

Innovation & Creativity

AP/ENTP2920 3.0 – Section M
Winter (W) 2024

Course Information

Course Instructor: Dr Andrew Sarta

E-mail: andrew.sarta@yorku.ca

Office Hours & Location:

ATK 428

Flexible, coordinate with me via email

Course Time & Days:

Monday: 1:00 pm – 4:00 p.m.

Class Location: BRG 313

Bergeron Centre for Engineering
Excellence

[Course eClass site](#)

Land Acknowledgment

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region ([LA&PS Land Acknowledgement](#)).

Course Overview

Required Course Materials

Readings: Students are responsible for obtaining copies of readings, which can be purchased through the Ivey Publishing website (<https://www.iveycases.com>). Any readings from [Harvard Business Review](#) are available through the York University libraries, so please check there first before making a purchase.

Video Content: Dr. Andrew Maxwell has generously given us access to a series of videos on the [Disruption Innovation Hub](#). All videos needed for this course have been uploaded to the eClass site for this course.

Course Description

This course focuses on concepts, theories, and practices associated with creative and innovative approaches to solving business, organizational, and societal problems. Students develop an understanding of ideation, innovation, and creativity through readings, current events, and experiential exercises with an emphasis on tools and frameworks supporting sustainable business models for both business and society.

Course Overview & Learning Objectives

This course examines the challenges of innovation and creativity processes in entrepreneurial and other organizations including well-formulated problem statements and potential solutions in the pre-implementation phase. The emphasis is on iterative processes of divergent and convergent thinking in the innovation process. As such, we adopt both individual and team perspectives as we seek to identify and propose solutions to organizational and societal problems.

To increase your competence in managing innovation and creativity, several interactive in-class activities are used. This allows us to gain hands-on experience with tools and techniques that expand the idea space while also understanding the biases of individuals, teams, and organizations. To maximize learning, all students must be prepared for class by completing assignments ahead of time. Student engagement during class activities is essential for success in this course and an important building block for future career success whether in entrepreneurship or elsewhere.

By the end of this course, students will be able to:

- Identify the difference between novelty, creativity, and innovation including the factors that facilitate and constrain creative and innovative activity at the individual, organizational, market, and societal levels
- Apply the principles of design thinking and other creativity and innovation tools
- Formulate and refine entrepreneurial problems while understanding how individual and team factors impact problem formulation
- Critically assess creative ideas and identify systematic ways to improve the connection between proposed solutions and identified problems
- Work creatively in a team environment and demonstrate leadership, communication skills, peer-to-peer learning, collaboration, and cooperation among other attributes

Course Format and Organization

Mini lectures, discussions, and in-class activities form the basic pedagogy of this course. We will also have in-class individual and group assignments. For all classes, students are expected to have completed pre-work in advance to participate in discussions. Constructive class contributions are an integral part of this course.

Each session is about three hours. Normally, there are assigned readings and short videos for each session. We will spend early portions of class reviewing the content to deepen our knowledge of the subject matter. We will then engage in active learning (both individually and in groups) to apply content knowledge to real-life situations. Each activity will serve a dual purpose—you will deepen your content knowledge and take with you a tool to use in your career to promote creativity and innovation.

Preparing for Class

During class, it will be assumed that you have studied the readings and videos. You will be called upon to apply the tools and concepts during class discussions. Inadequate preparation will reduce your ability to engage in discussions and activities, likely resulting in weaker evaluation scores for classroom participation.

Course Evaluation

Assessment	Date	Weight %
Class Discussions	Assessed Weekly	10%
Activity Engagement	Assessed Weekly	10%
Individual Reflections	(1) February 4, 2024 (2) March 15, 2024	30%
Group Problem Definition	February 15, 2024	20%
Group Presentation	Sessions 10 & 11	30%
		100%

Class Discussion & Activity Engagement Expectations

Class participation is worth 10% of your final grade and depends upon your active participation in class discussions. I treat classes as though they are business meetings focused on collectively understanding a problem to be solved. I will evaluate each student's participation after each session based on the quality of contributions and regular engagement in moving discussions forward. Good quality participation involves punctual attendance, stimulating in-depth discussions, resolving challenges with the subject matter, or outside-of-the-box thinking. Repetitive comments or simple summaries of the readings are considered marginal contributions.

