

BAEN506 APSC541: Technology Entrepreneurship*Syllabus (updated November 21, 2018)***COURSE GOALS**

This course is interdisciplinary and entirely project-based. This course provides students with an experience-based introduction into the process of starting a technology company. It is a real-life immersion into the process that founders go through when starting a high-tech company.

Student will be faced with the key issues involved in evaluating market opportunities, designing profitable business models, producing a solid business plan, raising capital and developing a winning team. Students will gain the skills and tools to creatively commercialize high tech research into profitable businesses. All venture ideas are subject to Professors' approval.

LEARNING OBJECTIVES

Students will learn

1. the essential component of planning a new start-up, including
 - a. Recognizing viable market opportunities
 - b. Market assessment via secondary market research and customer discovery via primary market research
 - c. Creating a profitable business model and an executable business plan
 - d. Protecting the intellectual property at the heart of their technology company
 - e. Developing financial projections that are aligned with the fundamentals of the proposed business plan
2. To work with students in other discipline, integrate creative business strategies with solid engineering and effectively work in multi-disciplinary teams
3. To make decisions in highly uncertain and unstructured environments, and take in feedback from a large variety of sources that use it to improve their business plans, or help them to 'pivot' and find alternative ideas or approaches
4. To pitch their product, strategy and team to experienced entrepreneurs and investors

BRIEF COURSE DESCRIPTION

This course provides an experienced-based exposure to the process of starting technology-based entrepreneurial ventures. The course is suitable for students interested in finding out about the process of launching start-ups, and the multiple challenges associated with it. The main project is to develop an investor-ready pitch to investors about a start-up opportunity that is identified by a team of students. This course is hosted jointly between the Sauder School of Business and the Faculty of Applied Sciences and is also open to entrepreneurial-minded student across UBC that are enrolled at master, PhD or postdoc levels. The course harnesses Steve Blank's Lean Launch Pad methodologies.

COURSE INFORMATION:

There are two sections, each taught by one Sauder and one Engineering/Science Professor and supported by one TA. Section allocation of students will take place after the late November team formation meeting.

Term/period: Jan-April 2019 (MBA P3 and P4)

Class meeting times: See calendar for detailed dates and times.

Classroom location: DL009 and DL005, plus special locations when indicated in calendar.

Pre-requisites: Enrolled in graduate UBC program.

Course website: Course blog, Group Builder Blog, both embedded in course site on Canvas.

TEACHING TEAM



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CANVAS WEBSITE, COURSE BLOG AND SLACK CHANNELS

Students will be using a private course blog integrated with Canvas where all course materials, class preparation, briefing notes and communications from Professors to all students will be managed. Students can access the course blog via Canvas. Canvas will also be used for the submission of assignments and posting of grades / comments. In addition to the main course blog and Canvas sites, each team will have a Slack channel where students document and communicate their team's progress. Each student is required to contribute to the team channel. Professors will have access to all team channels and will be reading them regularly.

COURSE STRUCTURE

The course is taught in a “flipped classroom” format, with small group exercises and informal feedback sessions. This requires that you come to classes prepared, a) by doing the relevant directed readings, b) by undertaking the weekly work on customer discovery (interviews) and related work, and documenting progress on your team blogs, which will be provided to you. The time requirement for this class is heavy. Students should be prepared to dedicate a minimum of 10-15 hours per week to sufficiently prepare for classes and external presentations.

The course follows a team-learning format where teams are self-selected before class 1. Students will stay with these teams for the duration of the course. If there are any problems in the group (e.g., free riders, group members being chronically late, etc.) the group members are expected to try to resolve the issue themselves and if the problem is not sufficiently resolved, only then should the group make one of the instructors aware of the issue through email or iPeer.

Each student team will pick its own business ideas. It is common for teams to start with several ideas, and then to change to another idea at a later stage, or to at least significantly pivot or narrow from one of the original ideas. You will be encouraged to pick something disruptive and viable. This is a short course and the primary intent is to help you learn a process for starting a venture. It is recommended that teams draw up a simple written note of mutual understanding, outlining that they each have an equal share of the input and output of the venture during the course. This should be re-visited at the end of the course and revised. Typically, at the end of the course there is an idea but no value. Everyone has an equal share of nothing. If one or more team members then want to pursue the idea further and add value in creating a venture, they should be free to do so.

