Institute of Technology Entrepreneurship and Commercialization

TIMG 5002A Technology Entrepreneurship

FALL 2023 (September 6 to December 8, 2023)

CRN: 35690

CLASS TIME AND PLACE

Mondays, 18:05 p.m. - 20:55 p.m. Eastern Time (Ottawa time)

In person: Nicol Building 4020

Online: Click here to enter Zoom classroom (passcode = 5002A)

This is a HyFlex course, so students can attend in person, online, or a combination of the two.

COURSE BRIGHTSPACE

Click here to enter online course environment

INSTRUCTOR

Professor Eduardo Bailetti

Eduardobailetti@cunet.carleton.ca

Office: Nicol Building 5060

Online office hours: Wednesdays, 2:30 p.m. – 3:30 p.m. Office hours link (passcode = office)

Quote from the instructor's teaching vision:

"The goal is to instill in students an entrepreneurial mindset vital for their personal and professional lives. Beyond knowledge acquisition and the application of academic findings, my vison includes developing students into resilient, innovative, and socially conscious professionals, ready to contribute meaningfully to society. My aspiration is to cultivate learners capable of higher order critical thinking, creativity, and innovation."

PLEASE READ THIS DOCUMENT IN ITS ENTIRETY

TABLE OF CONTENTS

ABOUT THE COURSE

This course benefit both those who are interested in finding work as an employee and those interested in joining or launching startups. This course uses the conceptualization of a new venture to structure learning of important concepts in technology entrepreneurship. Through a scaffolded, learn-by-doing, and "flipped classroom" approach, students incrementally develop, discuss and present a new venture by studying and delivering assignments before class, engaging in social learning activities during class, delivering assignments after class.

This graduate course supports students to:

1. Develop the competences required to formulate a new venture as an entrepreneur or employee.
2. Enhance critical thinking skills (i.e., execute, synthesize, recommend, create) that are in demand by industry.
3. Strengthen creativity and communication skills.
4. Assess proposals to create new things put forth by others.
5. Ethically harness large language model technology (e.g., ChatGPT) for professional and academic purposes.
6. Develop the competences TIM students require to be up to date on entrepreneurship literature and use facts and data to support their arguments.

Course calendar description

TIMG 5002 Technology Entrepreneurship [0.5 credits]

Key theories and models of technology entrepreneurship. Topics include the nature of technology products, collaborative experimentation and production of new products, assets, and their attributes, and the firm's asset ownership rights.

Target audience

TIMG 5002 Technology Entrepreneurship is a required course addressing the needs of graduate students registered in the Technology Innovation Management (TIM) program's Master of Applied Business Analytics (MABA), Master of Engineering (MEng), Master of Entrepreneurship (MEnt), Master of Digital Transformation & Entrepreneurship (MDTE), or Master of Applied Science (MASc) pathways. Students in other programs are welcome to attend this course. However, they will need to meet the high standards to which students in the TIM program are held.

COURSE SCHEDULE

Here is the plan for TIMG 5002A Technology Entrepreneurship this Fall term 2023.

Week	Class date	Focal topic(s)	Assignments
1	September 7* *Combined with 5002B	Orientation and success in 5002	-
2	September 11	Value creation and where ideas come from	After-class 2
3	September 18	The desired future: Addressing an attractive problem and the value proposition	Pre-class 3 After-class 3
4	September 25	Company purpose: Offers, buyers, and governance	Pre-class 4 After-class 4
5	October 2	Managing (in) networks: Value architecture and the minimal value network	Pre-class 5 After-class 5
6	TBD* *Tue or Wed	Enabling venture outcomes: External enablers and borders	Pre-class 6 After-class 6
7	October 16	Strategy: Where to compete and how to win	Pre-class 7 After-class 7
8	Break week: October 23 - 26		
9	October 31	Venture presentations 1 (part 1)	Slides1
10	November 6	Venture presentations 1 (part 2)	Present1 Feedback1
11	November 13	Taking action: Confidence and early initiatives	Pre-class 10 After-class 10
12	November 20	Leading to win: Growth path, scaling up, and raising money	Pre-class 11
13	November 27	Venture presentations 2 (part 1)	Slides2
14	December 4	Venture presentations 2 (part 2)	Present2 Feedback2
Exams	-	Take home exam	Venture Project Report

LEARNING SPACE

All course content, instructions, links, and submission portals are available online here: https://brightspace.carleton.ca/d2l/home. To access the 5002 Brightspace course webpage, go to the link, submit your credentials, and select TIMG5002A Technology Entrepreneurship.

