



APS1001 – PROJECT MANAGEMENT

Course Syllabus – Winter 2023

This is your course syllabus. Please download the file and keep it for future reference.

University of Toronto is situated on traditional Wendat and Petun First Nations, the Seneca and the Mississaugas of the Credit River. The territory was the subject of the Dish with One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peaceably share and care for the resources around the Great Lakes. Today, the meeting place of Toronto is still the home to many Indigenous people from across Turtle Island.

TEACHING TEAM

COURSE INSTRUCTOR

Darya Duma, PEng, PMP
University of Toronto

E-mail: darya.duma@mail.utoronto.ca

Office hours:

Usually Monday afternoons at 3:00 through the posted Zoom link or by appointment. Watch announcements for any changes.

Delivery: Asynchronous online



COURSE DATES: JAN. 9 TO APRIL 14, 2023

PREREQUISITE: None

ZOOM ROOM:

See Zoom information on Quercus

COURSE DESCRIPTION¹

Project Management (PM) has evolved from being an accidental job title into an organizational core competency, especially for engineers. (This course started as an offering to graduate engineers; we now welcome students in other masters degrees with STEM undergraduate degrees.) Even if you choose to follow a strictly technical career path, you will almost certainly work on projects, and this course can help you understand that context. Employers value competence in project management. This course covers most of the knowledge areas of the globally recognized PM Body of Knowledge: scope, cost, time, risk, resources, stakeholders, communications, and procurement management. We take a practical, applied approach. We include video lectures, reference to web pages, text readings. We have team papers and presentations on “lessons learned” from actual projects. We attract a mix of part-time students from the working world, and full-time students with little work experience.

PRE-REQUISITE KNOWLEDGE

This course is designed for a general audience from a variety of disciplines across the university.

COURSE LEARNING OUTCOMES

By the end of this course, students should be able to:

- Understand the common framework of project management
- Apply well-accepted project management terminology
- Be better able to fit into a formal project environment, or to manage your own less formal projects
- Add techniques to your PM “toolbox”, increasing your value to your organization and the marketplace
- Increase your own PM “lessons learned” by sharing experiences with others
- Gain exposure to Microsoft Project software
- Optional: With further preparation, be prepared to take a project management designation examination

COURSE MATERIALS

Required Textbook: Part 1 of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) 6th ed*, Project Management Institute, 2017. You should be able to find many printed used copies online through Amazon. The ebook version is available for purchase directly from www.pmi.org

Course notes and other course-related material: All other course material is accessible via Quercus.

¹ Course Author: Keith Farndale.

COURSE EVALUATIONS

Assessment Tool	Due Date (before 23:59 ET)	Weight
Commentary on previous papers	February 3, 2023, submitted via Quercus	5%
Mid-term exam	February 14, 2023 at noon To end of Module 5 Online in Quercus (70 minutes)	10%
Team Project		45%
Microsoft Project MPP file	March 5, 2023, one per team submitted via Quercus	5%
Part 1: Video Presentation	Week of April 3, 2023 Times to be arranged with instructor	5%
	Participation during video presentation	5%
Part 2: Team Paper	April 14, 2023 submitted via Quercus	30%
Learning Activities		
	Comments on discussion board in Quercus (not graded)	5%
	Completion of multiple-choice quizzes in Quercus (not graded)	3%
Individual Paper	April 7, 2023, submitted via Quercus	20%
Final Exam	April 11, 2023, noon Online in Quercus (70 minutes)	12%
		100%

ASSESSMENT DESCRIPTIONS

Commentary on Previous Papers

A link to a folder with several previous team papers of differing quality will be provided. Please select and read two of them and submit an individual short write-up with your observations. Requirements:

- About 800 words sent in a DOC or PDF via Quercus (NOT 850 or 900 or more)!
- You can identify surprises, or similarities among the papers, or other observations.
- Comment if you think the papers meet my specification for team papers (see “**Requirements for Team Project**” description).
- No special format, except of course use quotation marks if quoting from the papers. No need to refer to other sources.

This allows us all to learn from other teams’ papers and gives you a chance to see good and not-so-good examples of what I am looking for.

Team Project

This course includes a team project that consists of four parts. The first part is not graded, but the final three parts are graded. See the document “**Requirements for Team Project**” posted on Quercus for details.

Part 1 (ungraded): Three to four students in a team. It is to your advantage to self-form into groups early. It may be useful to team up with people from your own discipline so you can choose a relevant project. You can solicit members in Quercus Discussions. Because of dropouts, I finalize teams just after the course drop date (February 27, 2023). But I encourage you to form teams and do some research on your proposed project topic before then.

