



Approved by Chair:

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Jan 5, 2025

Signature

COMP3078 - Capstone Project II

Course Description

Students engaged in the Industry Capstone Courses (1 and 2) will be involved in authentic projects over their final two semesters. Projects will focus on emergent technologies opportunities, issues and challenges that are faced by and presented from industry partners, and are explored by student teams with the aid of qualitative and quantitative research lenses. Students will draw data and necessary information from various sources and apply project management principles to ensure effective and timely completion of the project. The objective for students over two semesters is to follow a development life-cycle which should lead to the development of a prototype or proof-of concept solution upon completion of their Capstone program. Throughout two semesters, students will apply concepts of human relations, team building, conflict resolution, self-management, and presentation skill development. Reflection will be a cornerstone of these courses, where students will be expected to regularly journal their progress and perspective throughout the semester. Capstone Project II (Semester 6) In the Capstone Project II Course, students will apply the concepts of problem identification, research and analysis, and project management. Using the skills developed throughout the program, students will apply their technical knowledge to explore solutions to problems identified, and make recommendations to industry. Final assessment in this semester will include: student's revised requirements analysis and design, project status reports, meeting management, system implementation updates and portfolio. Presentations and regular status meetings with faculty throughout the semester will support students and ensure progress throughout.

Course Outcomes

At the end of this course, the student will reliably demonstrate the ability to:

1. Utilize project management practices and techniques throughout an IT project life-cycle
2. Apply concepts of human relations and organizational behaviors to establish and maintain effective working teams.
3. Demonstrate leadership skills while working with diverse teams.
4. Apply customer service principles and practices when interacting with industry and/or stakeholders

5. Communicate effectively and persuasively through oral, graphic and/or print media.
6. Develop and activate life-long learning and professional development to maintain technological currency.
7. Design and develop a portfolio for career success.
8. Apply software development techniques to design and construct an IT project.

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Required

- N/A

Recommended Resources

- Course material (including lectures and labs) will be available to the students on the D2L.

Course Delivery Mode

The course uses various instructional methods, such as lectures, demonstrations, hands-on exercises, and take-home assignments. The delivery mode depends on whether the course is online or in person. Online lectures will be the primary mode, but there may be in-person lectures for in-person participants. Labs will be conducted virtually for the online program, while in-person program students must attend on-campus labs. For more information about the delivery mode, please refer to D2L. Any updates will be communicated through D2L in advance.

Assignment Policy

- Students are responsible for keeping a back-up copy of each assignment submitted.
- All assignments submitted should adhere to the documentation standards specified by the professor.
- Students should check the assignment handouts for the instructions for submission.

Test Policy

- A score of zero will be recorded for a missed assignment or examination unless the student presents the Professor with official substantiation of the absence the first day she or he returns to class.
- Students are responsible for reading the appropriate material before classes so that they may benefit from their practical activities and examples.

In-Person Exam Policy

Mid-term and Final exams for the T177 programs will be conducted in person. Please note the following exam schedule:

- Mid-Term Exams: Week 7 of the semester
- Final Exams: Week 15 of the semester

Students are expected to be available in person during these exam periods.

Important Note on the Use of Generative AI:

Students must review the "Generative AI Usage Guidelines" document, available on D2L, for detailed instructions on how generative AI tools may be used in this course. The course evaluation table now includes a column labelled "AI Usage Allowed," indicating whether AI use is permitted for each assessment.

Yes: AI can be used with proper referencing.

No: AI cannot be used, and any usage will be considered plagiarism and subject to academic penalties.

Misuse of AI in assessments where it is not permitted or failure to adequately disclose its use will be treated as a violation of academic integrity. According to college policy, consequences may include failing the assignment or the course or more severe disciplinary actions. **Students must also download the AI Usage Declaration form from D2L, complete it, and submit it with their assignments where AI use is permitted.** Adherence to these guidelines is mandatory to maintain academic integrity.

