

Course Outline

1. COURSE INFORMATION

Session Offered	Summer 2017	
Course Name	Technological Entrepreneurship	
Course Code	GEN TECH 3EN3	
Date(s) and Time(s) of lectures	Online Wednesdays 7:00-9:15	
Program Name	Civil Engineering Infrastructure Technology /Software Engineering Technology / Energy Engineering Technologies/ Manufacturing Engineering Technology	
Calendar Description	The processes for bringing new technologies to market and reality through entrepreneurship and intrapreneurship.	
Instructor(s)	M. Piczak	E-Mail: Avenue emailer & keep emails within Avenue only (no others will be answered) Office Hours & Location: by appointment/skype

2. COURSE SPECIFICS

Course Description	This course explores the ideas, mind set, thinking and techniques related to researching and starting up a new business, engineering or technological opportunity. Through a combination of lecture, field work, internet research, guest online lecturers, and video, students will assess the feasibility of an opportunity that could be pursued within (intrapreneurship) or outside (entrepreneurship) of organizational confines.		
Instruction Type	Code	Type	Hours per term
	C	Classroom instruction	
	L	Laboratory, workshop or fieldwork	
	T	Tutorial	3
	DE	Distance education	36
	Total Hours		39
Resources	ISBN	Textbook Title & Edition	Author & Publisher
	ISBN-13: 978017653221-5	Small Business Management: Launching & Growing New Ventures (6th Canadian Edition)	Longenecker, Donlevy, Champion, Moore, Petty, Palich, Hoy (Nelson Publishers)
	Other Supplies	Source	
Prerequisite(s)			
Corequisite(s)			
Antirequisite(s)	GEN TECH 2EN3		
Course Specific Policies	This course will use a range of software. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you		

have any questions or concerns about such disclosure please discuss this with the course instructor.

It is expected that students read the material that is coming under discussion **prior** to class consistent with the 'flipped classroom' approach to teaching/learning.

All assignments submitted for evaluation are **completely** word processed. Assignments and projects come as WORD files unless otherwise specified so that targeted, specific track change comments can be provided. Presentations are done in PowerPoint.

Students are invited to actively participate during class sessions offering insight, comment, reinforcement, argument, contrary views and underscoring examples. Students are expected to participate in the discussion using their microphones.

Most work done in this course is done in groups typical of industry and business practice. All students participate in group work where indicated. Group work is mandatory. No exceptions.

All students attend group presentations undertaking various roles including presenters, observers and evaluators. No attendance results in a zero for the assignment.

Where an individual does not make their contribution, the offending individual's grade can be reapportioned to remaining group members subject to sufficient notice. Groups exercising their privilege under this provision will provide the instructor with a table summarizing grade apportionment. Offenders are advised of intended grade reapportionment by group members.

All groups are self chosen and limited to 6 in a group. Presentations are 12 minutes in length MAX.

The business plan scope presentation online is 2 minutes in length, week 3 using PowerPoint.

Everything in this course is submitted to the Dropbox **using WORD only**. No other file formats are accepted. Marks will be docked for not respecting this instruction and other assignment/project related requirements.

There are no makeups for missed quizzes. Of the five quizzes offered, the best four will be considered for the final grade.

Additional tutorials can be scheduled at the students' request.

Final examinations will be scheduled, conducted and invigilated by the Office of the Registrar during the fall and winter terms. Summer term final examinations are scheduled for the last class of term. All students entering the examination room must produce a McMaster photo identification card. No other identification will be accepted. In addition, for classes that allow you to use a calculator, you must use the "CASIO FX 991" during all tests and exams. The

	CASIO FX991 is the only calculator allowed in the exam rooms. No electronic devices permitted other than CASIO FX 991. You cannot enter the exam room 30 minutes after exam start. You are not permitted to leave until 45 minutes have elapsed. Final exams may not necessarily be on class night.	
Departmental Policies	<p>Students must maintain a GPA of 3.5/12 to continue in the program.</p> <p>In order to achieve the required learning objectives, on average, B.Tech. students can expect to do at least 3 hours of “out-of-class” work for every scheduled hour in class. “Out-of-class” work includes reading, research, assignments and preparation for tests and examinations.</p> <p>Where group work is indicated in the course outline, such collaborative work is mandatory.</p> <p>The use of cell phones, iPods, laptops and other personal electronic devices are prohibited from the classroom during the class time, unless the instructor makes an explicit exception.</p> <p>Announcements made in class or placed on Avenue are considered to have been communicated to all students including those individuals that are not in class.</p> <p>Instructor has the right to submit work to software to identify plagiarism.</p>	
3. SUB TOPIC(S)		
Week 1 May 3	Innovation, Intrapreneurship and Entrepreneurship <ul style="list-style-type: none"> - Contextualizing the innovation/creativity process - Extending the results of creativity and innovation to either the business case or business plan - Business planning: a first look 	Avenue resources Chapter 1
Week 2 May 10	Distinguishing Intrapreneurs from Entrepreneurs <ul style="list-style-type: none"> - Characteristics and behaviour of entrepreneurs - Role of entrepreneurship in Canada - The organizational champion 	
Week 3 May 17	Start-up & the Need for Competitive Advantage <ul style="list-style-type: none"> - Finding ways and means of being better and different in the marketplace - Analyzing rather than describing the competition 	Chapter 2
Week 4 May 24	Developing the Effective Business Case or Plan Two minute Online Student Business Plan Scope Presentation Using PowerPoint <ul style="list-style-type: none"> - Contents of the classic business case/plan - Effective written presentation of most important parts of business case/plan - Conducting an environmental scan - Business Model Canvas as planning tool 	Chapter 5
Week 5 May 31	Marketing Research and Product Strategy and Promotional & Pricing Strategies <ul style="list-style-type: none"> - Quantifying market size and anticipated share - The conduct of defensible, credible research 	Chapters 6 & 7
Week 6 June 7	Marketing Research and Product Strategy and Promotional & Pricing Strategies Continued	Chapters 6 & 7 Con't.