Part 2 Microsoft Project file: Each team submits an MPP (Microsoft Project) file to the assignment folder in Quercus, displaying a WBS and schedule for the work your team will do on your own project to research, write and submit your team paper. (It is NOT a retroactive plan for the Boeing 787 or other project you have decided to study.) So you can actually prepare your WBS and schedule without even having chosen your subject.

Part 2a Choosing your project: Post an announcement in your Group folder identifying the project your group intends to study. It should be an engineering or other “technical” project or your choice which has been completed within the last 15 years. With the announcement, post the start and end dates of the project, and identify 3 sources of information that you will use for your research. You will need my approval to proceed. Of course, you may choose to discuss your choice with me prior to posting.

Part 3 Presentation: Presentation of your team project findings online. It can be a pre-recorded video or live presentation with duration of 12 to 20 min followed by live Q&A. Another team will be selected to ask questions. Other students may observe. Each team

member needs to perform part of the presentation.

Part 4 Team Project Paper: A team research report emphasizing “lessons learned” that we can gain from the project.

Learning Activities

There is a weekly discussion forum and multiple-choice quizzes. Each of these activities provides the opportunity for you to apply what you have learned in the course that week.

You will use the discussion board on Quercus for asking questions about course content and administration and proposing answers to discussions initiated by me. The discussion board comments are not graded, but participation counts towards your final grade.

There are 12 quizzes in this course available through Quercus. These quizzes are designed to provide you with immediate feedback on your knowledge. You have multiple attempts available. Your quiz scores do NOT count toward your final grade.

Your participation score is assessed at the mid-term and re-evaluated at the end of the course.

Individual Paper

A paper describing how you can and will use the project management framework and tools from the course to manage your future projects or sub-projects. For less-experienced students I recognize that your paper may be speculative. You can choose a project from school or a social group, if you do not have work examples.

Or how you will NOT use the tools and frameworks. You may certainly challenge “conventional wisdom” and come up with alternative approaches. I certainly do not need everyone to agree with my view or the text’s view. You should include something from several or most of our knowledge areas (no need to address all). Be as specific as you can about how it can apply in your current or anticipated environment: work, academic, even personal.

For example, some of you may like to prepare and submit a plan for an upcoming project which could be a major house renovation, your PhD research, an internship, or a real work project. Some of you may start with a project in your workplace which did or did not go well, and you analyze how you could manage a similar project better in future. Some of you may choose a school project or a project from a social group, such as a fundraising event, and whether you used any of these tools or “if you had to do it all over again....”

The body of the report is 4-6 pages (WE WILL STOP READING AT PAGE 7). They are not required, but if you draw on others’ ideas of course you will use a reference list (cited in your paper) or bibliography (generally used but not cited) and possibly appendices of tables and figures (which must be discussed in the body text). No need for executive summary or table of contents. The body of the report should be double-spaced, Times New Roman 12 or similar. Zero tolerance for plagiarism. Please write in the “first person” using “I”. Of course, I will keep your paper confidential.

A suggestion: Write a paragraph for yourself at the end of every module describing how the

methods, tools, techniques apply to your projects or your environment. By the week it is due, these paragraphs can simply be compiled and polished.

You can certainly discuss with me how you will approach this assignment or send me a one-page outline.

Mid-term and Final Exam

Both the mid-term and final exams are open book, online, short answer and long answer, a few multiple-choice, bullet points are encouraged, time-limited questions.

You should also take measures yourself to protect your information by keeping your UTORid password private, closing all applications prior to starting the exam/test, and ensuring your device is updated and safeguarded against malware.

GRADING

All written assessments in this course will be graded considering both technical content and the quality of the written report and given a numerical score in accordance to the published rubrics of this course. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to the established University of Toronto policies.

Work that is not well written or grammatically correct will not be eligible for a grade in the A range, regardless of its quality in other respects.

Unless stated otherwise in the assignment folder, the grades are assigned as:

Written Submission	Description
70-75%	Acceptable but uninspired. Less content.
78%	Good quality but no new thoughts OR Future oriented, broad and deep content, concrete applications, BUT poorly written.
80% (most scores are here)	Good quality, future-oriented, broad and deep content, concrete applications.
85-90% (very few of these)	Wow!
90% - 100% (rare)	No typos or grammar mistakes. Engaging. Presented new creative thoughts.