Weekly flow of activities

Students will engage in synchronous (i.e., together in class) and asynchronous (individually on own time) learning activities for most weeks of the term. These activities include consuming content, contributing to discussions, and handing in assignments. Instructions for these learning activities are available inside the course's Brightspace page.

Each week, students are expected to review and complete activities and assignments on time. Each student is expected to submit each assignment regardless of whether the assignment is classified as individual or group work. Credit goes to only the student who submits a completed assignment, so all students are expected to submit.

All classes follow a consistent pattern of learning activities to complete prior to, during, and after class. Figure 1 illustrates the pattern of the course. The pattern incentivizes consistent effort from students (effort is correlated to learning) and ensures that class time includes active discussions and the application of course concepts, rather than passive listening and low student engagement.
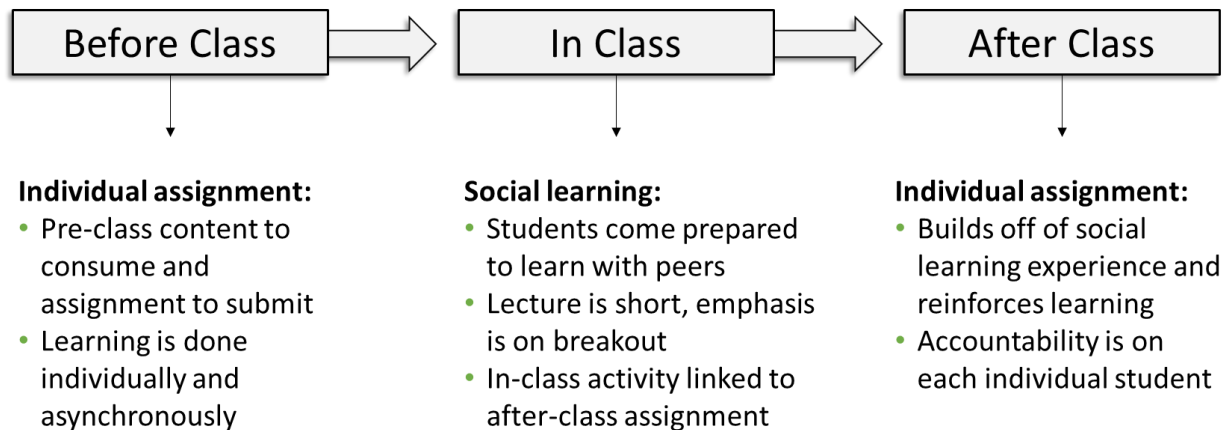
Before Class		In Class		After Class

Individual assignment:
- Pre-class content to consume and assignment to submit
- Learning is done individually and asynchronously

Social learning:
- Students come prepared to learn with peers
- Lecture is short, emphasis is on breakout
- In-class activity linked to after-class assignment

Individual assignment:
- Builds off of social learning experience and reinforces learning
- Accountability is on each individual student

Figure 1 - TIMG 5002's "flipped" classroom approach for more interesting classes and higher levels of engagement

Table 1 - TIMG 5002 weekly assignment submission deadlines.

Assignment	Submission deadline
Pre-class assignments	Sunday at 11:59 p.m.
After-class assignments	Wednesday at 11:59 p.m.

Synchronous portion – class sessions

Class sessions are the *synchronous* portion of our learning space where all of us, from anywhere in the world, come together at the same time to interact. The "HyFlex" approach allows this.

Class sessions will include combinations of group discussions, project work, lectures, student presentations, Q&A sessions, and learning reflections.

Students have the option to join class sessions in person in room 4020, Nicol Building, or online via Zoom (Click here). The classroom has a camera, speakers, and screens to bridge the online and offline worlds productively. In-person attendance is recommended. Bring your laptop.

Students should engage in class regardless of in-person or online attendance.

Asynchronous portion – outside class sessions

The *asynchronous* portion of our learning space involves work done by students on their own time (i.e., activities completed outside of class).

