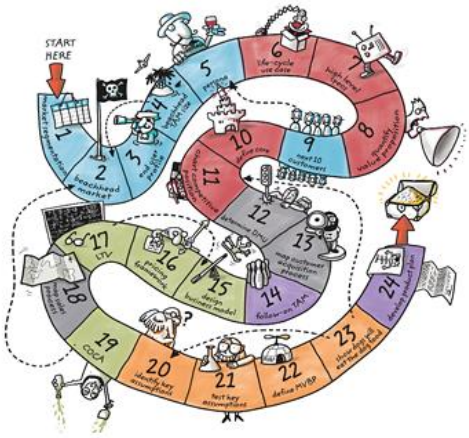
Technology Entrepreneurship

Instructor: Travis J. Brown (trabrown@indiana.edu)
Office Hours: By appointment (Informatics West 209)
Class Times: Tuesday, Thursday – 1:00P-2:15P
Class Location: Informatics West 107
Associate Instructor: Scott Trepper (strepper@indiana.edu)



Source: http://disciplinedentrepreneurship.com/

Course Description

This course will teach students the importance of systems and design thinking as they relate to building and managing a startup holistically. Students will be required to take a business concept from inception to implementation, at least to the degree required to have a minimum viable product (MVP). The focus of the course will be for students to get their ideas off of paper and into the market. Concepts covered will include business-hypothesis-driven experimentation, iterative product releases, and validated learning. Students will develop a prototype of their concept and seek feedback from target customers throughout the semester. The course will also include talks by guest speakers who have direct experience in starting and building successful technology startups. The class will culminate in a startup plan competition, which will require students to pitch their startup plan they developed through the course to a panel of judges who will evaluate the commercial viability of their business concept.

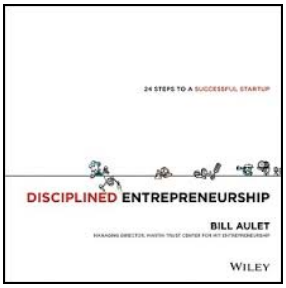
Course Goals and Objectives

Successful students in this course will be able to:

1. Articulate the interdependence of internal and external forces affecting a startup company.
2. Make a business case for a new technological product/service.
3. Develop a minimum viable product (MVP) in order to solicit target customer feedback.
4. Assess the potential for scaling a venture and to what degree.

Readings

The following book is required:



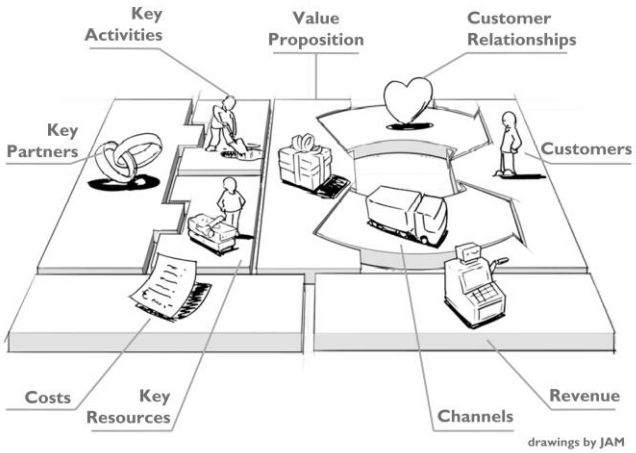
Aulet, B. (2013). *Disciplined Entrepreneurship: 24 Steps to a Successful Startup*. John Wiley & Sons.

Source: http://onstartups.com/tabid/3339/bid/100291/31-Short-Highlights-From-Disciplined-Entrepreneurship.aspx

You might also find these books useful:

Osterwalder, A & Pigneur, Y. (2010) *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Hoboken, NJ: John Wiley & Sons.

Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Random House Digital, Inc.



Source: "Introduction to the Business Model Canvas" *http://zebramc.com*

Structure

You will be required to complete projects individually to develop your startup according to the themes discussed in class. There are a total of 24 steps to the development of your startup company in this course, and you will be expected to make continuous progress toward the development of your startup over the course of the semester and present your incremental accomplishments in each class.

Lectures

We will cover new material and discuss the new assignment. Assignment instructions will be posted on Canvas prior to each lecture. Lectures will focus on lean startup methodology themes based on the

factors that any successful entrepreneur building a startup company must take into account, such as business-hypothesis-driven experimentation, iterative product releases, and validated learning.

Videos/Speakers

We will either have a speaker or a video to help you better understand the material covered in lecture. You are expected to actively participate in the discussion following both the videos and the presentations.

Individual/Team Presentations & Critiques

You will be organized into mini-incubator groups (MIGs) to provide and receive feedback and assistance while working with your classmates to develop your business concept. You will receive critiques from the instructor and will be required to regularly discuss your progress with the class through in-class presentations. You will be expected to explain the rationale for the assessment of the opportunity you have identified as well as the process by which you have tested your hypotheses.

