

CSC308H1 - Technology Leadership

SYLLABUS – Fall 2025

Contact Information

Instructor: Michael McCarthy - mccarthyblack@gmail.com

Course Meeting Information

All lectures will be held in-person on Thursdays from 12-3 pm in the Sigmund Samuel Library Building.

In-person attendance is a requirement for this course and built into the grading scheme.

Acknowledgment of Territory

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

Prerequisites:

Students must be enrolled in the Focus in Technology Leadership and have successfully completed CSC207: Software Design to enrol in this course.

Course description

An exploration of the core aspects of leadership within the context of the software-oriented industry and academic research sectors. Topics include corporate mission, vision, and stakeholder roles in the technology sector; strategic planning; competitive technology market analysis; decision-making; a practical awareness of financial documents; contract negotiation; equity and financing in technology business growth; business-to-business (B2B) and business-to-consumer (B2C) software markets; principles of effective communication and influence in a corporate setting; professional development strategies for a software-oriented career; crafting an impactful elevator pitch; understanding of employment rights. The approach ensures that graduates are well-prepared to step into leadership roles and navigate the complexities of the tech industry and of academic research.

Course Structure

Students can expect the weekly breakdown of tasks and activities to be the following:

Approximate Weekly Time Allocation:	Minutes
Lecture + Exercises	60
Mentorship Prep	30
Mentorship Meeting	30
Consulting Project - Work with Partner	60
Consulting Project - Independent Work	60
Readings & Other Preparation	60
Total time in hours =	5

Evaluation

Item	Description	Weight	Date Due
<i>Project - Plan</i>	A proposal for your business solutions and plan for the project.	5%	TBD
<i>Project - Final Assignment</i>	The overall content of the final project.	35%	TBD
<i>Project - Presentation</i>	The final presentation as presented to the project partner	10%	TBD
<i>In-Class Exercises (Best 8/10)</i>	Activities completed during class time, such as case studies or discussions.	25%	Ongoing
<i>Mentorship</i>	Engagement with the assigned mentee during scheduled activities	15%	Ongoing
<i>Leadership & Teamwork</i>	Engagement with the course content and overall collaboration with team members	10%	Ongoing

Course Project

A major component of your experience in this course is contributing to a group software design project. For the first half of the term, we will be meeting weekly to work on skill development activities in a group setting. In the last half of the term, you will apply these skills in a business consulting project, which will see you and your team develop business recommendations by applying what you have been learning in this course.

Expectations for managing project partner

When working with the project partner, students are expected to maintain professionalism and respect in all communications. This means being clear, polite, and timely in your responses, actively listening to the partner's needs, and avoiding casual or overly familiar language. Remember that you are representing both yourself and our team, so ensure your tone is collaborative, constructive, and solutions-focused. If disagreements arise, address

them respectfully and professionally, keeping in mind that the goal is to build a positive working relationship. Your TA is a good resource to support in these communications should any questions arise.

Mentorship Guidelines

Students will be paired with a member of the 2025–2026 FTLI cohort for a series of mentorship activities that support both professional growth and the consulting project. Mentors will guide students in setting goals, building their professional brand, preparing for interviews, and navigating career decisions like offer negotiation and onboarding. Throughout the project, mentors will provide accountability check-ins, share personal experiences, and help students connect their learning to long-term leadership and career development.

Grading and Penalties

You are responsible for meeting all deadlines. Due to the nature of the course involving an external industry partner, it is critical to maintain clear communication with your team and the course instructor/TA about any unexpected challenges.

If you're experiencing illness, mental health crises, family/personal emergencies, or other exceptional circumstances beyond your control that prevent you from being able to complete an assessment on time, please reach out to the course TA or lead instructor as soon as possible.

Please note that special consideration cannot be granted to accommodate for heavy course load, multiple assignments and/or tests scheduled during the same period, or challenges with time management.

Respect for classmates

The University of Toronto is committed to equity, human rights, and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Academic integrity

Students must adhere to the [Code of Behaviour on Academic Matters](#). **It is your responsibility to know what constitutes appropriate academic behaviour.** You are responsible for ensuring that you do not act in such a way that would constitute cheating, misrepresentation, or unfairness, including but not limited to, using unauthorized aids and assistance, personating another person, and committing plagiarism. For more information see [U of T Academic Integrity](#) website.