READING SUPPORT

You are not required to buy any books for this course. However, we do expect you to come to classes prepared, and we will be referring to concepts from the following books. It is a good idea to have one copy of each in the team to refer to. As a minimum, you should peruse the free online resources that are available to support much of this material.

- Blank, S and Dorf, B (2012). *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. K&S Ranch Press: This is a good value buy. It may be available in the UBC bookstore, but is not specifically ordered for this course, in part because many students have preferred a digital copy with instant access. Please obtain directly, before the course. You can read the first few chapters by way of preparation. You may also review the slides posted on steveblank.com and the videos in the related [Udacity course](#) (free access with free sign-up).
- Osterwalder, A, and Pigneur, Y (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, Wiley: Many business students will have seen this. It is also in the Sauder Lam library. We will cross-reference this extensively. There are also free resources online. You can download the first 72 pages for free, and should familiarize yourself with this if it is new to you.
- Osterwalder, A and Pigneur, A (2014). *Value Proposition Design*, Wiley: Osterwalder's latest book drills deep on the challenging but critical fit between customer segments and value propositions. We will use a number of tools from this text. Some free information [here](#).
- Fitzpatrick, R ((2014). *The Mom Test: How to talk to customers & learn if your business is a good idea when everyone is lying to you*, Founder Centric.
- Further optional readings: more may be added to the course blog, but these will get you started.
 - Mullins, J (2010). *The New Business Road Test*, Prentice Hall. Read Chapter 1: *My opportunity: why will or won't this work?* p. 1-23.
 - Kawasaki, G (2004). *The Art of the Start: The Time Tested, Battle-Hardened Guide for Anyone Starting Anything*, Portfolio: ...or any posts by Guy Kawasaki, and then check out: [The Garage](#).
 - Wasserman, N (2012). *The Founder's Dilemmas*, Princeton.

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ASSESSMENT

Assignment/Grade	Due Date (6PM)	%
Pre-class prep exercises	Per calendar/class blog prep instructions	5%
Interviews synopsis 1	Jan 23, 2019	2%
<i>iPeer 1</i>	<i>Feb 6, 2019</i>	<i>(-2% off participation if not completed)</i>
Participation 1	Grade will be posted by week of Feb 11, 2019	5%
Interviews synopsis 2	Mar 6, 2019	3%
Gate 1 Presentation	Mar 6, 2019	15%
Pivot Memo	Mar 13, 2019	5%
Financials	Apr 3, 2019	10%
Technical Report and Demo Day	Apr 3, 2019	10%
Interview Weekly Summaries	Apr 5, 2019	5%
Individual Reflection Document	Apr 5, 2019	10%
<i>iPeer 1</i>	<i>Apr 5, 2019</i>	<i>(-2% off participation if not completed)</i>
Participation 2	Grade will be posted by week of Apr 8, 2019	5%
Gate 2 – Final Presentation (Times to be posted)	Apr 10, 2019	25%
		100%

OVERVIEW OF DELIVERABLES

Pre-class Preparation

Most classes require pre-reading and content preparation. Some of this pre-preparation will be graded. See the calendar in the syllabus and the course blog for details.

Interview Synopses / Summary

This is a team deliverable. You are expected to keep regular running communications and documentation of your progress throughout the course. There will be three components.

- Dynamic, informal communication (ungraded)
A forum / tool (Slack channel) will be provided for you to log your regular communications. While this component is ungraded, by engaging in the forum we will better be able to see and provide feedback on the development of your ideas.
- Interview Synopses
The goal of this course is to be experiential and rooted in customer feedback. We recommend that each group perform 10-12 interviews per week with prospective customers (average of 2 per person). It is good practice to have one person lead the interview while a second person keeps notes – not just for submitting interview transcripts / synopses, but for comparing and contrasting the interpretation of responses provided (or to catch the interviewer from breaking good interview form).

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3. Weekly Summaries

Each week, your team must submit via the allocated communication channel a weekly summary of your activities and new insights.