Feedback on Assessments

The teaching team will provide feedback on graded activities. You can expect feedback on your assessments within ten days of the due date.

Accessing Your Grades

Your grades will show on Quercus. Official transcripts showing final grades will be available on the Official Grade Release Date.

COURSE MATERIALS

Calculator

A simple calculator with basic functions will be useful.

Required Hardware/Software

- You must have a reliable internet connection and hardware that are compatible with online learning system requirements
- For the final presentations, you must have speakers or headphones, a microphone, webcam, all hooked up to a computer or monitor; a tablet or smartphone will NOT be sufficient
- You must be able to receive email set to your utoronto.ca address

Suggested Time Commitment

This course represents a study period of one semester spanning 12 weeks. You can expect to invest on average 7-12 hours per week in this course. Learners who adhere to a predetermined study schedule are more likely to achieve a successful outcome.

COURSE OUTLINE

Module	Learning Outcomes	Activities
Start Date		
0	Syllabus and Course Information	Self-introduction post
Jan. 9	By the end of this module, you will have: <ul style="list-style-type: none"> • Identified the course requirements • Obtained your own copy of the <i>PMBOK® Guide</i> 6th Edition (NOT the more recent 7th edition!) • Created a personal course schedule • Familiarized yourself with other learners in this course • Downloaded the reading list 	Read Team Project Requirements Read Syllabus
1	Introduction	Discussion Forum
Jan. 9	By the end of this module, learners will be able to: <ul style="list-style-type: none"> • Recognize PM standards published by the Project Management Institute as the context and structure of project management practices in North America • Define the balance of constraints and its relationship to project success • Describe the essential elements of a project management framework 	Quiz
2	Project Integration Management	Discussion Forum
Jan. 16	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Identify the purpose of a Project Charter and Project Management Plan • Describe the most likely content of a Project Charter and a Project Management Plan • Describe the Project Integration Management process as defined by PMI • Describe the process of integrated change control • Value the importance of post-project reviews and distributing lessons learned 	Quiz

Module	Learning Outcomes	Activities
Start Date		
3	Project Stakeholder Management	Discussion Forum
Jan. 23	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Explain the importance of early identification of stakeholders and their expectations. • Apply tools for stakeholder identification and planning stakeholder engagement. 	Quiz
4	Project Scope Management	Discussion Forum
Jan. 30	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Identify the tools and techniques of collecting requirements • Describe the purpose and content of a project scope statement • Build a work breakdown structure aligned with accepted good practice • Consider the risk of scope creep • Define configuration management 	Quiz Previous Papers for Review
5	Project Time/Schedule Management	Discussion Forum
Feb. 6	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Describe a hierarchy of schedules using the concept of the Work Breakdown Structure • Analyze a network diagram • Use critical path method to calculate project duration • Define scheduling terminology • Evaluate the significance of sufficient float in a project schedule 	Quiz

Module	Learning Outcomes	Activities
Start Date		
6	Organizing for Projects	Discussion Forum
Feb. 13	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Differentiate between organizational structures and their impact on project and team structures for managing projects • Explain the tools used to assign resources to a schedule and optimize their use 	Quiz
7	Project Cost Management	Discussion Forum
Feb. 20	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Define cost estimating techniques, basis of the estimate and control accounts • Describe the process for developing a project budget • Identify the purpose of contingency reserves and their management • Calculate project cost and schedule performance indicators using earned value • Interpret a simple project cost report 	Quiz Mid-term exam Organize yourself into teams
8	Project Procurement Management	Course Add/Drop Date
Feb. 27	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Create a simple proposal evaluation matrix • List the contents of a procurement management (contract administration) plan • Discuss organization of the procurement function in a typical engineering environment • List “make or buy” criteria • Compare contract strategies by calculating their final prices 	All students assigned to teams Discussion Forum Quiz Preliminary participation mark issued MPP file submission

Module	Learning Outcomes	Activities
Start Date		
9	Project Risk Management	Discussion Forum
Mar. 6	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Define the terminology of project risk management • Describe the process of project risk management • List the contents of a risk management plan • Facilitate team discussions to identify project threats and opportunities • Analyze a project risk using a risk map • Assess the value of a risk using expected monetary value • Evaluate the value of a risk response using a quantitative method • Support the process of selecting a proportional response to an identified project risk • Appraise the benefit of transferring risk 	Quiz Team project named
10	Project Communications Management	Discussion Forum
Mar. 13	By the end of this module, you will be able to: <ul style="list-style-type: none"> • List the objectives of a project kick-off meeting • Define key elements of meeting management and active listening • Create a communications management plan 	Quiz
11	Project Human Resources Management	Discussion Forum
Mar. 20	By the end of this module, you will be able to: <ul style="list-style-type: none"> • Create a responsibility assignment matrix • Evaluate team management needs • Recognize the importance of developing flexible leadership competencies 	Quiz