Accessibility

Students with diverse learning styles and needs are welcome in this course. If you have a disability or health consideration that may require accommodations, please feel free to approach us and/or the Accessibility Services Office as soon as possible. The Accessibility

Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let them and me know your needs, the quicker we can assist you in achieving your learning goals in this course. For more information, or to register with Accessibility Services, please visit: <http://studentlife.utoronto.ca/as>.

Photo and Video Release

By enrolling in the course, students hereby grant to the University of Toronto (the "University") the right to record, film, photograph, audio record, or video record my image, work, and/or performance as related to CSC308 coursework (hereinafter collectively referred to as "Works") and to display, publish, or distribute these Works for the purpose of publishing, posting on the University website, social media sites, and/or for broadcasting on television or radio for use in connection with the activities of the University for promoting, publicizing, or explaining the University or its activities as determined by the University.

Generative Artificial Intelligence

In this course, you may use generative artificial intelligence (AI) tools, including ChatGPT and GitHub Copilot, as learning aids and to help complete assignments. While some generative AI tools are currently available for free in Canada, please be warned that these tools have not been vetted by the University of Toronto and might not meet University guidelines or requirements for privacy, intellectual property, security, accessibility, and records retention. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course.

Note that UofT now has its own instance of Copilot that does meet the University's standards. We ask that you only share our course materials with this instance of Copilot (that is, Copilot when you are logged into your UofT account), so that you are not sharing our intellectual property with another platform that retains it.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely entirely on these tools to complete your coursework. Instead, we recommend treating generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools.

Note that this policy only applies to University of Toronto materials. Information relevant to the industry partner is protected under a non-disclosure agreement and should not be shared with ANY instances of generative AI tools, university or otherwise.

Required texts or readings

Readings provide important context for lectures and exercises, and begin in Week 2 of the course. Readings marked optional provide additional context, often historical or the original texts that introduced the ideas and are recommended to develop holistic understanding of the concepts discussed.

Week-by-week breakdown of in-class activities

Provide a weekly breakdown of the material to be covered in class, activities, and assignments. Required and recommended readings may also be included.

Topic / Lecture	Readings & Links	Estimated Time	Notes
Week 2 Corporate Leadership			
Scientific Management	<ul style="list-style-type: none"> - Taylor's Scientific Management Summary Article <p>Recommended: <ul style="list-style-type: none"> - Original Writings: Ch. 1 & 2 (up to "To summarize") </p>	~15 min ~20 min	Summary is sufficient for most; original adds historical context.
Competitive Strategy	<ul style="list-style-type: none"> - Summary of Strategies <p>Recommended: Chapter 2 of <i>Competitive Strategy</i></p>	~5 min ~25 min	Summary captures core ideas; book chapter gives full detail.
Week 3 Project Management			
Team Dynamics	<ul style="list-style-type: none"> - PMBOK: Sections 2, 2.2, & 2.3.4 	~25 min total	Covers stakeholder roles, team characteristics, team culture questions, and development styles.
Agile Development	<ul style="list-style-type: none"> - Introductory Article - <i>The Art of Agile Development</i> - <i>James Shore</i>, Ch. 1 & 3 	~10 min ~15 min	Great introduction + deep dive on Agile development's history and phases.
Product Management	<ul style="list-style-type: none"> - Project Management Fundamentals Video <p>Optional: <ul style="list-style-type: none"> - PMBOK: Sections 4.4 & 4.6 </p>	~15 min ~15 min	Introduction to PM work and common structures Helpful for learning common project artifacts and performance terms.