Presentations

This is a team deliverable. Presentations is a culmination of all work execute to date, and is supportive of meeting course objectives. Presentations are executed in front of judges from industry who will provide constructive feedback based on real industry experience.

Participation

This is an individual assessment. This is not a lecture-based course; therefore, classroom discussion and activities are a vital part of the learning experience. Treat class like a business meeting: phones on silent and put away; laptops are closed as a default and only opened when Professors request it; be on time; come fed or be willing to wait until after class to eat, etc. Participation is the grade that the Professors give each individual student based on their professionalism and constructive involvement in-class (during plenary and team discussions, in the activities, as well individual attitude, lateness, etc.). So, in short, participation are grades students earn by being a positive and constructive member of the community during class time (from the Professors' perspective), and iPeer (see below- student's perspective) is used as evidence to deduct grades from a student's overall course grade for being a bad team member both in and outside of class.

Beyond in-class participation, active use of the Slack channel will also be assessed as part of the participation grades. Failure of the team to use the Slack channel actively will impact the participation grade of all team members.

Students will be expected to attend ALL classes and where they are unable to attend to notify the teaching staff ahead of time. Any absence over and above one excused absence (agreed in writing before class) will affect the course grade. Missing more than 2 classes will result in a failing grade and/or being required to withdraw from the course. Job interviews, club meetings, networking events or other extra-curricular activities are not acceptable reasons to miss class.

Where we have speakers in class, it is expected that students are prepared and interaction with guests will be evaluated as part of participation.

iPeer

As this course is entirely group-based, each student is required to complete iPeer twice during the course: once in an interim stage to provide feedback on how each team member is contributing, and again at the end of the course. iPeer provides the opportunity for students to confidentially raise concerns about their teammates (only the Professors can read what is written in iPeer). Students will complete a peer evaluation of each group member's contribution (including their own). Individual grades may be subject to adjustment following the Professors' review of peer evaluations. Reductions can be significant, ranging from a decrease of 10% to a decrease of 100% if an individual has contributed little or nothing to the team's work. In most instances, where team members are reliable and contribute, no adjustments are made.

Students are required to complete both iPeer evaluations by the specified deadlines noted above. **Failure to complete an evaluation will result in a loss of up to 2% per iPeer from the student's participation grade (aka – 8/10 becomes 6/10).** Submitting iPeer late is not possible because the system shuts down after the deadline. No extensions will be given, so please ensure you respond by the deadline.

Team Assignments

There are team assignments (pivot memo, prototyping/technical plan, financials). These regular assignments allow students to develop their presentations, and strengthen their fundamental business ideas.

Individual Reflection Document

The reflective diary is an opportunity to think introspectively. Drawing lessons from what was learned this semester, students should reflect on a cross-section of the topics taught and connect these with personal experience. Depth and breadth of reflective thinking should be evident in a diary. *Weekly entries are encouraged (best practices based on former students' experience)*, however the graded component is a final summary of what was learned from the entire course that is most useful as one looks forward as an entrepreneur and innovator. Students are meant to draw upon weekly entries for inspiration, and not cut and paste them.

GRADING

If in your reviewing your grade, you feel that something was overlooked, you may, within one week of the grade being released, submit a professionally worded email in which you request that your Professor re-evaluate the assignment. Explain fully and carefully why you think the assignment should be re-graded. Any requests for a re-evaluation of your work must follow the above process. Note: A grade review may see your mark adjusted either, up or down.

ACADEMIC INTEGRITY

All UBC students are expected to behave as honest and responsible members of an academic community. Failure to follow appropriate policies, principles, rules and guidelines with respect to academic honesty at UBC may result in disciplinary action.

It is the student's responsibility to review and uphold applicable standards of academic honesty. Instances of academic misconduct, such as cheating, plagiarism, resubmitting the same assignment, impersonating a candidate, or falsifying documents, will be strongly dealt with according to UBC's procedures for Academic Misconduct. In addition to UBC's Academic Misconduct procedures, students are responsible for reviewing and abiding by RHL's policy on Academic Integrity.

Plagiarism will not be tolerated. Students caught plagiarizing will be referred to the associate dean for academic affairs for disciplinary action. See UBC's statement on [academic honesty](#).

