MMA890: Entrepreneurship & Innovation

PROFESSORS

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ABOUT THE COURSE

Welcome to MMA890! We strongly encourage you to carefully read and review this document in its entirety at least once as everything that you need for the course is in here! Only companies that successfully innovate can survive in today's rapidly changing environment. They have a high level of demand for creative people who have the analytics toolkit, the entrepreneurial mindset, and the know-how to bring new ideas to life. This course focuses on building and enhancing the skillset to innovate using an entrepreneurial mindset — whether you are introducing new products in an existing company, working in a brand-new startup, or anything in-between. It also focuses on Al-powered or enabled innovation. Through a combination of in-class learning, insightful readings, a case study, teamwork, and guest speakers who are successful entrepreneurs and innovators, you will gain valuable knowledge about how to be more innovative. At the end of the session, you will also have an opportunity as a team to present a breakthrough innovation in a Dragon's Den-type competition for the best idea. Above all, we will have fun during our time together!

COURSE OBJECTIVES

This course is designed to provide an overview of the entire innovation and entrepreneurship process – in essence a framework for developing a business idea into an opportunity and ultimately into a successful business proposition. It will focus on Al-based ideas. Our assumption about all graduate students is that they are keen, motivated, enthusiastic learners who have a passion for embracing new concepts and situations. This course is delivered in an intense format, with extensive teamwork and individual/team presentations, and will provide the opportunity for you to fully immerse yourself in what it means to be entrepreneurial and innovative. It is structured as 5 days of class plus supplemental readings and course pre-work starting approximately two weeks prior. There are also dedicated periods each day of class for office hours, teamwork, and check-ins with the instructors.

The course learning objectives are:

- To gain a deeper appreciation for the process of how to **develop innovative ideas** into true business opportunities, and the tools to help support this, including design thinking and AI tools like ChatGPT. Business opportunities can be new ventures or new projects within existing companies of any size.
- To learn about the importance of data-driven decision-making using **test and learn experimentation** and how it can be utilized to validate critical assumptions underlying innovative new ideas.
- To build the expertise to **critically evaluate a business plan** for a new venture. One of your assignments will be to evaluate a real-life pitch by an entrepreneur using the skills you develop during the course.
- To learn about the **funding sources for new ventures**, including Canada-specific resources like angel investors, venture capital funds, government resources, and incubators and accelerators.
- To develop and enhance your ability to **pitch a new business opportunity** in front of a group (your fellow classmates). You will work with your team to identify and select one Al-based opportunity that you will develop during the course, with significant mentoring from your professors. Your team will then roleplay being entrepreneurs seeking seed financing for your idea in a Dragon's Den type (friendly) competition.

ADMINISTRATIVE INFORMATION

You are responsible for knowing the course policies that are described on the following pages.

WEBSITE

The course website can be reached through **the Smith learning portal.** Please bookmark the page and reference it often. We will post course announcements, class slides and handouts on the site. It is also your go-to source for online modules required for this course.

READING AND PREWORK

There are two short readings and a simulation during the course:

- ChatGPT DIY Guide: students will use this guide to complete Assignment #1 (see below)
- **Prompt Engineering for Students in Entrepreneurship and Innovation** students will use this guide to Prompt Engineering throughout the course
- New Venture Simulation: The Food Truck Challenge. Michael A. Roberto (Harvard Business Publishing)

ASSIGNMENTS AND GRADING - OVERVIEW

We use the senate-approved "letter-in/letter-out" method of grading. The underlying numerical value for each assignment grade is then used to calculate your final grade. The assignments are presented below, along with their weights and a basic overview. Detailed assignment outline is provided in the appendix of this document.

Assignments submitted one day late will be deducted by one-third of a letter grade (e.g. a B+ would be reduced to a B). Those submitted two days late will be deducted by two-thirds of a letter grade (e.g. B+ to B-). Assignments submitted more than two days late will receive an F.