Grading

Projects

There are 20 projects organized according to the 24 steps of building a successful startup which will be applied in the course. Projects will be completed individually; however, students wanting to form a business team will have the option to submit a team formation request and complete a work agreement. For each project, you will be responsible for submitting a personal reflection through which you will be expected to discuss what you have learned from the readings, the speakers, and the process of building your startup company. Completed assignments are to be submitted via Canvas by the assignment deadline. The point allocation for the course is as follows:

19 Mini-Projects: (2 * 25 points; 17 * 50 points) = 900 points
Final Plan & Pitch = 100 points

Entrepreneur Interview & Startup Company Analysis

H400 and I590 Students Only: You are required to complete an interview with a technology entrepreneur to discuss the concepts covered in class and how the entrepreneur being interviewed managed each phase of the business development process when building her/his startup. Additional instructions will be provided in class.

I590 Students Only: You are required to include an analysis of the business opportunity that the entrepreneur pursued and discuss why you would or would not have pursued the opportunity based on what you have learned about yourself as an entrepreneur through the course.

H400 and I590 Students Only: Interview & Analysis = 100 points

Attendance & Participation

Attendance is critical to this type of course structure. Accordingly, attendance is MANDATORY to all classes, and attendance will be taken during class. Attendance means being present, which entails actively listening, participating in class discussions, and providing design critiques during presentations; if you're not present, you didn't attend class and will be counted absent. There are 100 points allotted for attendance. **You are allowed exactly two absences without penalty**. Otherwise, you will lose points as reflected in the following table for each absence unexcused by University policies:

Number of Absences	Points
0-2	100
3	95
4	85
5	70
6	50
7	25
More than 7	0

The total number of possible points awarded during the class is 1000 for I400 students and 1100 for H400 and I590 students:

	I400	H400	I590
Projects	900	900	900
Interview & Analysis	-	100	100
Attendance & Participation	100	100	100
Total	**1000**	**1100**	**1100**

The percentage of the points received will not be rounded off and will be used to assign a letter grade as follows (e.g., 867 out of 1000 = 86.7% = B):

Grade	Points
A+	97 - 100
A	93 - < 97
A-	90 - < 93
B+	87 - < 90
B	83 - < 87
B-	80 - < 83
C+	77 - < 80
C	73 - < 77
C-	70 - < 73
D+	67 - < 70
D	63 - < 67
D-	60 - < 63
F	0 - < 60

COURSE SCHEDULE (The course schedule is subject to change with advance notice)

Week	Dates	Holidays	**Tuesdays**	**Thursdays**
1	JAN 12 JAN 14		Lecture: Introduction & Course Overview ***Due:*** *DE - Introduction* ***Assigned:*** *DE - Step 0 & MP1*	Lecture: Getting Started ***Due:*** *DE - Step 0 & MP1* ***Assigned:*** *DE - Steps 1 & 2 & MP2*
2	JAN 19 JAN 21	MLK, Jr. Day JAN 18	Lecture: Market Segmentation & Selecting a Beachhead Market ***Due:*** *DE - Steps 1 & 2 & MP2* ***Assigned:*** *DE - Step 3 & MP3*	Lecture: Building an End User Profile ***Due:*** *DE - Step 3 & MP3* ***Assigned:*** *DE - Step 4 & MP4*
3	JAN 26 JAN 28		Lecture: Calculating the Beachhead Market TAM Size ***Due:*** *DE - Step 4 & MP4* ***Assigned:*** *DE - Step 5 & MP5*	Guest Speaker: Brad Wisler, Co-founder & Managing Member, SproutBox
4	FEB 2 FEB 4		Lecture: Profiling the Beachhead Market Persona ***Due:*** *DE - Step 5 & MP5* ***Assigned:*** *DE - Step 6 & MP6*	Lecture: Developing a Full Life Cycle Use Case ***Due:*** *DE - Step 6 & MP6* ***Assigned:*** *DE - Step 7 & MP7*
5	FEB 9 FEB 11		Lecture: Sketching High-Level Product Specifications ***Due:*** *DE - Step 7 & MP7* ***Assigned:*** *DE - Step 8 & MP8*	Guest Speaker: Brian Oppenlander & Austin Borden, RareSloth
6	FEB 16 FEB 18		Lecture: Quantifying the Value Proposition ***Due:*** *DE - Step 8 & MP8* ***Assigned:*** *DE - Step 9 & MP9*	Lecture: Identifying Your Next 10 Customers ***Due:*** *DE - Step 9 & MP9* ***Assigned:*** *DE - Steps 10 & 11 & MP10*
7	FEB 23 FEB 25		Lecture: Defining Your Core & Charting Your Competitive Position ***Due:*** *DE - Steps 10 & 11 & MP10* ***Assigned:*** *DE - Steps 12 & 13 & MP11*	Guest Speaker: Matthew Anderson, CEO, Adproval & President, Mavenly
8	MAR 1 MAR 3		Lecture: Determining the Customer's DMU & Mapping the Customer Acquisition Process ***Due:*** *DE - Steps 12 & 13 & MP11* ***Assigned:*** *DE - Step 14 & MP12*	Lecture: Calculating the TAM Size for Follow-on Markets ***Due:*** *DE - Step 14 & MP12* ***Assigned:*** *DE - Step 15 & MP13*
9	MAR 8 MAR 10		Lecture: Designing a Business Model ***Due:*** *DE - Step 15 & MP13* ***Assigned:*** *DE - Steps 16, 17, 18, & 19 & MP14*	Guest Speaker: Mike Reynolds, CEO & Executive Product Management, InnovateMap
		Spring Break MAR 12-MAR 20		
10	MAR 22 MAR 24		Lecture: Setting Your Pricing & Calculating Customers' LTV & COCA ***Due:*** *DE - Steps 16, 17, 18, & 19 & MP14* ***Assigned:*** *DE - Steps 20 & 21 & MP15*	Lecture: Identifying Key Assumptions & Testing Them ***Due:*** *DE - Steps 20 & 21 & MP15* ***Assigned:*** *DE - Step 22 & MP16*
11	MAR 29 MAR 31		Lecture: Defining & Building the MVP ***Due:*** *DE - Step 22 & MP16* ***Assigned:*** *DE - Step 23 & MP17*	Guest Speaker: Ilya Rekhter, CEO, DoubleMap
12	APR 5 APR 7		Lecture: Testing the MVP in the Market ***Due:*** *DE - Step 23 & MP17* ***Assigned:*** *DE - Step 24 & MP18*	Lecture: Developing a Product Plan ***Due:*** *DE - Step 24 & MP18* ***Assigned:*** *DE - Postlude & MP19*
13	APR 12 APR 14		Lecture: Beyond the Steps ***Due:*** *DE - Postlude & MP19* ***Assigned:*** *Final Plan & Pitch*	Guest Speaker: Scott Dorsey, Managing Partner, High Alpha & Co-Founder, & Former Chairman and CEO, ExactTarget
14	APR 19 APR 21		Final Startup Coaching Session	Practice Pitches & Critiques
15	APR 26 APR 28	"Free Week"	Entrepreneurship Competition Semi-finals ***Due:*** *Final Plan & Pitch*	Entrepreneurship Competition Finals
16	MAY 2 MAY 6		Final Exam Week (**NO EXAM**)	

