



George Brown College

COURSE NAME: CAPSTONE PROJECT II

COURSE CODE: COMP3078

CREDIT HOURS: 5

**COURSE
CONTACT
HOURS:** 70

PREREQUISITES: COMP3059

COREQUISITES:

**EFFECTIVE
DATE:** January 2017

PLAR ELIGIBLE: YES () NO (X)

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EQUITY STATEMENT

George Brown College values the talents and contributions of its students, staff and community partners and seeks to create a welcoming environment where equity, diversity and safety of all groups are fundamental. Language or activities which are inconsistent with this philosophy violate the College policy on the Prevention of Discrimination and Harassment and will not be tolerated. The commitment and cooperation of all students and staff are required to maintain this environment. Information and assistance are available through your Chair, Student Affairs, the Student Association or the Human Rights Advisor. George Brown College is dedicated to reducing barriers and providing equal access to education for students with disabilities. If you require academic accommodations, please contact the Accessible Learning Services office on your campus.

STUDENT RESPONSIBILITIES

Students should obtain a copy of the *Student Handbook* and refer to it for additional information regarding the grading system, withdrawals, exemptions, class assignments, missed tests and exams, supplemental privileges, and academic dishonesty. Students are required to apply themselves diligently to the course of study, and to prepare class and homework assignments as given. Past student performance shows a strong relationship between regular attendance and success.

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.

ESSENTIAL EMPLOYABILITY SKILLS

As mandated by the Ministry of Training, Colleges and Universities essential employability skills (EES) will be addressed throughout all programs of study. Students will have the opportunity to **learn (L)** specific skills, to **practice (P)** these skills, and/or **be evaluated (E)** on the EES outcomes in a variety of courses. The EES include communication, numeracy, critical thinking & problem solving, information management, interpersonal and personal skills. The faculty for this course has indicated which of the EES are either Learned (**L**), Practiced (**P**) or Evaluated (**E**) in this course:

Skill	L	P	E	Skill	L	P	E
1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience	x	x	x	7. locate, select, organize and document information using appropriate technology and information sources	x	x	x
2. respond to written, spoken or visual messages in a manner that ensures effective communication	x	x	x	8. show respect for the diverse opinions, values, belief systems, and contributions of others	x	x	x
3. execute mathematical operations accurately		x	x	9. interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	x	x	x
4. apply a systematic approach to solve problems	x	x	x	10. manage the use of time and other resources to complete projects	x	x	x
5. use a variety of thinking skills to anticipate and solve problems	x	x	x	11. take responsibility for one's own actions, decisions and consequences	x	x	x
6. analyze, evaluate, and apply relevant information from a variety of sources	x	x	x				

COURSE OUTCOMES AND OBJECTIVES

Upon successful completion of this course the students will have reliably demonstrated 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.
9. Apply various software testing techniques.
10. Deploy the IT project and build the project closure report.

DELIVERY METHODS

Lectures, Liaise with Students and Industry Partners, Presentations, Seminars

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS

There is no required textbook. Class will be given handouts, supplemental/reference material by professor.

TESTING POLICY

- A score of zero will be recorded for a missed team project and/or seminar presentation (individual team members who are absent from the team presentation will be penalized), missed project status report, and/or missed project final report unless the student presents the professor with official written 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

ASSIGNMENT POLICY

- Students are responsible for keeping a back-up copy of each assignment, report, presentation, reference sources and e-mail submitted.
- All assignments (including reports, presentations, reference sources and e-mails) submitted should adhere to the documentation standards, submittal method, and deadlines distributed by the professor.
- Students should check Blackboard and the course handouts for the instructions for submission policy.

EVALUATION SYSTEM

Assessment Tool	Description	Outcome(s) assessed	EES Assessed	Date / Week	% of Final Grade
Project Status Report 1	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	3	10%
Project Status Report 2	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		5	10%
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		9	10%

Project Status Report 4	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		11	10%
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	6, 7	20%
System Implementation 2– 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	30%
Portfolio development	Learners will develop a portfolio which will include personal profile, academic credentials, professional summary, etc.	6, 7	All	12	10%
				TOTAL:	100%

GRADING SYSTEM

The passing grade for this course is: 50%

A+	90-100	4.0	B+	77-79	3.3	C+	67-69	2.3	D+	57-59	1.3	< 50	F	0.0
A	86-89	4.0	B	73-76	3.0	C	63-66	2.0	D	50-56	1.0			
A-	80-85	3.7	B-	70-72	2.7	C-	60-62	1.7						

Excerpt from the College Policy on Academic Dishonesty:

The **minimal** 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. To view George Brown College policies please go to www.georgebrown.ca/policies.

TOPICAL OUTLINE

Week	Topic / Task	Outcome(s)	Content / Activities	Resources
1	Course Introduction; Software Engineering – Design	1, 2, 3, 5	<ul style="list-style-type: none"> Design Concepts Design considerations Modeling language Design patterns 	Reference Material
2	Software Engineering - Construction	1, 2	<ul style="list-style-type: none"> Software Construction Fundamentals Managing construction Construction languages Coding Reuse 	Reference Material

			<ul style="list-style-type: none"> Construction quality 	
3		1, 2, 3, 5	Status Report 1 – DUE	
4	Project Management - Controlling	1, 2, 3, 4, 5	<ul style="list-style-type: none"> Tracking Projects Overcoming Issues Deliverables Milestones Project Status Reports Facilitating Meetings 	Handouts
5	Portfolio Development	6, 7	<ul style="list-style-type: none"> Purpose of a Portfolio Portfolio Content Benefits of developing a portfolio 	Reference Material
			Status Report 2 – DUE	
6		1, 2, 3, 4, 5	System Implementation 1 – DUE	Presentations
7		1, 2, 3, 4, 5	System Implementation 1 – DUE	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 Tools for testing 	Reference Material
			Status Report 3 – DUE	
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 	Reference Material
11	Customer Service Principles	2, 3, 4	Status Report 4 – DUE	Handouts
12	Life Long Learning and Work Search	6, 7	Portfolio Project – DUE	Handouts
13		1, 2, 3, 4, 5	System Implementation 2 – DUE	Presentations
14		1, 2, 3, 4, 5	System Implementation 2 – DUE	Presentations
15		All	System Implementation 2 – DUE	Presentations
<p>Please note: this schedule may change as resources and circumstances require.</p> <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>				