Module	Learning Outcomes	Activities
Start Date		
12	Project Management Wrap-Up	Quiz
Mar. 27	<p>By the end of this module, you will be able to:</p> <ul style="list-style-type: none"> • Discuss the context of a project environment • Differentiate between projects, programs, and portfolios • Develop a personal archive of project management “best practices” • Demonstrate leadership and team management skills • Evaluate a project’s performance using the practices discussed in this course • Recommend strategies and practices for project success 	Individual paper
Apr. 3		Presentations
Apr. 10		Final Exam
		Final participation marks posted
		Team Report
April 21		Final grades posted

ANTI-PLAGIARISM SUBMISSION SOFTWARE

Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Turnitin "green" is not necessarily good enough.

NETIQUETTE

In this course, you may be expected to communicate with your peers and the teaching team through electronic communication. You are expected to use the utmost respect in your dealings with your colleagues or when participating in activities, discussions, and online communication.

Following is a list of netiquette guidelines. Please read them carefully and use them to guide your online communication in this course and beyond.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers write before you respond. Think through and re-read your writings before you post or send them to others.
6. It's all right to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and challenge others with the intent of facilitating growth. Do not demean or embarrass others.
8. Encourage others to develop and share their ideas.

QUESTIONS ABOUT COURSE MATERIAL

Questions or comments regarding the course material that can be of benefit to other students should be posted in the Q&A forum on the class website. The instructor, TAs, and students are encouraged to answer these questions directly in the discussion forum for the benefit of everyone in the course.

COURSE ANNOUNCEMENTS

The teaching team will routinely post course news in the Announcements section on Quercus. Please sign up to be automatically notified by email when new information is posted.

CONFIDENTIAL MATTERS

If you have a confidential matter you would like to discuss, contact details are on the first page of this document. Expect email replies within 48 hours.

COURSE POLICIES

Please review the following policies concerning copyright, academic integrity, absences and academic accommodations.

COPYRIGHT

Course materials created by the teaching team, including all slides, presentations, synchronous and asynchronous course recordings, handouts, tests, exams, and other similar course materials, and are identified as intellectual property. It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's **express consent**. A student who engages in such conduct may be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights and, with respect to recordings, potential privacy violations of other students.

ACADEMIC INTEGRITY

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour and citation methods, please refer to resources including <http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize>, and <https://www.academicintegrity.utoronto.ca/>

LATE POLICY

Late submissions will be accepted with a penalty of 2% per day for up to 10 days, after this time a 0 will be assigned. In the event of extenuating circumstances, follow the policies for requesting an academic consideration (please see below). Note that unacceptable reasons include extra-curricular activities, travel plans, generally behind on schoolwork, etc.

ABSENCES (ACADEMIC CONSIDERATIONS) AND ACADEMIC ACCOMMODATIONS

The University of Toronto supports accommodations for students with diverse learning needs, which may be associated with mental health conditions, learning disabilities, autism spectrum, ADHD, mobility impairments, functional/fine motor impairments, concussion or head injury, visual impairments, chronic health conditions, addictions, D/deaf, deafened or hard of hearing, communication disorders and/or temporary disabilities, such as fractures and severe sprains, or recovery from an operation.

If you have a learning need requiring an accommodation the University of Toronto recommends that students register with Accessibility Services as soon as possible. Register at: <https://studentlife.utoronto.ca/service/accessibility-services-registration-and-documentation-requirements/>

We know that many students avoid seeking help because they feel that they should not need “unfair advantages.” The purpose of academic accommodation is not to give an unfair advantage, but to help remove an unfair disadvantage. It may feel difficult to ask for help, but it can make all the difference during your time here.

Phone: 416-978-8060

Email: accessibility.services@utoronto.ca

EQUITY, DIVERSITY AND INCLUSION

You belong here. The University of Toronto Engineering commits to all students, instructors, staff, alumni and partners that you can learn, create and participate in a welcoming, healthy and respectful environment. In this class, the participation and perspectives of everyone is invited and encouraged. The broad range of identities and intersections of identities within an inclusive team environment will help you achieve academic success. You can read the evidence for this approach here: <https://www.weforum.org/agenda/2019/04/business-case-for-diversity-in-the-workplace/>.