Туре	Assignment	%	Due
Individual	1. Individual idea generation	20	Thursday, September 26, 2024 by midnight
Individual	2. Venture assessment	50	Monday, October 21, 2024 by midnight
Team	3. In-class Business Plan Pitch	30	Friday, October 4 by 8:00am

ASSIGNMENTS - DETAIL

1. INDIVIDUAL IDEA GENERATION

Prior to the start of the course, you will use the **ChatGPT DIY Guide** to help you think creatively about potential innovative, AI-based new business ideas. See page 5 of this document for details.

2. INDIVIDUAL VENTURE ASSESSMENT

In one of the course sessions, an entrepreneur will present his/her company, and you will assess that company against a framework you develop from course material and anything else you deem useful. There will be an extensive Q&A session as part of the class session, and you will be required to submit at least one question in advance via the course portal. You will base your assessment primarily on the presentation made (content and style) during the class plus the Q&A session. You are free to discuss the assignment in your team or with others; however, the final submission must be an individual effort. You should also consider AI-focused or enabled recommendations that could accelerate the entrepreneur's business trajectory. See pages 6-7 of this document.

3. TEAM BUSINESS PITCH

You will be put into teams that will work on developing one chosen Al-focused or enabled idea/opportunity for each team into a business pitch, which you will present to investors (your classmates acting as angel investors) on the last day of class. You will select the one chosen idea/opportunity from the top ideas each of you will discuss during the first two days of class. You will build and assess a chosen Al-focused or enabled opportunity, detail its product-market fit, present the underlying assumptions and how you test them, highlight your competitive advantage, the financial projections and the business model. Overall, we will look at how well you address the content of the ten slides and whether you do so in a way that prevents you from telling the common "entrepreneur lies" as detailed in Kawasaki's talk. See page 8 of this document.

MMA890: CLASS SCHEDULE

<u>Pre-class preparation</u>: Core reading and assignment #1

- 1. Core reading (ChatGPT DIY guide and Prompt Engineering document)
- 2. Assignment #1: Individual Idea Generation (Due by Thursday, September 26, 2024 by midnight 20% of overall grade)

Class	Date / Time	Topic(s)	Exercise/Case Study
1	Sunday,	Morning session (9am- 12pm)	
	Sept 29	Welcome and course overview	- Ideation team exercise
		Introduction to the Innovation Framework	- Mastercard example
		Assess, Ideate, Plan, Action	- SCAMPER exercise
		Review of tools/processes	
		Afternoon free	
2	Tuesday,	Morning session (9am- 12pm)	- Design Thinking Exercise
	Oct 1	Introduction to the Innovation Framework	- Teams pick their one idea
		Review of tools/processes, continued	for the pitch competition
		Design Thinking Workshop	on Friday
		Afternoon session (1pm – 5pm)	- Assumptions Verification
		Test & Learn experimentation	Exercise
		Technology Strategy	
		Legal strategy	
		Financial strategy	
		Pitch slide examples	
3	Wednesday,	Morning session (9am- 12pm)	- AI Tools Exercise
	Oct 2	Class open discussion and review pitch videos	
		 Venture pitch 10-11am (for assignment #2) 	
		Al tools for entrepreneurs	
		Afternoon session (1pm – 5pm)	
		1-2:30pm: Food truck simulation	
		Rest of the day: Teams work on their one idea to	
		pitch in the competition on Friday	
4	Thursday,	Morning session (9am- 12pm)	
	Oct 3	Review of Days One and Two	
		Review of pitch videos	
		Guest panel 11am-noon	
		Afternoon session (1pm – 5pm)	
		Teams work on their one idea to pitch in the	
		competition on Friday	
		2-5pm: 15-minute final team review sessions on	
		their pitch idea with the professors	
5	Friday,	Morning session (9am- 12pm)	
	Oct 4	Pitch presentations	
		Wrap up	

ASSIGNMENT #1: INDIVIDUAL IDEA GENERATION

SUBMIT ASSESSMENT TO THE COURSE SITE BY MIDNIGHT ON THURSDAY, SEPTEMBER 26, 2024 - WORTH 20 PERCENT OF FINAL GRADE

You will use the **ChatGPT DIY Guide** to help you brainstorm to identify **five** AI-based innovative ideas. You will follow the Guide and the specifics of the prompts, although you can also use your creativity (if you like) to add to prompts in the Guide. The Guide walks you through the process of using ChatGPT as a tool to help with idea generation, organizing the ideas in a table, using a brainstorming tool called SCAMPER to further evaluate your ideas, and a detailed analysis of your ideas using Porter's 5 Forces.