EVALUATION SYSTEM:

The passing grade for this course is: D (50%)

Assessment Tool	Description	Outcome(s) assessed	EES Assessed	Date / Week	% of Final Grade	AI Usage Allowed
Sprint 5 Project Status Report 1, Updated Project Plan	Learners will prepare and present a project status report to include; project status summary, upcoming objectives and managing issues/risks.	1, 2, 3, 4 5	All	4	15%	NO
Sprint 6 System Implementation 1– Demo, Presentation	Learners will develop and present a System Implementation update which will include; summary, scope, requirements, current status, future plan along with a demo of the developed system.	1, 2, 3, 4, 5	All	5, 6, 7	20%	NO
Sprint 7 Project Status Report 3	Learners will prepare and present a project status report to include; project status summary, upcoming objectives and managing issues/risks.	1,2,3, 4, 5		10	10%	NO
Sprint 8 System Implementation 2– Demo of Complete Project, Closure Report, Presentation	Learners will develop and present a System Implementation update which will include detailed information about the system, demo of the completed system and project closure report.	1, 2, 3, 4, 5	All	13, 14, 15	30%	NO
Portfolio development	Learners will develop a portfolio which will include personal profile, academic	6, 7	All	11	15%	NO

	credentials, professional summary, etc.					
Commitment	Participation in meetings with instructor/team, guest speaker sessions (if any) or any other capstone related activity.	8, 9, 10	All	Ongoing	10%	NO
			TOTAL:		100%	
Peer Evaluation will be done on an ongoing basis for every team-based deliverable. Participation in the project will be part of evaluation on an ongoing basis.						

Topical Outline

Learning Schedule / Topical Outline (subject to change with notification)

Week	Topic / Task	Outcome (s)	Content / Activities	Resources
1	Course Introduction Project Management - Controlling	1,2, 3, 5	<ul style="list-style-type: none"> - Tracking Projects - Overcoming Issues - Deliverables - Milestones - Project Status Reports - Facilitating Meetings 	Reference Material
2	Software Engineering – Design	1,2, 3, 5	<ul style="list-style-type: none"> - Design Concepts - Design considerations - Modeling language - Design patterns 	Reference Material
3	Portfolio Development	6, 7	<ul style="list-style-type: none"> - Purpose of a Portfolio - Portfolio Content - Benefits of developing a portfolio 	Reference Material
4	Software Engineering - Construction	1, 2	<ul style="list-style-type: none"> - Software Construction Fundamentals - Managing construction - Construction languages - Coding - Reuse - Construction quality <u>Sprint 5 – DUE</u>	Reference Material
5		1, 2, 3, 4, 5	<u>Sprint 6 - DUE</u> System Implementation 1	Presentations
6		1, 2, 3, 4, 5	System Implementation 1	Presentations
7		1, 2, 3, 4, 5	System Implementation 1	Presentations
8	INTERSESSION WEEK			
9	Software Engineering - Testing and Debugging	1, 2, 3, 4	<ul style="list-style-type: none"> - Testing methods - Testing levels - Testing types - Testing process 	Reference Material

			- Tools for testing	
10	Software Engineering - Deployment Project Management – Presentations	1, 2, 3, 4, 5	<ul style="list-style-type: none"> - Deployment activities - Deployment roles - Understand the formula for presentation perfection! - Visual Image - Vocal Image - Elements for Speaking and Presenting with Confidence - Overcoming Anxiety <u>Sprint 7 – DUE</u>	Reference Material
11	Customer Service Principles		<u>Portfolio Project – DUE</u>	
12	Lifelong Learning and Work Search	6, 7	Skills for <ul style="list-style-type: none"> - Personal Development - Professional Development - Effective Job Search 	
13		1, 2, 3, 4, 5	<u>Sprint 8 - DUE</u> System Implementation 2	Presentations
14		1, 2, 3, 4, 5	System Implementation 2	Presentations
15		All	System Implementation 2	Presentations
<p>For information on withdrawing from this course without academic penalty, please refer to the College Academic Calendar: http://www.georgebrown.ca/Admin/Registr/PSCal.aspx</p> <p>Policy on Academic Dishonesty: The <i>minimal</i> consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material.</p> <p>To view George Brown College policies please go to www.georgebrown.ca/policies</p>				