You are not alone. You are invited to talk to anyone in the Faculty that you feel comfortable approaching, including your professor, teaching assistant, academic advisor, any staff member, the Engineering Equity Diversity & Inclusion Action Group, a culture or identity club or group, or a U of T Equity Office.

Department Administrators: <https://gradstudies.engineering.utoronto.ca/grad-admins/>

Engineering Equity, Diversity & Inclusion Action Group & Clubs: www.uofteng.ca/edi

U of T Equity Offices: <https://hrandequity.utoronto.ca/inclusion/equity-offices/>

You have rights under the Ontario Human Rights Code that protect you against all forms of harassment or discrimination, including but not limited to acts of racism, sexism, Islamophobia, anti-Semitism, homophobia, transphobia, ableism and ageism. Engineering denounces unprofessionalism or intolerance of any kind, whether in person or online, on or off-campus. If you experience or witness any of these behaviours, please tell someone so we can help with resources and resolution. Engineering takes these reports extremely seriously. You can confidentially disclose directly to Marisa Sterling, P.Eng, Assistant Dean, Diversity, Inclusion and Professionalism.

Phone: 416.946.3986

Email: disclosure.engineering@utoronto.ca

Submit confidential disclosure form: www.uofteng.ca/disclosure

Ontario Human Rights Code: <http://www.ohrc.on.ca/en/students%E2%80%99-handouts/fact-sheet-1-ontario-human-rights-code>

ACADEMIC AND STUDENT SUPPORT

WRITING SUPPORT

You may use the free writing support provided by the Graduate Centre for Academic Communication <https://www.sgs.utoronto.ca/resources-supports/gcac/>, for both native and non-native speakers of English.

RELIGIOUS OBSERVANCE

The University provides reasonable accommodation of the needs of students who observe religious holy days other than those already accommodated by ordinary scheduling and statutory holidays. Students have a responsibility to alert me in a timely fashion to upcoming religious observances and anticipated absences and I will make every reasonable effort to avoid scheduling tests, examinations or other compulsory activities at these times.

Please contact me as early as possible to communicate any anticipated absences related to religious observances, and to discuss any possible related implications for course work.

FAMILY CARE RESPONSIBILITIES

The University of Toronto strives to provide a family-friendly environment. You may wish to inform me if you are a student with family responsibilities. If you are a student parent or have family responsibilities, you also may wish to visit the Family Care Office website at www.familycare.utoronto.ca.

TECHNICAL SUPPORT

QUERCUS LEARNING PORTAL: If you are having trouble, contact q.help@utoronto.ca.

MENTAL HEALTH

Engineering at the University of Toronto is a demanding program. The workload and the frequency of assignments and tests can be challenging to balance and can feel overwhelming. As a result, students can find themselves experiencing physical and/or mental health issues which impact their academic performance and overall well-being.

If you find yourself feeling distressed and in need of more immediate support resources, consider reaching out to the counsellors at **My Student Support Program (MySSP)** (www.uoft.me/myssp) or visiting **U of T Engineering's Urgent Support – Talk to Someone Right Now** webpage (<https://uofteng.ca/talknow>).

If you are encountering challenges that significantly affect your academic performance and overall wellbeing, there are a variety of free and confidential supports that can help you. As a U of T Engineering student, you have your **Departmental Graduate Administrator** (www.uoft.me/gradadmin) who can advise on personal matters that impact your academics. You can find helpful people, services and resources like these listed on the **U of T Engineering Mental Health & Wellness webpage** (www.uofteng.ca/mentalhealth) and SGS Health and Wellness Resources (<https://www.sgs.utoronto.ca/gradhub/resources-supports/#health-wellness>).

A small selection is also included here:

- Accessibility Services (www.studentlife.utoronto.ca/as)
- Health & Wellness (www.healthandwellness.utoronto.ca)
 - On-Location Health & Wellness Engineering Counsellor (<https://www.sgs.utoronto.ca/resources-supports/graduate-wellness-services-at-sgs/>)
- Student Life Academic Success (<https://studentlife.utoronto.ca/department/academic-success/>)
- U of T Engineering's Mental Health Programs Officer (www.uofteng.ca/mentalhealth#MHPO)
- SGS Financial Aid (<https://www.sgs.utoronto.ca/awards-funding/financial-aid-advising/>)

We encourage you to access these resources as soon as you feel you need support; no issue is too small.