



### MECH462 – Small Business Start Up and Organization

Term – SUMMER 2016 (201605)

**Instructor(s):**

Mr. Alex Glassey  
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**Office Hours:**

Days: Friday  
Time: 3:30 – 4:30 PM  
Location: TBA

**Course Objectives:**

MECH 462 is an exciting course that will teach you to think about entrepreneurship, new businesses startup, and business operation. Students will learn models to help them THINK through a business idea, PLAN the venture, BUILD the appropriate documents (lean canvas; elevator pitch; business plan including financial projections, pitch deck, and presentation), and DELIVER a team-based pitch presentation. This includes learning some of the latest tools entrepreneurs can apply to help them develop, analyze, and most importantly, *test* their business plans.

It is very important to explain that this course is not limited to only those who wish to start their own business. *Intrapreneurship* takes entrepreneurship into the corporate world. The same analysis and techniques that an entrepreneur applies in order to launch a new business, can be applied to the analysis of launching a new product or service within an existing company. This course believes that entrepreneurship is a way thinking, not something that one does just to launch a business.

In the first part of the course, we will cover a tool called "*Lean Canvas*" that helps to properly align customer segments, their problems, and proposed solutions, in an efficient/systematic manner. This is critical to avoid the age-old trap of building a solution in search of a problem, or not knowing when a product is "ready".

We will then use the story and lessons in the book "*Customer Dreams*" to understand that thinking beyond the product or service is vital; it unlocks the full potential value and sets the stage for strategy.

You will also learn how to take an idea of your own that has been captured properly and pitch it to others. The infamous "elevator pitch" is the tool, and this will be used to establish a selected group of business concepts that will be addressed by teams through the rest of the course.

Whether for a new business or the expansion of an existing business, every new idea will need to be financed somehow. We will explore some of the options for financing a start up, and discuss what options may be applicable to different situations. We will then spend time looking into what key financial projections are required and how to properly present them as part of a business plan.

With a well-defined business model captured in a "*Lean Canvas*" and a financial projection to support it, a complete business plan can be developed. We look at the elements that make up a solid presentation using a provided template that can be used to assess any business plan.

The course wraps up with student-team presentations of business ideas. Student teams are formed around ideas pitched earlier in the course. During your journey through this course you will therefore be introduced to the latest "*Lean Start-up*" concepts, learn about tools to capture and analyze ideas, understand what it

takes to build them into properly presented business plans, and apply these in teams to ideas generated by the class.

### **Learning Outcomes:**

Upon successful completion of this course the student will be able to:

- Analyze entrepreneurial situations to separate good opportunities from what appear to be good ideas using a variety of decision techniques.
- Develop and capture business models for new opportunities quickly and develop approaches to validating them.
- Analyze, assess and critique business plans for new ventures in a consistent manner.
- Identify resources of funding that are available for new venture start-ups and be able to evaluate their applicability to different situations.
- Participate in the development of a business plan and how to pitch it.

### **Syllabus:**

- Business Model Canvas: How to document a business model [1-4]
- Transaction Box: How fundamental market forces put pressure on product design and pricing [5-6]
- Business Strategy: How to assess and map the business landscape; charting a medium course [7-10]
- Preparing for Execution: How to convert the strategic direction into a planning framework [11]
- Building Financial Projections: How to use Excel to build a financial model and assess the viability of a business [12-15]
- Debt or Equity? How to determine which is suitable for your business; assessing the impact of debt and equity on financial projections [16]
- Pricing considerations [17]
- Customer acquisition: alternatives, costs, assessing effectiveness [18]
- Preparing a formal business plan [19-21]
- Pitching: How to create a pitch deck. How to pitch. [22-24]

### **Format:**

- Twenty-four 90-minute lectures
- Homework between most lectures (watch videos, build an Excel model, write business plan narrative, build slide deck, practice a pitch)
- Idea Pitch: written individual submission (graded) after lecture 6
- Two graded quizzes during lecture 7 and lecture 16
- Written individual submission (graded) after lecture 20 consisting of a business plan document with financial appendices
- Final Presentation: a live team pitch (graded) during lecture 24 (8-minute max.)
- Participation marks: based on in-class random presentations of your homework assignments. If you are absent/late without notifying instructor and you are called upon, you may lose the mark. If your homework isn't done, you may lose a mark.

**Requirements for Graded Work:**

*Participation:* Based on in-class random presentations of your homework assignments. If you are absent/late without notifying instructor and you are called upon, you may lose the mark. If your homework isn't done, you may lose a mark.

*Idea Pitch:* The Idea Pitch is an individual component. The feedback and marking of this component will be based upon each participant reflecting a clear understanding of the elements that make up a high quality pitch. The intent is not to judge the quality of the idea itself. The goal is to learn what needs to be included in a pitch.

*Quiz One and Quiz Two:* These will be multiple-choice, and short answer quizzes. Note: A passing grade on the combined quiz marks will be required to obtain a passing grade on the course overall.

*Business Plan with Financial Projections:* This is an individual assignment with each student completing their original idea. The complete business plan captures their proposed business idea's information using all the concepts and course materials from start-to-finish in the course.

*Team Venture Presentation:* This will be a team-based delivery of one venture. All members of the team will receive the same grade. As with the Idea Pitch, the assessment will be based MOSTLY upon how well the team presents a clear understanding of the components of a venture presentation; some aspect of the mark will reflect the quality of the investment potential as interpreted by a community panel.

**For Success the Student Should:**

- Attend all of the classes and be prepared to participate in active discussions about the topics. Deriving value from this course depends upon being actively engaged.
- Be prepared to devote some time and effort towards an idea that can be pitched as a business concept. Look at projects already undertaken or happening in parallel with this course and apply the new tools and ideas discussed during class to at least one of them. The team component is a critical part of this course and maximizing it depends upon developing interesting concepts around which the teams will form. If you have some ideas don't be shy about sharing them!
- Be prepared to devote approximately 3 hours per week outside of the lecture times individually and with team project development.
- Keep up with the concepts ESPECIALLY the financial projections. None of the concepts are difficult to understand but they do take time to review and practice before they're properly internalized.
- Actively participate in the team project. The project component is critical for success in this course. Only by actively participating in the team project will one really learn to appreciate the dynamics, complexities, and uncertainties, related to business plan development.

A-Section(s): A01 / CRN 31598

Days: Wednesday and Friday

Time: 4:30 PM to 6:00 PM

Location: ECS108

**Required Text**

Title: Customer Dreams

Author: A. Glassey

Publisher: A. Glassey

Year: 2016

**Assessment:**

Idea Pitch (Pitch + Lean Canvas):	15%	Date: May 25, 2016
Class Participation:	5%	
Quiz #1:	15%	Date: TBA
Quiz #2 :	15%	Date: TBA
Final Report (Business Plan + Analysis):	30%	Date: TBA
Presentation (Team Venture):	20%	Date: TBA

**Note:** Failure to achieve a passing grade the combination of both quiz marks, will result in a failing grade for the course.

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Undergraduate Calendar.

**There will be no supplemental examination for this course.**

**Note to Students:**

Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the Chair of the Department by email or the Chair's Secretary to set up an appointment.

**Accommodation of Religious Observance**

See entry in current Undergraduate Calendar

**Policy on Inclusivity and Diversity**

See entry in current Undergraduate Calendar

**Standards of Professional Behaviour**

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour in current Undergraduate Calendar, which contains important information regarding conduct in courses, labs, and in the general use of facilities.

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult entry in current Undergraduate Calendar for the UVic policy on academic integrity.

**© Course Lecture Notes**

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