SCHEDULE (subject to change):

See next two pages

Week	Date	Main Theme	Time	Detailed Themes	Recommended Status	Graded Deliverables	Grade			
Pre	28-Nov	Mixer - Team building	Pre-class		Pre-prep: Profile development on Team Formation Site					
			6:00-8:00	First mixer - and team formation	General status: Initial Team Logistics and Schedule Established for first class deliverables					
	02-Jan	No class								
1	09-Jan	Opportunity Identification. Customer Discovery and Product-Market Fit	Pre-class		Pre-prep: Slide deck on 3 initial problem/opportunity areas and hypotheses to test - See course blog - class 1 prep for details					
			6:00-7:15	Guest Speaker: Geordie Rose - Why consider entrepreneurship? (BOTH COHORTS IN HA132)	General Status: Team should have logistics for course established. All team members should be established and using Slack channel. Focus is on commencing problem review and idea development. Initial problems being reviewed. Hypotheses being formed.					
			7:15-7:30	Break						
			7:30-8:15	Intro customer discovery tools: VP canvas, developing hypotheses, customer interviewing (who, what, how), design interview Qs						
			8:15-9:30	Team Presentation of initial ideas to class - (10 mins per team)		Presentation of top three ideas				
2	16-Jan	Opportunity Assessment. Customer Validation. Product Market Fit (cont')	Pre-class		Pre-prep: Pre-reading and preliminary exercise as foundation for discussion in class. See course blog - class 2 prep for details	Pre-class: prep exercises	1%			
			6:00-7:30	Opportunity assessment. Validating pains/gains. Market sizing.	General Status: Primary research interviews: hypothesis-test-(in)validate/pivot-next steps (on Slack)					
			7:30-7:45	Break						
			7:45-9:30	Tools: maps on day in the life, external ecosystem and internal buyer decision process.				Value proposition & customer segment hypotheses for lead idea(s) validated by primary research interviews.		
			Concurrent 8:30-9:30	Internal presentations - in breakout room in parallel						
3	23-Jan	Design Thinking, MVP, Prototyping	Pre-class		General Status: Continued primary research interviews: hypothesis-test-(in)validate/pivot-next steps (on Slack)	Assignment: Interview synopsis 1	2%			
			6:00-7:15	Design thinking - Human-centered design	Value proposition discovery for lead idea(s) and 3 maps: 1) Day in the life of customer: before & after 2) customer ecosystem, 3) internal buyer influence - validated by primary research interviews.					
			7:15-7:30	Break						
			7:30-9:30	Intro to MVP / Lean (agile) method - Prototyping 1 & 2				Interview synopsis 1		
4	30-Jan	Business Models	Pre-class		Pre-prep: Pre-reading and preliminary exercise as foundation for discussion in class. See course blog - class 4 prep for details	Pre-class: prep exercises	1%			
			6:00-7:30	Business model types, mash-ups and disruption - revenue implications	General Status: Continued primary research interviews: hypothesis-test-(in)validate/pivot-next steps (on Slack)					
			7:30-7:45	Break						
			7:45-9:00	Tools: pass-fail test design for customer validation				Refinement of DITL and VP on lead idea		
			9:00-9:30	Class check-in on interview process highs and lows				Initial market sizing and competitive analysis for lead idea(s) based on secondary market research		
			Initial prototyping concepts for lead ideas							
5	06-Feb	Go-to-Market Strategy and Customer Development	Pre-class		Pre-prep: Pre-reading and preliminary exercise as foundation for discussion in class. See course blog - class 5 prep for details	Pre-class: prep exercises	1%			
			6:00-7:30	Sales models	General Status: Continued primary research interviews: hypothesis-test-(in)validate/pivot-next steps (on Slack)					
			7:30-7:45	Break						
			7:45-9:30	Channels and implications for margins and costs. Customer acquisition programs.				Preliminary stab on business model, pricing. Refinement of customer archetypes on lead idea(s).	iPeer-Interim (-2% of participation grade for failure to submit)	
		Interim ipeer								
Feb 13 Feb 20 Feb 27		Three Week Break		General Status: Narrowing content focus to a single lead idea. Refinement of VP, market sizing, business model, competitive analysis, customer archetype, DITL. Go to market, channel etc. Updates on Slack. Prototype advancement. Prep-for Gate 1	Participation: Interim Grade	5%				