	<ul style="list-style-type: none"> - Pricing, positioning - Comparative 4Ps as analytic framework <p>The New Venture Team, Small Firm Management and Managing HR</p> <ul style="list-style-type: none"> • The management subplan plan • Tips for finding/developing the winning team • Time management strategies for the busy manager/leader • Employee versus contractor status 	Chapter 9 (on own)
Week 7 June 14	Mid Term Examination	2 hours 7-9 p.m. TBD on campus
Week 8 June 21	<p>Financial Software Lecture</p> <ul style="list-style-type: none"> - Using financial software for pro forma development - Researching, estimating, analyzing financials - Presenting the financial plan 	Financial software Case study: The Startup Chapters 13, 14
Week 9 June 28	<p>The Customer Service Plan</p> <ul style="list-style-type: none"> - Weaponizing customer service - Objectives - Strategies - Customer Service is the Name of the Game 	Avenue resources
Week 10 July 5	<p>Forms of Ownership & Legal Issues/Selecting a Location and Planning the Facilities, Customer Service</p> <ul style="list-style-type: none"> - Considering forms of ownership - Choosing a name, location 	Chapters 10 & 11, 12
Week 11 July 12	<p>Project Night Presentations 12 minutes MAX using PowerPoint</p> <ul style="list-style-type: none"> - Students will serve in 3 capacities: presenters, observers, evaluators (rubric and schedule to be provided) 	All WORD reports (2 – info mapping + full report) + Excel Financials to Dropbox; 1 submission set/group ONLY
Week 12 July 19	<p>A Careful, Nuanced and Critical Examination of Stage Gate Models for Guiding the Intrapreneurial Process</p> <ul style="list-style-type: none"> - Professor R.G. Cooper’s Stage Gate Model - Competing Stage Gate Frameworks 	Avenue resources
Week 13 July 26	<p>Review of our Educational Journey</p> <ul style="list-style-type: none"> - Internal, external cases/plans - Components of effective business planning <p>Business Planning: A General Model</p>	Avenue resources
Week 14 August 2	Final Examination (comprehensive)	7:00-9:30 p.m.
<p>Classes end: Friday, August 4th, 2017</p> <p>Final examination period: Saturday, July 29th to Friday, August 4th, 2017 (in-class)</p> <p>All examinations MUST be written during the scheduled examination period.</p>		
<p>Note that this structure represents a plan and is subject to adjustment term by term. The instructor and the University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes.</p>		
4. ASSESSMENT OF LEARNING *including dates*		Weight
On Line Quizzes (best 4 out of 5 count)		10%

Mid Term	25%
Assignment #1 (SWOT and Market Size/Anticipated Share)	10%
Assignment #2 (N/W Event in info mapping style)	10%
Business Case/Plan (50/50 on report vs. presentation)	20%
Final examination (comprehensive)	25%
Percentage grades will be converted to letter grades and grade points per the University calendar.	

5. LEARNING OUTCOMES

1. Explain the state of mind of entrepreneurs/intrapreneurs relative to employees, managers or bureaucrats.
2. Find ideas, solve problems and think creatively, innovatively, and entrepreneurially/intrapreneurially in business and engineering situations.
3. Adopt an intrapreneurial, opportunistic approach for carrying forward ideas within the confines of an existing organization.
4. Conduct environmental scans, market size/anticipated share and other analyses through research.
5. Attend and conduct one's self professionally in a networking situation.
6. Undertake internet and field enquiry to pursue a business idea or opportunity.
7. Work effectively in groups and teams to achieve a stated goal.
8. Research, assemble and present a defensible, credible business idea packaged as a business case/plan.
9. Demonstrate effective communication (written and oral) skills using a selection of formats and software including presenting online using Webex.

