

# **RYERSON UNIVERSITY**

## **Ted Rogers School of Information Technology Management and G. Raymond Chang School of Continuing Education**

### **COURSE OF STUDY 2017-2018**

#### **(C)ITM 750 – IS Project Management**

##### **1.0 PREREQUISITE**

The prerequisites for this course are (ITM 305 and ITM 410) or Direct Entry. Students who do not have the prerequisites will be dropped from the course.

##### **2.0 INSTRUCTOR INFORMATION**

- Name:
- Office Phone Number:
- E-mail address:
- Faculty/course web site(s): <https://my.ryerson.ca>
- Office Location & Consultation hours:
  - Your instructor is available for personal consultation during scheduled consultation hours which are posted on their office door or on the course shell in D2L Brightspace. However, you are advised to make an appointment by e-mail or by telephone before coming to ensure that the professor is not unavoidably absent.
- E-mail Usage & Limits:

Students are expected to monitor and retrieve messages and information issued to them by the University via Ryerson online systems on a frequent and consistent basis. ***Ryerson requires that any official or formal electronic communications from students be sent from their official Ryerson E-mail account.*** As such emails from other addresses may not be responded to.

##### **3.0 CALENDAR COURSE DESCRIPTION**

This course provides students with a more in-depth understanding of the tools and techniques of project management as it applies to IT-enabled process improvement projects. The ability to plan and execute projects successfully is consistently ranked among the most important skills among information technology professionals. The course is based on the industry-standard Project Management Body of Knowledge (PMBOK) and provides cutting-edge techniques for project

planning, scheduling, budgeting, human resources, quality, procurement, communication, and risk management.

#### **4.0 COURSE OVERVIEW**

Many IT organizations have experienced challenges in achieving project objectives, due to the evolving and dynamic nature of the industry. This can be addressed through a clearer understanding of project management methodology, strategy and practice as well as the deployment of established or emerging techniques for exercising control over time, cost, and quality in project undertaking.

This course is compatible with the Project Management Body of Knowledge (PMBOK), developed by the Project Management Institute. PMI is a non-profit association of project managers located throughout the world (see [www.pmi.org](http://www.pmi.org)).

The focus of this course is project management fundamentals as practiced in the context of an information technology and telecommunication environment. Salient concepts introduced in this course provide a useful foundation for students who wish to either further their education in this particular area in order to participate in projects, or those who may wish to consider this as a career option.

This course will enhance students' knowledge and understanding of project management concepts and techniques necessary for successfully planning, managing, and implementing IT-enabled process improvement projects. Throughout the course, students will progressively develop and refine project-related documentation for each of PMBOK subject areas and by the end of term will have developed an exemplary portfolio of project deliverables. This will require students to master the ability to critically analyze and reflect on their choices and alternatives for creating and generating their project deliverables.

#### **5.0 COURSE OBJECTIVES**

The goals of this course are to:

- provide a theoretical framework for effective project management;
- evaluate how project management practice varies among different organizations;
- show how the management of IT projects differs from other project types;
- provide practical experiences in the use of project management software; and
- create a forum for the discussion of critical issues in the management of IT projects.

By the end of the course, students are expected to be able to:

1. plan and manage IT-enabled process improvement projects using project management techniques;
2. understand and apply typical IT project management methodologies including structured and agile approaches
3. analyze, predict, and manage managerial issues arising from IT-enabled projects;
4. create business cases, project charters, project plans, and scope documents;
5. estimate and manage project duration, quality, cost, risk, and resources; and
6. manage project resources, change management, and communication issues.

## 6.0 EVALUATION

The grade for this course is composed of the mark received for each of the following components:

Evaluation Component	Percentage of the Final Grade
Individual Assignment/Quiz	10%
Group/Project Assignment	30%
Midterm Exam	20%
Final Exam	40%
<b>Total</b>	<b>100%</b>

**NOTE:** Students must achieve a course grade of at least 50% to pass this course.

### Citation Format for Essays and Term Papers

All essay assignments, term paper and other written works must adhere with APA citation format. Technical errors (spelling, punctuation, proofing, grammar, format, and citations) and/or inappropriate levels of language or composition will result in marks being deducted. You are encouraged to obtain assistance from the Writing Centre ([www.ryerson.ca/writingcentre](http://www.ryerson.ca/writingcentre)) for help with your written communications as needed.