A second major component of participation is engagement with the activities, which is worth 10% of your grade. Activities will typically focus on applying an innovation and creativity tool and/or method that you can use in your career. This is the hands-on component of participation. Activities will typically be conducted in groups. In the latter part of each session, I will provide you with 15 minutes of in-class time to reflect on the class activities and prepare a short reflection statement of 250 words or less. You will have until **midnight on the day of class** to submit the individual reflection to eClass. You are permitted to submit identical reflections to your group members, although each group member must individually submit the reflection to receive credit. Strong reflections include one or more of the following elements—(1) concise articulations of “aha” moments, (2) possible uses of the learned tool in real life, or (3) possible improvements to the tool.

Both components of your class participation will be based on 10 possible opportunities for participation in the term (beginning in session 2 and excluding session 4). Consistently above-average engagement in class discussions across the term is required to achieve higher class participation grades while sporadic or consistently below-average engagement in class discussion will result in lower class participation grades. To account for the potential errors in evaluating participation or situations where students might have to miss sessions for unexpected events, your participation in this component will be based on your best 8 sessions. Because I treat classes as professional sessions to prepare you for upper-year courses and the work environment, I expect that you will let me know if you are going to miss class or be late for class.

If students have difficulty participating, please contact me and we can formulate a joint plan on how to best engage in class discussions.

Individual Reflections

Two individual reflections are each worth 15% to make up a total of 30% of your final grade. Each reflection is module-based. For the reflections, you are permitted to use Large Language Models (e.g., ChatGPT) in producing your reflections. Reflections should be no more than 500 words and must fit on a 1-page, single-spaced, letter-sized page (12 pt font, 1” margins). If you choose to use a large language model, you are also required to submit an appendix of no more than 10 pages which should include (1) your chosen large language model and (2) screenshots of your prompts and responses received from your large language model. Do not simply copy and paste the text. You will be expected to creatively extend responses produced by the large-language model. Exceeding the page limit will result in a 10% grade penalty. In addition, handing in the reflections late will result in a 10% grade penalty.

The first individual reflection focuses on the problem definition module and is due on February 4, 2024. You will be expected to scope and refine an **entrepreneurial** problem based on one of the [UN Sustainable Development Goals](#) of your choosing. Your grade on this reflection breaks down as follows: (1) your ability to scope a UN SDG, incorporating your unique, individual experiences into your problem scoping (40%), (2) your ability to refine your problem without proposing a solution (40%), (3) your ability to articulate your thoughts with clear grammar and presentation (10%), and (4) your creative use of technologies or tools to support your reflection (10%).

The second individual reflection focuses on the idea generation module and is due on March 15, 2024. The second reflection can either build on the first or address a new problem. You will be assessed on your ability to develop “how might we” statements. A “how might we” statement considers 2-3 leading proposals that may help you solve your problem. Your grade on this reflection breaks down as follows: (1) your clear articulation of a problem (10%), (2) your ability to identify proposed solutions to your problem (35%), (3) your ability to independently evaluate proposed solutions (35%), (4) your ability to articulate your thoughts with clear grammar and presentation (10%), and (5) your creative use of technologies or tools to support your reflection (10%).

Group Assignment

This course puts great emphasis on group work as an essential component in the contemporary business world. The group problem definition assignment is worth 20% of your final grade. Students are expected to form a group of approximately **4-5 members** depending on the class size. Individuals may self-select their groups, with names of group members to be submitted to eClass no later than **January 22** (3rd class). Students who have not found a group by that point will be assigned to one. Once groups have been formed, switching group members will not be permitted (so choose wisely!). Please be advised that each group member is responsible for the overall group’s performance and dynamics. I will not adjudicate group-related issues.

