Materials	Weekly Learning Outcome(s)	Instructional Strategies	Evaluation Name	Evaluation Date
			some of the challenges of leading and managing a multicultural project.			
11 4/9/2018	Managing Organizational Change, Resistance, & Conflict	Marchewka: Chapter 11	<ul style="list-style-type: none"> <li>Describe the discipline of organizational change management.</li> <li>Understand the impact of change.</li> <li>Describe how change can be viewed as a process and identify the emotional responses people might have when faced with change.</li> <li>Apply the concepts and ideas in this chapter in order to develop a change management plan. This plan should focus on assessing the organization's willingness and ability to change, developing a change strategy, implementing and tracking the progress toward achieving the change and then evaluating whether the change was successful and documenting the lessons learned from those experiences.</li> <li>Discuss the nature of resistance and conflict and apply several techniques for dealing with conflict and resistance in an efficient and effective way.</li> </ul>	Instructor-led presentation Group work Case studies Group discussion Prof. feedback	In-class assignment	current week
12 4/16/2018	Project Implementation, Closure, and Evaluation	Marchewka: Chapter 12	<ul style="list-style-type: none"> <li>Describe the three tactical approaches to information implementation and installation: (1) direct cutover, (2) parallel, and (3) phased. Compare the advantages and disadvantages of each approach.</li> <li>Describe the processes associated with project closure to ensure that the project is closed in an orderly manner.</li> <li>Identify the four different project evaluations or reviews: (1) individual performance review, (2) postmortem review, (3) project audit, and (4) evaluation of the project's MOV.</li> </ul>	Instructor-led presentation Group work Case studies Prof. feedback	In-class assignment	current week
13 4/23/2018	- Student Group Project submission due on eCentennial - Test #2					