

## **ENGSCI 9310: New Venture Creation**

### **Course Outline – Summer 2021**

#### **Objectives:**

This course is for students who have an interest in entrepreneurship and the challenges of starting, growing, and managing a new venture. The purpose of this course is to develop your skills in relevant areas of new venture creation, especially as it relates to thinking about innovative products and services, recognizing/identifying opportunities, and acting on these ideas. The purpose of this course is also to encourage students to think broadly and collaboratively about entrepreneurship.

#### **Prerequisites:**

- This course is open to any M.Eng. student, **from all disciplines**.

#### **Instructor:**

**Joel Adams**, BEng (Western Engineering), HBA (Richard Ivey School of Business)  
Contact: [jadams@uwo.ca](mailto:jadams@uwo.ca)

Joel Adams is an experienced entrepreneur, engineering executive, and senior innovation advisor at the Government of Canada. He the former Executive Director of Western University's Research Parks, is the founder of several technology incubators, and has advised hundreds of entrepreneurs, led the development and testing of one of Canada's first street legal autonomous vehicles, and was recognized for his contributions to entrepreneurship as the Entrepreneurial Ecosystem Builder of the Year for Ontario by Startup Canada. For nearly 20 years, he has taught new venture creation to professional, graduate, and undergraduate engineering students at Western Engineering, and the Universities of Waterloo, Toronto, McMaster, and Queens.

This class will also make use of guest speakers and external material to bring a real-world perspective.

#### **Course materials:**

- Students are required to purchase an Ivey Publishing Course Pack for a nominal fee (under \$100). Instructions to purchase print or digital download copies will be provided in class.
- Other essential readings will be provided in OWL, including publicly available cases.
- Online materials including summary slides, concept models, recorded lectures, videos, and other examples, and including theoretical reading material drawn from entrepreneurship literature, particularly the areas of entrepreneurial orientation and venture growth.
- Students may be required to attend and participate in guest speaker sessions by videoconference.

#### **Required textbook:**

- None (supplemental readings will be recommended in class).

#### **Final Examination:**

- None (Business Plan/Presentation in lieu of final exam).

**Evaluation:**

<b>Course Component</b>	<b>Weight</b>
Class Participation (individual)	20%
Emerging Opportunity Report (individual)	20%
Lean Canvas & Elevator Pitch (individual)	10%
Business Plan/Presentation (group or individual)	40%
Reflection Paper (individual)	10%

To obtain a passing grade in the course, a mark of 50% or more must be achieved on the Business Plan (in lieu of a final exam). A business plan mark < 50% will result in a final course grade of 48% or less.

**Topics and Specific Learning Objectives:**

**1. Topic: Entrepreneurship**

At the end of this section, students will be able to:

- a. define the role of an entrepreneur and the importance of entrepreneurship to the economy
- b. describe the role of engineers in entrepreneurship and new venture (startup) creation
- c. describe the relationship between technology, products, and markets

**2. Topic: Innovation**

At the end of this section, students will be able to:

- a. define innovation and describe positive and negative impacts of innovation on society and organizations
- b. describe the high-level processes, dynamics, and limitations of technological innovation
- c. describe the role of innovation as a specific tool of the entrepreneur in new venture creation

**3. Topic: Emerging Opportunity Recognition and Evaluation**

At the end of this section, students will be able to:

- a. apply tools and frameworks to find, identify, and describe potential exploitable opportunities
- b. complete market research and feasibility studies on emerging technology opportunities
- c. evaluate attractiveness of potential opportunities and make decisions to proceed

**4. Topic: Business Models and Lean Startup**

At the end of this section, students will be able to:

- a. describe and critically evaluate alternative frameworks for defining new venture business models, including the business model canvas, lean canvas, traditional business plans, and other competing approaches
- b. generate customer, problem, and solution hypotheses, and identify core/riskiest assumptions
- c. get out of the building to test product-market fit and perform customer development

**5. Topic: Business Planning**

At the end of this section, students will be able to:

- a. create and present a startup business plan as required by investors and other stakeholders
- b. prepare and present an elevator pitch that captures their unique value proposition
- c. identify the limitations of business plans and understand their relationship to other frameworks

**6. Topic: Reflection Paper**

At the end of this section, students will be able to:

- a. identify how their experiences in the class are reflected in the existing research literature
- b. synthesize concepts from the course and the literature to their own personal career path

### **Homework Assignments:**

Assignments and reports will be discussed during class hours and posted on OWL.

### **Late Submission Policy:**

Late submissions will be penalized 5% per day and will not be accepted beyond 5 days late. Presentations must be given on the assigned date.

### **Participation:**

Class discussion is an integral aspect of full participation in this course. As we will be using the Ivey School of Business case study method of teaching, students are expected to participate in classroom discussions (which may include virtual chatrooms and other methods) and will be graded for quality and quantity of participation. Students must notify the instructor in advance if they will be unable to attend a class.

### **Attendance:**

Any student who, in the opinion of the instructor, is absent too frequently from class, laboratory, or tutorial periods will be reported to the Dean (after due warning has been given). On the recommendation of the Department, and with the permission of the Dean, the student will be assigned a failing grade in the course.

### **Scholastic Offences:**

Scholastic offences are taken seriously and students are directed to read the appropriate academic policies, including the definition of what constitutes a Scholastic Offence, at the following Web site:

[https://www.uwo.ca/univsec/academic\\_policies/index.html](https://www.uwo.ca/univsec/academic_policies/index.html)

([https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_grad.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf))

### **Plagiarism:**

University policy states that plagiarism, defined as the “act or an instance of copying or stealing another’s words or ideas and attributing them as one’s own.” (excerpted from Black’s Law Dictionary, West Group, 1999, 7th ed., p. 1170) is a scholastic offence. In submitting any written work as part of the requirements for this course, students must ensure that this work is written in their own words. Whenever students take an idea or a passage of text from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Any student who is suspected of a scholastic offence in respect of any work submitted as part of the coursework requirements for this course will be dealt with according to the University policies. For the purposes of this course, the University official for handling the case will be the Director, Centre of Engineering Leadership and Innovation. A common penalty for a first-time offence is a grade of zero in the relevant assignment. A serious incident or repeated offences (at any time at Western) may result in suspension or expulsion from the University.

**Accessibility:**

Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

<http://www.sdc.uwo.ca/ssd/>

**Conduct:**

Students are expected to arrive at lectures (including online sessions) on time, and to conduct themselves during class in a professional and respectful manner that is not disruptive to others. Late comers may be asked to wait outside the classroom until being invited in by the Instructor. Please turn off your cell phone before coming to a class, tutorial, quiz or exam.

On the premises of the University or at a University-sponsored program, students must abide by the Student Code of Conduct: <https://www.uwo.ca/univsec/pdf/board/code.pdf>

**Sickness and Other Problems:**

Students should immediately consult with the Instructor or Department Chair if they have any problems that could affect their performance in the course. Where appropriate, the problems should be documented. The student should seek advice from the Instructor or Department Chair regarding how best to deal with the problem. Failure to notify the Instructor or Department Chair immediately (or as soon as possible thereafter) will have a negative effect on any appeal.

**Notice:**

Students are responsible for regularly checking their email, and the course OWL site for new notices related to the course.