Group Problem Definition Statement (20%)

Group problem definition will be based on developing a problem statement for a **local entrepreneurial problem** rooted in a [UN Sustainable Development Goal](#). Groups may choose the sustainable development goal of their choice on eClass by **January 22** (3rd class). Only 1 sustainable development goal will be assigned to a single group, so act quickly. You will not be permitted to change your selection after January 22.

For this course, a local entrepreneurial problem exists on-campus or in the Greater Toronto Area. To inspire and expand your thinking, you will supplement your problem definition statement with a **virtual reality experience**. Each group will be trained on the use of virtual reality headsets and will have a headset reserved through the Media

Creation Lab at the Scott Library. Headsets can be checked out for 1 week where each group will be *guided* with pre-selected virtual environments to explore; however, you are permitted to go beyond the guidance. One group member will be responsible for checking out a headset under the library's terms. Collectively, your team is expected to share the headset and explore the virtual environment. Virtual environments are meant to add inspiration to expand upon the "problems to be solved" in your local environment.

For the group problem definition, you are again permitted to use Large Language Models (e.g., ChatGPT) in producing your write-up. Problem definition statements should be no more than 500 words and must fit on a 1-page, single-spaced, letter-sized page (12 pt font, 1" margins). If you choose to use a large language model, you are also required to submit an appendix of no more than 15 pages which should include (1) your chosen large language model and (2) screenshots of your prompts and responses received from your large language model. Do not simply copy and paste the text. You will be expected to creatively extend responses produced by the large-language model. Exceeding the page limit will result in a 10% grade penalty. In addition, handing in the reflections late will result in a 10% grade penalty.

Your group problem definition statement is due on February 15, 2024. You will be expected to scope and refine a problem based on your chosen sustainable development goal. Your grade on this reflection breaks down as follows: (1) your ability to scope your virtual environment to inspire a local entrepreneurial problem while incorporating the unique perspectives of your team members (50%), (2) your ability to refine your problem without proposing a solution (30%), (3) your ability to articulate your thoughts with clear grammar and presentation (10%), and (4) your creative use of technologies or tools to support your reflection (10%).

Group Presentation (30%)

Sessions 10 and 11 are designated for group presentations. The purpose of the group presentation is to help students to develop their oral communication and presentation skills to articulate ideas. Presentations are expected to be **no longer than 15 minutes** (you will be cut off at the 15-minute mark). There is no required format for the presentations. Clarity and creativity are crucial. Since your presentation is based on your chosen sustainable development goal (and associated virtual environment) from session 3, you will be expected to build on your group problem statement and develop a refined proposal that addresses your problem. Your grade for the presentation breaks down as follows: (1) your ability to improve and articulate your problem (20%), (2) your ability to articulate possible "how might we" paths (30%), (3) your ability to establish the rationale for your proposal (40%), and (4) your ability to articulate your thoughts with clear grammar and presentation (10%).

Empirical evidence shows that a high level of group performance requires effective teamwork and input from individual group members. However, experience tells us that groups are subject to 'free riders.' Accordingly, your individual grade for this component will be partly based on peer evaluation. For individuals with average peer evaluations that are one standard deviation above the group's average peer evaluation, those individuals will receive 3 additional grade points to the group grade I assign. In contrast, individuals with average peer evaluations that fall one standard deviation below the group's average peer evaluation will receive a score that is 3 points lower than the group grade.

Each individual will complete an evaluation form, available on eClass, to provide evaluations of other group members. The evaluation will be based on five criteria:

1. Teamwork: Draws out the best from others
2. Initiative and dependability: Fulfills responsibilities on time
3. Quality of output: Oral and written components were of high quality
4. Contribution to knowledge and learning: Effectively understood, utilized, and demonstrated knowledge of course materials
5. Professionalism: Attended meetings on time, responded to emails/messages promptly, and respected other group members

Since peer evaluation significantly contributes to your individual grade, you should take it seriously. You are required to submit your evaluation **1 day after your group presentation** (by midnight). It is important to submit your evaluation on time as individual grades will be calculated two days after your presentation. Late submissions are not permitted. You will receive a 3-point penalty if you fail to submit your evaluation on time.