Week 4 Entrepreneurship			
Startup Development	<ul style="list-style-type: none"> - How to Get and Evaluate Startup Ideas Startup School - YC Combinator Watch 1:30 - 15:00 - <i>The Lean Startup</i>, Chapter: "Pivot or Persevere" 	~15 min ~15 min	Common mistakes and questions to ask when evaluating startup ideas Summary + core chapter on startup strategy.
Business Model Canvas	<ul style="list-style-type: none"> - Building Blocks of the Business Model Canvas - Competitive Differentiation for Tech Products 	~5 min ~5 min	Simple breakdown and examples of using the business model canvas.
Startups & Planning	<ul style="list-style-type: none"> - Business Model vs Plan 	~10 min	Good for understanding startup planning logic.
Week 5 Problem Solving			
Understanding Blue Ocean Leadership	<ul style="list-style-type: none"> - Blue Ocean Tools Read sections about Red vs Blue Ocean Strategy , ERRC Grid, and Value Innovation - Blue Ocean Leadership: Summary - Case Studies 	~5 min ~5 min ~10 min	Covers strategy, leadership transformation, and real-world cases.
Alchemy of Growth	<ul style="list-style-type: none"> - Summary of the Alchemy of Growth 	~5 min	A simple breakdown of business growth phases.
Week 6 Strategy and Finance			
People-first Leadership	<ul style="list-style-type: none"> - Drucker's Management Theory - Summary 	~10 min	Highlights Drucker's core management thinking in contrast to others.

Tech Companies - Going from Good to Great	<ul style="list-style-type: none"> - Jim Collin's Good to Great Summary - Flywheel Effect - Hedgehog Concept - Drucker Lessons 	~25 min total	Summarizes the key perspectives to take when considering the jump for companies from good to great.
Week 7 Design Thinking & Innovation			
Personal Branding	- <i>The Mom Test</i> - Rob Fitzpatrick, Chapter 8 + Cheatsheet	~10 min	Navigating customer research
One Minute Manager	<ul style="list-style-type: none"> - One Minute Manager Summary Video - 2020 Update - Accounting for remote work 	~10 min	Overview of the original model + modern adaptation for hybrid workplaces.
Week 8 Risk Management			
Behavioural Interviews	<ul style="list-style-type: none"> - <i>Cracking the Coding Interview</i>, Ch. 5 - Coding Interview Communication Case Studies 	~10 min ~10 min	Understanding on how to communicate stories + technical thinking in tech interviews.
Week 9 Leading Teams			
Technical Interviews	<ul style="list-style-type: none"> - Coding Interview Techniques <p>Students are also highly encouraged to explore LeetCode</p>	~10 min	High-level strategies for breaking down development problems in a technical interview.
Week 10 Negotiation			
Managing Competition	- Simon Sinek - Leadership and Game Theory Video (7 min to end)	~15 min	Competition vs longevity in business.

Game Theory & Negotiation	- Game Theory Explained Through Movies Watch timestamps 11:40-25:15, and 29:40-38:13.	~20 min	Covers game theory strategies and considerations in negotiations
	Optional: <i>Thinking Strategically</i> - Avinash K. Dixit, Ch. 11	~20 min	Introduction to formal strategic negotiation.
Week 11 Career Management			
Navigating the Career Ladder	- HBS First 90 Days Summary	~15 min	Understanding early onboarding expectations.
	- First 90 Days - Pages 6-17	~ 10 min	
	- <i>The Manager's Path</i> , Ch. 1	~10 min	Understanding structure of technical leadership roles.

Student Support Services

Student Mental Health Resources

- [U of T's Central Hub for Student Mental Health Resources](#)
- [SGS Graduate Wellness Services](#)
- [Student Life Health and Wellness](#)
- MySSP: 1-844-451-9700 (or use the app)
- Good2Talk: Call: 1-866-925-5454 or Text: GOODTOTALKON to 686868

Tri-Campus Sexual Violence Prevention and Support Centre ("The Centre").

- The Centre has a location on all three campuses to help students who disclose to access supports and, in cases where the student chooses to formally make a report, the Centre will explain the process, and facilitate the making of the report to the University and/or to the Police. The Centre can be contacted through its confidential phone at 416-978-2266 or thesvpcentre@utoronto.ca.
- Students are encouraged to call or email for an appointment, which will be booked as soon as possible. **Students in crisis or in need of immediate support related to sexual violence can contact Women's College Hospital Sexual Assault Care Centre at 416-323-6040.**

Office of the Ombudsperson

- As part of the University's commitment to ensuring that the rights of its individual members are protected, the University Ombudsperson is devoted to ensuring procedural fairness and just and reasonable outcomes.
- The Ombudsperson offers confidential advice and assistance for complaints and concerns and can recommend changes in academic or administrative procedures where this seems justified. For information, see <https://governingcouncil.utoronto.ca/ombudsperson>.