Assignment 1 Deliverables:

- 1. At the end of this exercise, you will create a 1-2 page document where you summarize your responses to the four questions in the Self Evaluation (located on the last page of the DIY Guide). You will also copy/paste the table that is created from the DIY Guide showing your ideas, the problems they solve, the key assumptions supporting your idea, and the size/complexity of the opportunity for each idea.
- 2. You will also list your top 3-5 takeaways from this overall exercise: what you learned, how ChatGPT may have helped you be more productive or creative in the innovation process, and any other key points that you'd like to share with the professors.

GRADING

The following template will be used to grade your assignment. Grades use the GPA system ranging from an A+ (4.3) to F (0.0). Grades in the A range indicate that your work exceeds expectations, those in the B range indicate that your work meets expectations, those in the C range indicate that the quality of your work is somewhat below expectations, those in the D range indicate that the quality of your work is much below expectations, and sections not completed will receive an F.

Area:	Weight
Ideas generated: It will be important for you to show that you have carefully thought about key trends/macro factors and how your solutions address key needs/customer pain points. Identifying the critical assumptions that you would subsequently test (e.g., customers, markets, pricing, etc.).	50%
2x2 opportunity/complexity matrix: presenting the relevant size and complexity of each idea within the matrix.	25%
1-page document: meeting the deliverables as outlined in the ChatGPT DIY Guide and discussing your key learning outcomes from this exercise	25%
Total	100%

ASSIGNMENT #2: VENTURE ASSESSMENT (INDIVIDUAL)

SUBMIT ASSESSMENT TO THE COURSE SITE BY MIDNIGHT MONDAY, OCTOBER 21, 2024

10 PAGES MAXIMUM, NOT INCLUDING APPENDICES

WORTH 50 PERCENT OF FINAL GRADE

This assignment asks you to prepare an assessment of an entrepreneur's pitch that will be presented in Friday's session. In this session of the course, an entrepreneur will present his/her company, and you will assess that company against a framework you develop from course material and anything else you deem useful. There will be an extensive Q&A session as part of the class session. You will base your assessment primarily on the presentation made (content and style) during the class plus the Q&A session. You are free to discuss the assignment in your team or with others; however, the final submission must be an individual effort.

Please submit a short report, double-spaced, no longer than 10 pages (excluding exhibits). We are looking for several things in the report. First, is that you have a logical and thorough approach (i.e., a framework to guide your thinking) to the assessment. Second, is that for any major issues (good or bad) you identify, you provide specific suggestions for the entrepreneur regarding approaches to addressing these issues. On this latter requirement, a recommendation such as "Fred should think about partnering with a supplier" is not nearly specific enough. A much better answer would be along the lines of "The company needs to partner with a supplier of sufficient size and motivation to provide access to the market. An example of such a vendor would be Acme Corporation."

GRADING

The following template will be used to grade your assignment. Grades use the GPA system ranging from an A+ (4.3) to F (0.0). Grades in the A range indicate that your work exceeds expectations, those in the B range indicate that your work meets expectations, those in the C range indicate that the quality of your work is somewhat below expectations, those in the D range indicate that the quality of your work is much below expectations, and sections not completed will receive an F.