You can find APA guidelines and academic referencing from the following online resources:

a) Ryerson Writing Support Web site:

<http://www.ryerson.ca/content/dam/studentlearningsupport/resources/citation-conventions/APA%20Basic%20Style%20Guide.pdf>

b) Ryerson Library for APA style guide: <https://library.ryerson.ca/guides/style/>

## 6.1 INDIVIDUAL ASSIGNMENTS

Individual assignments will focus on effective use of MS Project or the applicability of project management concept/practice to accomplish the objectives detailed in the instructions in the Individual Assignments section.

All Assignments must be uploaded to D2L Brightspace in the electronic drop box for the assignment by 11:59pm EST/EDT on the date due. No extensions to the due date will be granted except for documented religious, medical, or compassionate reasons as described previously. If you have an anticipated conflict with the due date, you can submit the assignment earlier. Assignments must be received in the required format by the due date/time or are subject to a late penalty of 10% per day late. The instructor may refuse to accept any late assignment at his/her discretion.

## 6.2 GROUP/PROJECT ASSIGNMENTS

All Group Assignments are required to collaborate on a substantive, major project that permits the Group members to fully exploit and apply all the concepts, notions, techniques, methodology and practice in relation to project management of IT.

Group members must contribute equally to the groups' efforts. Any group finding that a member is not contributing should advise the Instructor immediately by email. An optional peer evaluation may be used to identify inadequate contribution to group work. Individuals found not to be contributing

sufficiently to the group work will receive a reduced assignment mark as outlined in the peer evaluation form on D2L Brightspace.

All Assignments must be uploaded to D2L Brightspace in the electronic drop box for the assignment by 11:59pm EST/EDT on the date due. No extensions to the due date will be granted except for documented religious, medical, or compassionate reasons as described previously. If you have an anticipated conflict with the due date, you can submit the assignment earlier. Assignments must be received in a machine-readable and gradable format by the due date/time or are subject to a late penalty of 10% per day late. The instructor may refuse to accept any late assignment at his/her discretion.

Marks will be awarded based on how well the documents serve as a model or template for the student's future use in practice, in accordance with the marking scheme. The group assignments will be submitted to a plagiarism detection service for integrity checking-- students must ensure all work is original and not copied from another person, publication, Internet, or previously submitted assignment. If the submission is based on other sources (such as an example from the text), it must be modified to fit in with the assignment instructions and the previous assignments submitted by the group. Each member of a group that submits non-original work as their own will be dealt with under the academic misconduct provisions of the student code of conduct.

### **6.3 QUIZZES**

Quizzes will generally be an individual 1 or 2 page quiz that will be available on D2L Brightspace in the Quizzes section. If the student does not submit a quiz for a module by the deadline, a mark of 0 will be assigned. No late quizzes will be accepted but they may be done earlier to avoid missed deadlines. The contents of the quiz will be based on the text and assigned readings.

### **6.4 DISCUSSION PARTICIPATION**

This course is designed around frequent in-class and/or on-line participation in learning activities. You need to keep up with the readings for each week and regularly respond to discussion topics to contribute to your own learning and the learning of your peers.

### **6.5 EXAMINATIONS**

Examinations consist primarily of multiple-choice questions, exercises, or other problems to test both understanding and application of key course concepts. Students may be allowed to use simple (nonprogrammable) calculators to help in solving arithmetic problems during an examination. Students may not use programmable calculators, cell phones, personal digital assistants (PDAs) or similar devices during an examination.

Examination questions will be based primarily on the textbook content, but may also draw upon content discussed in class, from other readings, or from activities performed in the labs. The content or format of exams will not be discussed in individual emails or conversations with students. Any questions related to exams must be raised before the whole class, to ensure that all students receive the same information.

### **7.0 POSTING OF GRADES**

- ❖ All grades, on assignments or tests must be posted or made available to students through the return of their work. Grades on final exams must be posted. However, as there may be other

consideration in the determination of final grades, students will receive their official final grade in the course only from the Registrar. Final official course grades may not be posted or disclosed anywhere by an instructor.

