

HCM391: Health Care Entrepreneurship

Fall 2020, 1.0 CU, Mondays and Wednesdays, 10:30-11:50am

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Course Scope and Mission

Delivering basic health care advances worldwide and continuing to increase the quality and span of life (in an affordable manner) represent some of the major societal challenges of our time. *This has perhaps never been so clear or salient as now, in the middle of this pandemic.* Addressing these challenges will require innovation in both medical technology and the ways in which health services are delivered.

Through a combination of lectures, readings, cases, guest speakers, and your own entrepreneurial work outside of class, we will examine the key features of concern to prospective health care entrepreneurs: (1) sources of health care innovation; (2) the many "customers" in health care: patients, doctors, hospitals, insurers, and regulators; (3) the powerful established firms with developed clinical and sales expertise; (4) the investing community. Along the way we will develop a framework for thinking about what is different (and what is not) about the challenges of health care entrepreneurship.

The overall goal is to bring together a multidisciplinary group of students from across UPenn to explore the many opportunities to "do well by doing good" as health care entrepreneurs. This course will be useful for those interested in starting or working for an entrepreneurial venture in health care; those who will be "customers" of health care innovation; and those who desire to develop an entrepreneurial mindset to bring to work for established firms, finance, or consulting in the health care sector. We will spend time explicitly focused on each of these perspectives as we consider the issues facing health care entrepreneurs.

Course Prerequisites

Sophomore or higher standing suggested.

Required Readings

Cases will be available electronically via our course Canvas site link to Study.Net. All other readings will be posted on Canvas via regular announcements.

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Assignments and Evaluation

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Class Preparation and Contribution	30%	Ongoing
Pitch of promising opportunity	10%	Sep 29 (written, by Noon); Sep 30 (present)
Group Assignments		
Customer Perspective Analysis	20%	Oct 21 (present); Oct 23 (written, by 5pm)
Venture Questionnaire	10%	Nov 6 (written, by 5pm)
Business Model Pitch	30%	Dec 7, 9, 10 (present); Dec 16 (written, by 5pm)

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Course Format

This course consists of a mixture of: lecture and guest speakers, discussion of readings and case studies, and outside of class development and analysis of venture ideas. All three of these—especially the last two—will challenge you to go beyond being a receiver of ideas, facts, concepts, and techniques. Instead you will generate ideas, gather new information, analyze and evaluate alternatives, and formulate workable action plans.

Weekly Schedule

Class	Date	Topic	Readings/Preparation
1	Sep 2	Why Health Care Entrepreneurship?	
2	Sep 9	Where Do Great HC Ventures Come From?	Finding CA in Adversity
			Good Ideas
3	Sep 14	Biotech Entrepreneurship	Guest: Dora Mitchell, Carisma Therapeutics
4	Sep 16	Health Services Entrepreneurship	Guest: Shivan Mehta, Penn Medicine, CMI
5	Sep 21	Evaluating HC Venture Ideas	Where are all the HCEs?
			Case: ViaCell
6	Sep 23	Business Models for Health Care I	Entrepreneurs Need Strategy
7	Sep 28	Workshop: Honing Pitches	
* One page resume and one page Pitch Memo due by Noon, Tuesday, Sep 29			
8	Sep 30	"Elevator" Pitches of Promising Opportunities	
9	Oct 5	Business Models for Health Care II	Case: Kyruus
10	Oct 7	"The Customer" in Health Care	Case: Heartport
11	Oct 12	Using "Big" (and "Small") Data	MIQ(s)
12	Oct 14	HC Venture Story II	Guest: Brianna Wronko, Group K Diagnostics
13	Oct 19	Workshop: Honing Customer Insights	
14	Oct 21	Customer Perspective Presentations	
* Customer Perspective Memo due by 5pm, Friday, Oct 23			
15	Oct 26	Health Care Marketing to Drive Adoption	Case: Doctor on Demand
16	Oct 28	Business Models for Health Care III	Case: NH Heart Hospital
17	Nov 2	Financing Health Ventures I	Guest: Gary Kurtzman, Safeguard
18	Nov 4	Financing Health Ventures II	Case: Dermacare
* Venture Questionnaire due by 5pm, Friday, Nov 6			
19	Nov 9	Team Meetings with Instructor	
20	Nov 11	Team Meetings with Instructor	
21	Nov 16	IP and Barriers to Entry	Guest: Adam Dakin, DreamIt
22	Nov 18	Financing and Business Models	Case: EndoNav
23	Nov 23	Workshop: Honing Business Models	
	Nov 25	Thanksgiving (no class per Penn schedule)	
24	Nov 30	Growth and Exit	Case: Amylin
25	Dec 2	Wrap-up, Pitch Example, Parting Advice	
26	Dec 7	Business Model Pitches	
27	Dec 9	Business Model Pitches	
28	Dec 10	Business Model Pitches	
* Busin	ess Model	Pitch Memo due by 5pm, Wednesday, Dec 16	

Details for Assignments and Evaluation

Class Preparation and Contribution

The in-class portion of this course relies on analyses and discussion regarding cases, readings, and guest speakers. For the classes with reading/preparation on the schedule, there will be an online "Quiz", requiring 1-2 bullet points of interesting comments or questions---simply doing this will give you a point toward the class preparation grade, making half of this grade "easy". The most important part of these preparation assignments is that they will help you prepare to contribute your own analysis, conclusions, and recommendations during in-class discussion.