Pre-class – Students receive learning content to consume and instructions to complete a pre-class assignment ahead of most classes. Students will engage with the material on their own time and at their own pace, while meeting expected submission deadlines. By consuming the provided content and completing the pre-class assignments, students will arrive to class prepared to engage in higher-order learning activities.

After-class – Students receive instructions on the assignment they need to submit after the synchronous classes. The after-class assignment build on the pre-class and in-class learning activities. Students will complete the after-class assignment on their own time, while meeting expected submission deadlines.

Asking questions

Course-related questions – Students should post all questions about the course, including questions about course content, procedures, and assignments, to the discussion forum on Brightspace titled "Ask the Prof" (find this in the "Course Comms" section). Response time: please allow 24-48 hours for responses to questions posted during the work week.

Helpful tips:
- Click subscribe on the Ask the Prof discussion forum to keep track of all Q&A posts.
- Review your Brightspace settings to ensure you receive notifications from the course.

Accommodations and non-course related questions – Students wishing to receive accommodations or seek guidance on private items that are not related to the course content and instructions, please email the instructor. Accommodations are to be requested prior to a submission deadline, not after.

In-class – The instructor will dedicate time in each class for questions to be asked. Students are also invited to speak with the instructor before or after the class, as time permits.

LEARNING OUTCOMES & ASSIGNMENTS

The table below provides the learning outcomes at the course level and the corresponding assignments associated with them.

A learning outcome is what you will be able to do after completing this course. This course has 20 assignments and a final project report. An assignment is a micro-output from actions undertaken for the purpose of learning.

Learning outcome	Assignments	Individual (I) or Group (G)	Number of submissions
Reliably meet specifications	All 20 assignments + Venture Project Report	I and G	21
Conceptualize a new venture	Venture Project Report	G	1
Communicate with skill	Venture Slide Deck	G	2
Communicate with skill	Venture Presentation	G	2
Assess venture proposals	Feedback on presentations	I	2
Take responsibility for your education	Pre-class Assignments	I	7
Take responsibility for your education	After-class Assignments	I	7
			21

ASSESSMENT

Specification grading

This course uses the specification grading system[1] to assess 20 of the 21 assignments and the traditional grading system to assess one assignment – Venture Project Report.

Specification grading allows students to choose the grade they wish to earn based on the amount of effort they wish to put in.

Students receive clear specifications that their assignments must meet, and the instructor evaluates whether the assignment that students submit meet the stated specifications. The specification grading system is not concerned with points, partial credits, or course pass or fail. An assignment that a student submits either meets specifications or it does not.

An assignment that meets specifications receives an "M" (meets specification). An assignment that does not meet specifications receives an "N" (not assessable) or an "R" (revision required).

1 – See Nilson, L.B., 2015. Specifications grading: Restoring rigor, motivating students, and saving faculty time. Stylus Publishing, LLC.

To assess assignments, the instructor uses the MRN specification system shown below.

Grade

M Assignment clearly meets all stated specifications. No additional work is required.

R Revision is required. Assignment provides clear evidence that effort to meet specifications was given. However, significant gaps remain. Needs further work.

N Not assessable.
- Assignment was not submitted before deadline.
- Assignment does not provide enough clear evidence that earnest effort was given. Work contains significant omissions, parts are not connected in a logical manner, ideas are expressed poorly, work contains errors in spelling, grammar, and capitalization.

Your letter grade

To determine your letter grade in this course, the instructor will use a formula that considers your Venture Project Report grade and adjusts it according to the number of assignments you completed with a grade of M.

To make this adjustment, we use a constant value for each letter grade (which we call K) and subtract from it the number of assignments that receive an M grade. We then take half of this difference and round it to the nearest whole number to get an integer adjustment.

Assignments that receive an R or N grade do not count towards completing an assignment to specification.

For example, let's say you received an "A" grade on your Venture Project Report and completed 15 assignments with an M evaluation. To calculate your final letter grade, we would use the formula: (K - M)/2, where K is the constant value for the letter grade that you're aiming for, and M is the number of assignments completed to specification.

If K for an "A" grade is 19, and a student completes 15 assignments, then we would calculate the adjustment as: (19 - 15)/2 = 2. This means that your final letter grade would be adjusted down by two levels from an A to a B+.