- ❖ Posting of grades on the Course Management System (D2L Brightspace) is preferred. If grades are posted in hard copy they must be posted numerically sorted by student identification number after at least the **first four digits** have been removed. Instructors must inform students in all course management documentation of the method to be used in the posting of grades. Students who wish not to have their grades posted must inform the instructor in writing.
- ❖ Some graded work will be returned to students prior to the last date to drop a course without academic penalty.

## 8.0 TOPICS – SEQUENCE & SCHEDULE

Session	Topic / PMBOK Knowledge Area	Learning Outcomes	Readings	Activities & Due Dates
1	Choosing a Project Management Methodology  PM Framework and Processes	<ul style="list-style-type: none"> <li>● Incorporate common project management terminology into your management communications.</li> <li>● Describe the strengths and limitations of using the PMI's PMBOK for planning and managing IT-enabled process improvement projects;</li> <li>● Contrast the major components of the two main types of ITPM methodologies (i.e. SDLC and Agile);</li> <li>● Determine the most appropriate project management methodology for a given project.</li> </ul>	Chapter 1 & 2	Quiz 1A & 1B
2	Building a Project Business Case	<ul style="list-style-type: none"> <li>● Describe the purpose of the project business case, project charter, scope statement, and baseline plan;</li> <li>● Create an appropriate statement of MOV for a project using SMART goals;</li> <li>● Create a convincing and concise business case (feasibility analysis) for a given project.</li> </ul>	Chapter 3	Discussions Quiz 2
3	Developing a Project Charter and Scope Statement  Integration Management Scope Management	<ul style="list-style-type: none"> <li>● Incorporate each of the PMBOK knowledge areas into a comprehensive yet concise project charter for a given project;</li> <li>● Create a clear preliminary scope statement for a given project using written scope, use cases, user stories, and/or a Work Breakdown Structure.</li> </ul>	Chapter 4 & 5	Discussions
4	Estimating Project Schedules & Budgets	<ul style="list-style-type: none"> <li>● Recognize the pros and cons of the top-down, bottom-up, and analogous methods of estimation;</li> <li>● Create an effective baseline schedule and</li> </ul>	Chapter 6 & 7 (except EVM)	Discussions

Session	Topic / PMBOK Knowledge Area	Learning Outcomes	Readings	Activities & Due Dates
	Time Management Cost Management	budget using a Gantt Chart according to the goals and constraints of a specific project.		
5	Managing Project Human Resources and Stakeholders  Human Resource Management Stakeholders Management	<ul style="list-style-type: none"> <li>Perform a stakeholder analysis for a project;</li> <li>Design an effective job posting and interview process for an IT-enabled process improvement project;</li> <li>Use project management software to ensure resource allocations are leveled across a project.</li> </ul>	Chapter 9 & 13	Discussions  Quiz 3  Individual Assignment 1
6	Managing Project Scope, Schedule, and Budget  Integration Management Time Management	<ul style="list-style-type: none"> <li>Identify the critical path of a project and determine appropriate methods of reducing the total project duration;</li> <li>Apply the critical chain project scheduling technique to manage the risks of inaccurate schedule estimates;</li> <li>Create scope change control documents to evaluate and manage requested changes to an ongoing project.</li> </ul>	Chapter 4 & 6	Quiz 4  Individual Assignment 2
7	<b>Midterm Exam</b>			Group Assignment 1
8	Tracking and Communicating Progress  Communications Management	<ul style="list-style-type: none"> <li>Create an effective project communications plan;</li> <li>Prepare a report on a project's budget and schedule performance using the Earned Value Analysis (EVA) technique.</li> </ul>	Chapter 10 (plus Ch. 7 EVM)	Quiz 5A & 5B  Individual Assignment 3
9	Managing Project Risks  Risk Management	<ul style="list-style-type: none"> <li>Identify common risks for IT-enabled process improvement projects and calculate the severity of each risk;</li> <li>Recommend appropriate strategies for responding to specific project risks including when to accept, avoid, mitigate, and/or transfer the risk;</li> <li>Create a risk register for a project.</li> </ul>	Chapter 11	Discussions  Quiz 6
10	Improving Project Quality  Quality Management	<ul style="list-style-type: none"> <li>Recommend various approaches for improving the quality of a project including Six Sigma, Capability Maturity Model, and project management certification;</li> <li>Create an effective quality management plan for a project using appropriate SMART goals and metrics.</li> </ul>	Chapter 8	Discussions  Quiz 7
11	Managing Project Procurement  Procurement Management	<ul style="list-style-type: none"> <li>Describe the key components and purpose of a RFI, RFP, and RFQ;</li> <li>Recognize the pros and cons of fixed price, variable price, and value-based contracts;</li> <li>Describe techniques for ensuring project procurement is done ethically;</li> </ul>	Chapter 12	Discussions  Quiz 8