Area:	Weight
Overall summary : We are looking for your summary assessment of the opportunity presented: Is there a real problem, need or want to be addressed? Is the customer(s) well understood? Is the timing right? Is there money to be made? Can the team do it?	10%
Customer: We are looking for your assessment of the company's customer: Is there a significant and well-defined/understood problem, need or want that the business is proposing to solve? How compelling is the purchase decision for the customer? Who is the customer? Is a customer archetype identified or identifiable? How does the customer make decisions about buying this product or service? Are any customers on side/in place now? Will the business have economically viable access to customers? (simple or multi-stage distribution) Does proposed pricing scheme seem well thought out and viable?	

Environment: we are looking for detailed assessment of the environmental favorability (i.e. PESTEL factors, competition, industry, market size, barriers to entry) Business model/money making characteristics: This section focuses on your assessment of the viability of the venture making money: are the margins good, is the revenue robust, are the costs understood and manageable, what are the investment requirements, are the financial characteristics consistent with the founder's goals? What critical assumptions has the company made and has it properly evaluated them? How is the company using test & learn/experimentation to advance its business? What opportunities are there for Al to accelerate the business' growth? The team: your assessment of the team's capability to grow this venture: Where are the founders from? 10% What are their motivations? Personal and financial? Where have they been educated? Where have they worked – and for whom? What have they accomplished – professionally and personally – in the past? What is their reputation in the business community? Do they know suppliers, customers, employees? How good is their network (with suppliers, customers, employees)? What experience do they have that is directly relevant to the opportunity they are pursuing? What skills, abilities, and knowledge do they have that is directly relevant to the opportunity they are pursuing? How realistic are they about the venture's chances for success and the trials and tribulations it will face? How committed are they to this venture? Do they have 'skin in the game'? How well will they work together? Is there a good advisory board in place? Other considerations: We are looking for whether and how you support your claims and if you have 10% identified any additional success factors/fatal flaws based on the Innovation Framework and other skills/tools you have learned in class. What is your assessment of the AI that the entrepreneur is using? Structure, format, writing style: we are looking for clarity and precision of language; attention to grammar, style and spelling; efficiency and concision. We are also looking for consistency throughout the report (i.e. what you write in one section doesn't contradict what is written elsewhere). 10% Total 100%

ASSIGNMENT #3: PITCHING YOUR IDEA (TEAM)

SUBMIT SLIDES TO COURSE WEBSITE BY 8AM FRIDAY, OCTOBER 4, 2024

10 SLIDES, NOT INCLUDING BACK-UP SLIDES; WORTH 30 PERCENT OF FINAL GRADE

This team presentation provides you with an opportunity to pitch the Al-focused or enabled business idea you have been working on as a team throughout the week. It is also intended to simulate the real-world environment, as you will be pitching to a panel of investors (your class and instructors – we may bring in some investor guests as well).

To that end, each investor (class participant) will have \$500,000 in "play money" to allocate after they have seen all the presentations. Students should understand that they can vote their money however they choose, and it doesn't need to correspond to the amount requested by any team. You cannot invest in your own team.

This is a **team assignment**, while you may consult with others outside of your team in helping you to arrive at the answers to the questions (e.g. incorporating findings from the interviews that you have completed or market research that you have done), only MMA890 team members may prepare the material on the actual slides.

GRADING

The following template will be used to grade your presentation. We use the GPA system ranging from an A+ (4.3) to F (0.0). Grades in the A range indicate that your work exceeds expectations, those in the B range indicate that your work meets expectations, those in the C range indicate that the quality of your work is somewhat below expectations, those in the D range indicate that the quality of your work is much below expectations, and sections not completed will receive an F.

Area:	Weight
Content of presentation: We are looking for whether you address the content of the ten slides detailed here . We are also looking for whether you do so in a way that prevents you from telling the common "entrepreneur lies" as detailed in Kawasaki's talk (<i>listen here</i>)	60%
Style of presentation : The direction of the presentation is laid out in the introduction; the structure unified and coherent; the conclusion precise and relevant. The presentation is creative, grabs the audience's attention and is appropriate for the product/service being pitched. If multiple team members are presenting, the flow is smooth and professional.	20%
Q&A: We are looking for the ability to answer and respond appropriately to questions (e.g. admit when you don't know; ability to take criticism without getting defensive) and to work as a team (e.g. don't contradict one another in your responses, share questions).	20%
Total	100%

HOW MONEY IS ALLOCATED:

Each investor (class participant) will prepare a scorecard that lists all the teams in the class. Everyone will have \$500,000 in play money to allocate among the teams based on the following rules:

- The more excited you are about a venture and the more you think that it has the possibility of succeeding the more money you should allocate to that venture. It doesn't have to bear any relationship to what funding the team has asked for.
- You cannot allocate money to your own venture.
- You may allocate money to as many (or as few) of the teams as you want.