Guidance for the Presenting Groups

Your presentation can be as creative as you wish, but should cover the following areas:

1. Problem Definition
2. Idea Generation
3. Idea Selection

Guidance for the Audience

To be a good audience, you need to listen to the presentation closely to understand the context. By doing so, you will find that you can learn a great deal from the presenting groups. You will be invited to ask any questions you may have during the question-and-answer portion (10 minutes after the group assessment). Your participation will be graded based on your involvement in the question-and-answer period and your ability to offer constructive feedback in online forums.

Course Schedule: Weekly Readings and Activities

Session Dates	Session Topic	Readings & Preparation
Session 1 January 8	Introduction <i>Course Expectations</i> <i>What is Creativity?</i> <i>What is Innovation?</i> <i>Why are these important?</i>	Reading: Creativity & Innovation in Organizations Video: What is Creativity? How is Creativity Linked to Innovation?
Module 1: Problem Definition		
Session 2 January 15	Problem Exploration <i>What's the Problem?</i> <i>The Design Thinking Approach</i>	Reading: Harnessing Deliberate Creativity A Note on Design Thinking Video: How to Innovate: Intro to the Creative Problem Solving Process Activities: How Creative Are You?
Session 3 January 22	Problem Refinement <i>How do you refine a problem to something more specific?</i> <i>Individual and Group Processes</i>	Reading: The Most Underrated Skill in Management (YU Library) Video: Frameworks to Identify the Problem How to Develop Initial Problems How to Validate a Problem Statement
Session 4 January 29	Technology in Practice Workshop (TIP) Media Creation Lab to Support Assignment with a session outline use of virtual reality, exploration spaces, and application of problem scoping and problem definition. 12 virtual environments will be deployed centered on UN Sustainable Development Goals.	

Module 2: Idea Generation		
Session 5 February 5	“How Might We” Exploration <i>The role of expertise and cognition in ideation</i> <i>Means-Ends Thinking</i>	Reading: To Innovate Better, Find Divergent Thinkers (YU Library) How to Kill Creativity (YU Library)
Session 6 February 12	Innovation Refinement <i>What are you solving for?</i> <i>Theories of Innovation (Radical, Architectural, and Disruptive)</i>	Reading: What is Disruptive Innovation? (YU Library) Video: What are the Different Types of Innovation
February 19 –No Class (Reading Week)		
Module 3: Idea Selection		
Session 7 February 26	Problem Embodiment <i>How do we know if we’re solving a problem?</i> <i>Bricolage, and Effectuation in Innovation</i>	Reading: What Makes Entrepreneurs Entrepreneurial? Video: How to Develop Solutions?
Session 8 March 4	Constraints in Innovation <i>Refining & understanding resource and institutional barriers</i>	Reading: Power Play (YU Library) Video: How to Overcome Barriers to Adoption How to Determine Desirability, Feasibility & Viability
Session 9 March 11	Proposal Matching <i>What is a good creative idea?</i> <i>Solutions chasing problems</i>	Reading: Ideas as Art (YU Library) The Adjacent Possible Video: How to Solve Problems Creatively

Module 4: Proposals in Practice		
Session 10 March 18	<i>Presentations</i>	In-Person & Online Feedback
Session 11 March 25	<i>Presentations</i>	In-Person & Online Feedback
Session 12 April 1	Creativity and Innovation in Practice <i>Bringing it all together</i>	

Using Zoom and Computing Resources (if necessary)

Students shall note the following:

- Zoom is hosted on servers in the United States and Canada. Recordings done since May 1, 2022 are stored in Canada. For more information, please refer to the notes on [Zoom Privacy and Security](#) provided by Information Security at York.
- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Here are some useful links for student computing information, resources, and help:

- [Student Guide to eClass](#)
- [Zoom@YorkU Best Practices](#)
- [Zoom@YorkU User Reference Guide](#)
- [University Information Technology \(UIT\) Student Services](#)
- [Student Guide to eLearning at York University](#)

To determine Internet connection and speed, there are online tests, such as [Speedtest](#), that can be run. If you need technical assistance, please consult the [University Information Technology \(UIT\) Student Services](#) web page. For more specific assistance, please write to askit@yorku.ca.