To summarize, your final letter grade is determined by the grade assigned to your Venture Project Report adjusted based on the number of assignments completed to specification using the formula (K - M)/2 rounded to the lower integer.

The table below provides the value of K for each letter grade. The instructor may change the K value in week 8 to adjust as needed

Letter grade for Venture Project Report	Constant value for the grade (K)	Letter grade for the course
A+	19	A+
A	19	A
A-	18	A-
B+	17	B+
B	17	B
B-	17	B-

Dean approval

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

RULES OF CONDUCT

Engagement

Student engagement with their peers and the course content is important for learning. Students' success depends on the extent and intensity of their engagement.

Students are expected to show up prepared to and actively engage in class discussions.

Respect and integrity

Each student is to interact with their peers, the instructor, and the learning space with respect and integrity. Students come from different places, cultures, religions, legal systems, family dynamics, and experiences, and possess different perspectives, sexual orientations, beliefs, and norms. Abusive, intolerant or prejudice behaviour or sentiment will not be tolerated in our learning environment at any point in time. Ever. The TIM alumni form one community and students will inevitably be alumni together; students are expected to behave accordingly.

Submission responsibility

Students will engage with the course individually and as part of groups. Each student is to submit each assignment, regardless of whether it is individual or group assignment.

Groups and project teams

In class, students may be assigned groups by the instructor for learning activities. Students will actively, fully, and respectfully engage all members of a group to complete assigned tasks and assimilate the content covered. For the venture project, students organize themselves into teams, handle their own team dynamics, and keep themselves and each other accountable to the team. Permissible size of teams are 2 or 3 students. Teams may fire a team member and members may leave their team at any point. All interactions must be respectful and productive.

Academic Integrity

This is a graduate course at an academic institution of higher learning. Students are to support claims with well-researched facts, cite their sources using proper citation practices, and produce work and correspondence that meets high standards of professionalism. Plagiarism is not acceptable in any form. All students are expected to familiarize themselves with the university's standards on plagiarism as they will be held accountable to it (see plagiarism).

ChatGPT and other generative AI technology

Students are encouraged to use generative artificial intelligence (AI) applications such as ChatGPT (https://chat.openai.com/chat) responsibly within this course. ChatGPT will be actively taught and used in the course. When using these technologies, students are expected to 1) submit record of their conversation with the application, 2) check, verify, and provide proper citations to the claims and ideas used, and 3) apply critical thinking skills to increase the value created by the machine. Assignment submissions that appear unedited, unthinking, copy-paste text from the machine will be flagged and penalized.

Example uses of ChatGPT:

- Improve the quality of the venture presentation slide deck and presentation

- Translate text

- Generate text

- Summarize text

- Explore concepts and brainstorm options

- Propose research method steps

- Engage in question answering and role playing

- Improve the explanation of data acquisition and data analysis

- Eliminate all errors in grammar spelling, capitalization, and punctuation

- Ensure that citations and references are complete and correct

Expectations of students

The instructor expects students to:

- Comply with the university's [academic integrity standards](#).
- Ensure assignments meet grading specifications before submitting.
- Deliver clear, influential, organized, and error-free professional-quality work.
- Complete individual work independently.
- Avoid permitting or engaging in freeloading in group projects.
- Be prepared and actively participate in all classes.
- Avoid disturbances in class, including device alerts and side talking.
- Submit assignments on time and show up to class on time.
- Collaborate and interact respectfully with others.
- Engage with peers and instructors to produce new knowledge.
- Take initiative in tasks benefiting the venture team.
- Use the Carleton email for course-related correspondence.
- Respond to emails promptly and professionally.
- Deliver clear, concise, insightful presentations within the allotted time.
- Schedule assignments and study time in personal calendars.
- Navigate adversity and disagreements with a positive, respectful mindset.
- Deal with uncertainty productively.

TIM BRAND, VALUES, GROUP WORK, AND PLAGIARISM

Brand

The brand of the TIM program is an asset that is valuable. All TIM alumni and students work hard to protect and enhance both their own brand and the TIM brand.

TIM Values

The table below identifies our expectations (what we value) and what is not acceptable in our value system. Individuals registered in this course must act accordingly.