Week	Date	Main Theme	Time	Detailed Themes	Recommended Status	Graded Deliverables	Grade
6	06-Mar	Gate 1	Pre-class		Pre-prep: All elements for External Presentation (Gate 1) See gate 1 briefing for details.		
			6:00-9:00	Presentations in two parallel rooms with informal feedback from panel of outside judges. (GATE 1 in HA132/133)	General Status: Focused content on a single idea candidate for presentation in gate 1. Detailed and refined RHS content and application of all tools introduced in classes 1-5.	Presentation: Gate 1	15%
			9:00-9:30	"Picking up the pieces" - Instructor feedback and support for the break (COHORTS TOGETHER IN HA132)	Prototype advancement / plan Post presentation feedback and updates on Slack Interview synopsis 2	Assignment: Interviews synopsis 2	3%
7	13-Mar	IP Strategy and Roadmaps	Pre-class				
			6:00-7:30	IP Strategy & commercialization	General Status: Status updates to Slack		
			7:30-7:45	Break	Updates to all content based on pivot decisions		
			7:45-9:30	Building roadmaps/ Intro to financials	Prototype plan / development Pivot memo	Assignment: Pivot Memo	5%
8	20-Mar	Financial Projections	Pre-class		Pre-prep: Pre-reading and preliminary exercise as foundation for discussion in class. See course blog - class 8 prep for details	Pre-class: prep exercises	1%
			6:00-7:30	Financial projections workshop 1 (revenue)	General Status: Continued refinement of all content (Status updates on Slack)		
			7:30-7:45	Break			
			7:45-9:30	Financial projections workshop 2 (cost)	Initial technical/corporate roadmaps and pro-forma revenue Prototype refinement		
9	27-Mar	VC / Investment / Equity	Pre-class		Pre-prep: Pre-reading and preliminary exercise as foundation for discussion in class. See course blog - class 9 prep for details	Pre-class: prep exercises	1%
			6:00-7:30	VC/Valuation / Peer Review	General Status: Continued refinement of all content (Status updates on Slack)		
			7:30-7:45	Break			
			7:45-9:30	Splitting the pie	Full financial projection draft Prototype refinement		
10	03-Apr	Demo Day / Presentation Planning (and optional skills training)	Pre-class		Pre-prep: Demo day presentation. Business/Prototype demo. See course blog - class 10 prep for details		
			6:00-8:00	MVP demo day - all teams see all demos			
			8:00-8:15	Break	General Status: Prototype complete	Assignment: Consolidated Financials	10%
			8:15-9:00	Presentation Skills Refresher(both cohorts)	Consolidated financials and investment strategy		
			9:00-9:30	Final Presentation - Team Preparation / Work Session (DL009)	Technical Report	Assignment: Technical Report	10%
			9:00-9:30	Optional presentation training (DL005)			
11	05-Apr	Dry Run	Pre-class		Pre-prep: Preliminary gate 2 pitch presentation for dry-run. See course blog - class 11 prep for details		
			6:00-9:30	30 min slot with Instructors, followed by 30 min coaching with T.A. Teams only attend their 60 min timeslot DRY-RUN WILL TAKE PLACE ON THE 9th FLOOR	General Status: Initial pitch deck - Opportunity, Need and size. Technical solution and Roadmap. Go to market plan. Financials. Team. The ask. Interview weekly summaries	iPeer-Final (-2% of participation grade for failure to submit) Assignment: Interviews Summary	5%
			one team at a time		Reflection Document		
					Final iPeer	Assignment: Reflection Document (Individual)	10%
12	10-Apr	Final Presentation	Pre-class		Pre-prep: Refined and practiced final gate 2 pitch presentation. See course blog - class 12 prep for details		
			50 min slots			Presentation: Final	25%
			2:00-5:00 6:00-9:00	Teams only attend their 50 min timeslot	General Status: Final presentation and reports	Participation: Final Grade	5%
			2 cohorts	Final presentations WILL TAKE PLACE ON THE 9th FLOOR			
					TOTAL		100%