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department Chair, the Sexual Harassment Officer or the Human Rights Consultant, as soon as possible.

http://www.mcmaster.ca/policy/General/HR/Discrimination_Harassment_Sexual_Harassment-Prevention&Response.pdf

Academic Integrity

You are required to exhibit honestly and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, located at: <http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicIntegrity.pdf>.

The following illustrates only three forms of academic dishonesty:

1. Plagiarism. E.g. the submission of work that is not own or for which other credit has been obtained
2. Improper collaboration in group work
3. Copying or using unauthorized aids in tests and examinations.

Requests for Relief for Missed Academic Term Work (Assignments, Mid-Terms, etc.)

The McMaster Student Absence Form is an on-line self-reporting tool for Undergraduate Students to report absences for:

- 1) Relief for missed academic work worth less than 25% of the final grade resulting from medical or personal situations lasting up to three calendar days:
 - Students may submit a maximum of one academic work missed request per term. It is the responsibility of the student to follow up with instructors immediately (within the 3 day period that is specified in the MSAF) regarding the nature of the accommodation. All work due in that time period however can be covered by one MSAF.

- MSAF cannot be used to meet religious obligation or celebration of an important religious holiday, for that has already been completed or attempted or to apply for relief for any final examination or its equivalent.
- 2) For medical or personal situations lasting more than three calendar days, and/or for missed academic work worth 25% or more of the final grade, and/or for any request for relief in a term where the MSAF has not been used previously in that term:
- Students must visit their Associate Dean's Office (Faculty Office) and provide supporting documentation.

E-Learning Policy

Consistent with the Bachelor of Technology's policy to utilize e-learning as a complement to traditional classroom instruction, students are expected to obtain appropriate passwords and accounts to access Avenue To Learn for this course. Materials will be posted by class for student download. It is expected that students will avail themselves of these materials prior to class. Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail account, and program affiliation may become apparent to all other students in the course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about this disclosure please discuss this with the course instructor. Avenue can be accessed via <http://avenue.mcmaster.ca>.

Communications

It is the student's responsibility to:

- Maintain current contact information with the University, including address, phone numbers, and emergency contact information.
- Use the University provided e-mail address or maintain a valid forwarding e-mail address.
- Regularly check the official University communications channels. Official University communications are considered received if sent by postal mail, by fax, or by e-mail to the student's designated primary e-mail account via their @mcmaster.ca alias.
- Accept that forwarded e-mails may be lost and that e-mail is considered received if sent via the student's @mcmaster.ca alias.
- Check the McMaster/Avenue email and course websites on a regular basis during the term.

Turnitin (Optional)

This course will be using a web-based service (Turnitin.com) to reveal plagiarism. Students submit their assignment/work electronically to Turnitin.com where it is checked against the internet, published works and Turnitin's database for similar or identical work. If Turnitin finds similar or identical work that has not been properly cited, a report is sent to the instructor showing the student's work and the original source. The instructor reviews what Turnitin has found and then determines if he/she thinks there is a problem with the work. Students who do not wish to submit their work to Turnitin.com must still submit a copy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, etc.). To see the Turnitin.com Policy, please go to <http://www.mcmaster.ca/academicintegrity/turnitin/students/>

Protection of Privacy Act (FIPPA)

The Freedom of Information and Protection of Privacy Act (FIPPA) applies to universities. Instructors should take care to protect student names, student numbers, grades and all other personal information at all times. For example, the submission and return of assignments and posting of grades must be done in a manner that ensures confidentiality. <http://www.mcmaster.ca/univsec/fippa/fippa.cfm>

Academic Accommodation of Students with Disabilities Policy

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail sas@mcmaster.ca. For further information consult McMaster's policy for Academic Accommodation of Students with Disabilities

<http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf>

Students must forward a copy of the SAS accommodation to the instructor of each course and to the Program Administrator of the B.Tech. Program immediately upon receipt. If a student with a disability chooses NOT to take advantage of a SAS accommodation and chooses to sit for a regular exam, a petition for relief may not be filed after the examination is complete. <http://sas.mcmaster.ca>

Student Code of Conduct

The Student Code of Conduct (SCC) exists to promote the safety and security of all the students in the McMaster community and to encourage respect for others, their property and the laws of the land. McMaster University is a community which values mutual respect for the rights, responsibilities, dignity and well-being of others. The purpose of the Student Code of Conduct is to outline accepted standards of behavior that are harmonious with the goals and the well-being of the University community, and to define the procedures to be followed when students fail to meet the accepted standards of behavior. All students have the responsibility to familiarize themselves with the University regulations and the conduct expected of them while studying at McMaster University.

<http://www.mcmaster.ca/policy/Students-AcademicStudies/Studentcode.pdf>