Session	Topic / PMBOK Knowledge Area	Learning Outcomes	Readings	Activities & Due Dates
		<ul style="list-style-type: none"> <li>• Create an effective project procurement plan using each of the steps in the PMBOK Procurement Process Group.</li> </ul>		
12	Managing Project Implementation, Evaluation, and Change Management	<ul style="list-style-type: none"> <li>• Identify common reasons why project stakeholders might resist planned changes;</li> <li>• Recommend appropriate techniques for dealing with resistance and conflict;</li> <li>• Recognize the pros and cons of delivering a project using a direct cutover, parallel, or phased implementation;</li> <li>• Describe the major activities performed in closing out an implemented project;</li> <li>• Evaluate and document the lessons learned for a project.</li> </ul>	See D2L	Discussions  Quiz 9 & 10  Group Assignment 2
13	<b>Final Exam</b>			

## 9.0 TEACHING METHODS

This course will incorporate the following teaching/learning methods: Facilitated discussions, readings, and assignments for creating project management deliverables and solving problems are the primary teaching methods in this course. Sessions will review and expand the reading materials and provide students with the instructor's commentary, examples, and illustrations.

## 10.0 TEXTS & OTHER READING MATERIALS

**Title:** Information Technology Project Management, 8th Edition

**Author:** Kathy Schwalbe

**Publisher:** Course Technology

**ISBN:** 978-1285452340

See D2L Brightspace for additional reading requirements.

The text is based on PMI's PMBOK guidelines. Additional details on the topics covered in project management can be found in the optional text:

PMI (2013) "A Guide to the Project Management Body of Knowledge", 5<sup>th</sup> Edition. Project Management Institute Inc., Newtown Square, PA. ISBN-13: 978-1935589679.

This optional guide (commonly referred to as PMBOK) is not a textbook, but a summary of project management knowledge as established by the Project Management Institute. It will be especially useful if you decide to write the PMI's CAPM certification exam following the course.

## 11.0 VARIATIONS WITHIN A COURSE

All sections of a course (Day and CE sections) will follow the same course outline and will use the same course delivery methods, methods of evaluation, and grading schemes. Any deviations will be posted on D2L Brightspace once approved by the course coordinator.

## **12.0 OTHER COURSE, DEPARTMENTAL, AND UNIVERSITY POLICIES**

- For more information regarding course management and departmental policies, please consult the ‘**Appendix of the Course of Study**’ which is posted on the Ted Rogers School of Information Technology Management website, <http://www.ryerson.ca/content/dam/itm/documents/cos/Appendix.pdf>. This appendix covers the following topics:
  - 12..1** Attendance & Class Participation
  - 12..2** Email Usage
  - 12..3** Request for Academic Consideration
    - 12..3.1** Ryerson Health Certificate
    - 12..3.2** Academic Accommodation for Students with Disabilities
    - 12..3.3** Religious, Aboriginal or Spiritual Observance
    - 12..3.4** Re-grading and Recalculation
  - 12..4** Examinations & Tests
    - 12..4.1** Period of Prohibition from Testing
    - 12..4.2** Make-Up of Mid-Term Tests, Assignments and Other Assessments During the Semester
    - 12..4.3** Make –Up of Final Exams
    - 12..4.4** Missing a Make-Up
  - 12..5** Late Assignments
  - 12..6** Standard of Written Work
  - 12..7** Academic Grading Policy
  - 12..8** Academic Integrity
    - 12..8.1** Turnitin.com
  - 12..9** Student Rights