	What the instructor expects	What the instructor finds unacceptable
Course assignments	• Original work	• Plagiarized work

	• High-quality work delivered on-time for public examination	• Low-quality work delivered late with excuses
Focus	• Co-create innovation to make a difference in our university, disciplines, and communities	• Knowledge that fills menial gaps and has little or no impact on communities, our region, country, or world
Source of information	• Reputable scholarly journals	• Low quality journals, individual opinions, and stories
Mode in which students acquire knowledge and skills	• Independent and critical thinking • Application of new knowledge to gain insights on how to launch and grow technology companies	• Memorization and regurgitation of information • Application of superficial opinions, stories, management fads, generalities
Challenge	• Trying new things, destroying boundaries, and being deep thinkers	• Over-extending yourself by taking on so many things that you no longer have the capacity to do a respectable job at any of them.
Environment	• Relevant, substantive, fun, positive, 24x7 experiential learning	• Worthless, trivial, theatre, boring, negative, 3 hrs/week listening

Group work and free loaders

There is zero tolerance for free loaders in the TIM program. A freeloader refers to an individual who takes advantage of group members' efforts without contributing much to return. Free loaders are not welcome anywhere, and this course is no exception.

Group work is a key component of this course. A group deals with conflicts in a way that is fair, respectful, and fast.

The best way to deal with free loaders is to not include their names in the first page of the group assignments. If a student's name does not appear in an assignment submitted by his or her group, the student must submit his or her own assignment. If a student fails to submit an assignment with his/her name on the first page, the student will receive zero for the assignment.

Plagiarism

Plagiarism, including copying and handing in for credit someone else's work, is a serious instructional offence that will not be tolerated. Please refer to the [website on Academic Integrity from the Carleton Registrar's Office](#) for additional information. Plagiarism is against the TIM culture. A case of plagiarism will be referred to the Dean of the Faculty of Graduate and Postdoctoral Affairs (FGPA). The instructor will not deal with the matter directly. Carleton University has a clear process to deal with allegations of plagiarism.

The [University Academic Integrity Policy](#) defines plagiarism as "*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own.*" This includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;

- using another's data or research findings without appropriate acknowledgement;

- submitting work developed in whole or in part by someone else, with or without modifications, as one's own; and

- failing to acknowledge sources through the use of proper citations when using another's work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

STUDENT MENTAL HEALTH

As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you.

Carleton provides a list of support services available here: https://carleton.ca/wellness/

Emergency Resources (on and off campus): https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/

Carleton Resources:

- Mental Health and Wellbeing: https://carleton.ca/wellness/
- Health & Counselling Services: https://carleton.ca/health/
- Paul Menton Centre: https://carleton.ca/pmc/
- Academic Advising Centre (AAC): https://carleton.ca/academicadvising/
- Centre for Student Academic Support (CSAS): https://carleton.ca/csas/
- Equity & Inclusivity Communities: https://carleton.ca/equity/

Off Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, https://www.dcottawa.on.ca/
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, http://www.crisisline.ca/
- Empower Me: 1-844-741-6389, https://students.carleton.ca/services/empower-me-counselling-services/
- Good2Talk: 1-866-925-5454, https://good2talk.ca/
- The Walk-In Counselling Clinic: https://walkincounselling.com

INFORMATION ON ACADEMIC ACCOMMODATIONS

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Informal accommodation due to short-term incapacitation
If you require short-term informal accommodations due to the need to travel to Canada, sickness, or emergency. Provide your request in writing to the instructor in advance. If accommodations are due to an emergency, contact the instructor as soon as possible to alert him of the situation. Undue delay to inform the instructor may result in denial of request for accommodations. In the case of sickness, provide the instructor with your completed Self-Declaration for Academic Considerations form (https://carleton.ca/registrar/wp-content/uploads/self-declaration.pdf).
Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form (click here).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details click here.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or mailto:pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, please request your accommodations for this course through the [Ventus Student Portal](#) at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). Requests made within two weeks will be reviewed on a case-by-case basis. For final exams, the deadlines to request accommodations are published in the [University Academic Calendars](#). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: https://carleton.ca/equity/sexual-assault-support-services

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation will be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf

HAVE A GREAT FALL TERM LEARNING!