ACADEMIC INTEGRITY

INTRODUCTORY COMMENTS

Below you will find the official statement regarding academic integrity, examples of violations, and our responsibility as your professors to investigate any potential violations. More generally we want to emphasize that we take academic integrity seriously and that written papers in this course require both proper citation and integration of information from multiple sources. While many individuals think of plagiarism narrowly (i.e. copying another's work verbatim), the spectrum of what constitutes plagiarism is much broader. We encourage you to reach out to us if you have any questions and if you are unsure to err on the side of over- versus undercitation.

THE OFFICIAL STATEMENT¹

Queen's students, faculty, administrators, and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect, and responsibility, and by the quality of courage (see www.academicintegrity.org). These values and qualities are central to the building, nurturing, and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University.

¹ For more information please refer to Anonymous (2015). The Plagiarism Spectrum: Instructor Insights into the 10 Types of Plagiarism. turnitin White Paper

Students are responsible for familiarizing themselves with, and adhering to, the regulations concerning academic integrity. General information on academic integrity is available at Academic Integrity @ Queen's University; an overview of Smith's own policies and procedures are also important to review. You may also find these frequently asked questions on academic integrity helpful for your understanding of the concept and the regulations surrounding it. Departures from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery, and falsification. Actions which contravene the academic integrity regulations carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

Please note each assignment clearly indicates whether it is an individual assignment or team assignment and what the expectations are in terms of academic integrity for those assignments.

TURNITIN.COM

When assignments are submitted through the assignment folder on the course website, they will be processed through Turnitin.com. Turnitin is a plagiarism detection tool that checks your submission against other texts, including websites, journal articles, books, and other student submissions in order to verify the originality of the submission. More information about Turnitin will appear when you first log in to the course website.

ACCESSIBILITY

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may

need accommodations, you are strongly encouraged to contact Student Wellness Services (SWS) and register as early as possible. For more information, including important deadlines, please visit the <u>Student Wellness website</u>.

GENERAL ASSIGNMENT DEADLINES

SUBMITTING ASSIGNMENTS

All assignments are to be submitted as an electronic copy to the course website by the deadline established in this syllabus on the date that they are due, unless specified otherwise.

LATE POLICIES

Unless otherwise stated, assignments submitted one day late will be deducted by one-third of a letter grade (e.g. if you received a B+ on your assignment it would be reduced to a B). Those submitted two days late will be deducted by two-thirds of a letter grade (e.g. B+ to B-). Assignments submitted more than two days late will receive a grade of zero (0). Please note that assignments that are partially or entirely completed in class (i.e. your 1-minute idea slide and business pitch) will receive a grade of zero (0) if not completed during the scheduled time period. The exception to the above policy is if you have a documented illness or emergency (e.g. death of an immediate family member) that prevents you from completing an assignment on time. If such a case arises please contact us ASAP to make alternate arrangements, consistent with the Smith School of Business policies governing extenuating circumstances.

REQUESTS TO REVIEW AND/OR RE-GRADE ASSIGNMENTS

If you would like additional feedback on your assignments, we are happy to provide it as long as you contact us no earlier than 24 hours after and no later than one week of receiving your graded assignment. In your written requests, please provide us with a written explanation of what you would like to discuss and/or why you think the grade is inappropriate. In reviewing your assignment, we reserve the right to increase, maintain or decrease your grade. Note: If a team is requesting a review then all team members must agree to it.