Course Policies

All students are expected to familiarize themselves with the following information:

- [Student Rights & Responsibilities](#)
- [Academic Accommodation for Students with Disabilities](#)

Please also review the following course policies:

Academic Integrity

In this course, we strive to maintain academic honesty to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing [SPARK's Academic Integrity module](#) at the beginning of the course. Breaches of academic honesty range from cheating to plagiarism (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.). All instances of academic dishonesty in this course will be reported to the appropriate University authorities and can be punishable according to the [Senate Policy on Academic Honesty](#).

Accessibility

While all individuals are expected to satisfy the requirements of their program of study and to aspire to achieve excellence, the University recognizes that persons with disabilities may require reasonable accommodation to enable them to perform at their best. The University encourages students with disabilities to register with [Student Accessibility Services](#) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors through their Letter of Accommodation (LOA).

Please let your instructor know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course. Sufficient notice is needed so that reasonable steps for accommodation can be discussed. Accommodations for tests/exams normally require three (3) weeks (or 21 days) before the scheduled test/exam to arrange.

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community and making reasonable and appropriate [accommodations for adherents for observances of special significance](#). Should any of the dates specified in this syllabus for course examinations, tests, or deadlines conflict with a date of religious significance, please contact the instructor within the first three (3) weeks of class. If the date falls within the formal examination periods, you must complete and submit a [Religious Accommodation for Examination Form](#) at least three (3) weeks before the start of the exam period.

Student Conduct in the Learning Environment

York University is committed to fostering teaching and learning environments that are free of disruptive and/or harassing behaviour, are physically safe, and conducive to effective teaching and learning. Students and instructors are expected to maintain a professional relationship characterized by courtesy, civility, and mutual respect and to refrain from actions disruptive to such a relationship. Individuals who fail to adhere to such standards and who violate University or public law may be subject to disciplinary action by the University.

For more information, see the policies on [Disruptive and/or Harassing Behaviour in Academic Situations](#), the [Student Conduct and Responsibilities](#), and the [Code of Student Rights & Responsibilities](#).

Student Support and Resources

To help you succeed academically, York University offers a wide range of resources and services. Everything from writing workshops and peer mentorship to wellness support and career guidance is available to fulfill our LA&PS students' needs. Explore the links below to access these on-campus resources:

- [Academic Advising](#) is available to provide students support and guidance in making academic decisions and goals.
- [Student Accessibility Services](#) are available for support and accessibility accommodation when required.
- [Student Counselling, Health & Wellbeing](#) offers workshops, resources, and counselling to support your academic success.
- [Peer-Assisted Study Sessions \(PASS\) Program](#) provides student study sessions for students to collaborate and enhance their understanding of course content in certain courses.
- [Student Numeracy Assistance Centre at Keele \(SNACK\)](#) supports students in courses involving math, stats, and Excel.
- [The Writing Centre](#) provides multiple avenues of writing-based support including drop-in sessions, one-to-one appointments, a Multilingual Studio, and an Accessibility Specialist.
- [ESL Open Learning Centre \(OLC\)](#) supports students with building proficiency in reading, writing, and speaking English.
- [Learning Skills Services](#) provides tips for time management, effective study and learning habits, keeping up with coursework, and other learning-related supports.
- [Learning Commons](#) provides links to supports for time management, writing, study skills, preparing for exams, and other learning-related resources.

- [Roadmap to Student Success](#) provides students with timely and targeted resources to help them achieve academic, personal, and professional success.
- [Office of Student Community Relations \(OSCR\)](#) is responsible for administering the [Code of Student Rights & Responsibilities](#) and provides critical incident support.
- [goSAFE](#) is staffed by York students and can accompany York community members to and from any on-campus location, such as the Village Shuttle pick-up hub, parking lots, bus stops, or residences.

For a full list of academic, wellness, and campus resources visit [Student Support & Resources](#).