In a typical class, one or more class members will be asked to start the session by addressing a specific question. After a few minutes of initial analysis and recommendations, we'll open the discussion to the rest of the class. We will try to build a complete analysis of the situation, determine the extent to which the materials in the readings apply, and address the problems and issues presented.

While you are expected to be an active participant throughout the course, please note that it is the quality of your participation that is most important. Criteria I will use in measuring effective class contribution include:

- (1) Is the participant a good listener?
- (2) Are the points made relevant to the discussion? Are they linked to the comments of others?
- (3) Is there willingness to test new ideas or are all comments "safe" (for example, repetition of case facts without analysis or conclusions)?
- (4) Do comments lead to a clearer statement of the concepts being covered and the problems being addressed?

Please note that I have a "no excuses" policy regarding absences—I trust you to use your own judgment about your reasons for missing class and whether you can afford to do so. Your class contribution grade will suffer directly for every absence beyond *three* missed classes. Use these "free" absences as you like (job interview, illness, personal matters, religious holidays). You may choose any day for a free absence except a day when you present. If you miss a day when an assignment is due, you still need to get it to me before the start of class.

Pitch of a Promising Opportunity

A concise outline of a venture opportunity and potential business model for implementing it. The written portion (*one* page max) is distributed in the class "opportunity book", along with your resume, so it is best thought of as a companion to the verbal portion—it can be any format you like, as long as it captures the key elements of a pitch that we discuss in class. The verbal portion is a *60 second* "elevator pitch" where you communicate the essentials of your venture opportunity. We will discuss examples in the first few weeks of class.

Customer Perspective Analysis

A *five minute presentation* and accompanying *two page memo* summarizing the expected response of the health care "customer" (patients, doctors, hospitals, insurers, regulators) to your venture opportunity. Examples will be distributed after teams are formed.

Venture Questionnairre

An early outline/draft of the venture opportunity you would like to pitch to investors, answering an exhaustive set of important questions. This will allow you to receive interim feedback. The goal is to help you achieve excellence—it will be graded softly, but the more thought and effort put into this portion, the better feedback you can get! A template set of "questions every venture should ask early on" will be distributed after completing the customer perspective analysis.

Business Model Pitch

Your final product. A *ten minute presentation* and accompanying *ten page (or less) memo*, attempting to communicate the best possible business model for this venture and your ultimate recommendation

whether or not to invest in this opportunity. Written examples will be distributed after completing the customer perspective analysis, and we will watch and discuss an example presentation in one of the last class sessions.

Free Advice

Soapbox on Writing and Presenting

Each assignment in this course has both written and spoken components. Time is scarce, so communicating well is a critical skill, especially for an entrepreneur seeking to sell a vision.

Good writing is clear and concise. It is not easy (for most of us). Page limits for the writings in this class are short, so you will face hard decisions about what NOT to include. If you use a bunch of complex terminology or try to hit every potentially relevant point, you will run out of space. I will evaluate these assignments based on the quality of your writing as well as your ideas and analysis.

Like good writing, a good presentation is not an easy thing to do, but it is a valuable (essential?) skill to develop. We look at several examples of successful presentations in class, but always remember that *enthusiasm* and *preparation* both go a long way.

Soapbox on Teamwork

Course participants are required to form teams of 4-6 students whose talents, skills and knowledge (in the ideal case) are complementary. Extensive group work outside of class is an essential part of this course. Other factors crucial to your team's functioning are the management and coordination of group effort by appropriate means (telephone, e-mail, sub-group meetings, etc.).

When working as a group, the best advice I can give is to simply "be cool":

- Treat other members with courtesy and respect;
- Establish a positive and productive team dynamic;
- Contribute substantially and proportionally to the final project;
- Ensure enough familiarity with the entire contents of the group project/assignment so as to be able to sign off on it as original work;
- Meet the project timeline as established by the team.

Learning to work together in teams is an important aspect of your education and preparation for your future careers. Project work is challenging; conflicts can and do occur. Teams are expected to resolve disputes or misunderstandings as soon as they arise (and prior to submission of the final project).