Timeliness

Timeliness is critical in professional settings. Managers and clients don't like to pay for work that's turned in late, and they aren't interested in hearing about why something is late. Start early and manage your projects so that you have plenty of time at the end to deal with unexpected surprises.

Free Week

The final project is due on the first class of "Free Week." The project will be assigned well in advance on April 12th in keeping with University policy[1]. There is also a post-evaluation task that does not affect your grade (except as a matter of attendance and participation) and is used to evaluate the effectiveness of the class only.

Doing Your Own Work and Sharing and Attributing Others

In the real world, it is important to build on the work of others. When you present or submit your work, you need to be prepared to give an account of what part of a concept or research is your own work and which part was inspired or informed by the work of others. You must properly attribute the work of others.

If you use the work of others without attribution and acknowledgement, you will be subject to academic sanctions concerning plagiarism with all deliberate intent. **Acts of plagiarism—using the work of others without attribution or reusing your own work without attributing prior use—will be subject to a zero-tolerance policy in this class.** If you believe that someone else in the class has used your work without attributing you, please talk to the instructor or one of the AI's.

Digital Photography & Other Tools

IU has worked out a special licensing arrangement with Adobe and students can now download the latest Adobe software suites from http://iuware.iu.edu using your student IU login for your own educational use.

You can also access http://lynda.com from http://iuware.iu.edu, which provides instruction for how to use Adobe tools. There are a lot of Adobe software tools worth mastering. You are expected to learn these tools on your own using the instructions that come with the software or any of the myriad of self-tutor books on the topics, but this class is an opportunity to learn-by-doing in practicing your use of these tools.

Academic Misconduct

The class is morally and procedurally bound by IU's policies on academic misconduct, the details of which you can read about at the following website: http://www.indiana.edu/~code/.

Religious Observance

In accordance with the Office of the Dean of Faculties, any student who wishes to receive an excused absence from class must submit a request form available from the Dean of Faculties for each day to be absent. This form must be presented to the course professor by the end of the second week of the semester. A separate form must be submitted for each day. The form must be signed by the instructor,

[1] "The week prior to the exam period shall be free of major or final exams, except for practical tests at the end of lab periods. Paper projects may be due only if assigned well in advance."

with a copy retained by the instructor, and the original returned to the student. Information about the policy on religious observance can be found at http://teaching.iub.edu/policies_religious.php?nav=policies.

English

If English is not your native language or you are otherwise shy about speaking in class, please do not worry. You will not be penalized in any way for making contributions to the class in less than perfect English or for taking time to compose your answers. The instructor will frequently emphasize to the class the need for all of us to be supportive of each other when it comes to contributing to the discussions. There is no need to feel rushed when responding to questions in class—an important part of the class is the construction of a feeling of community with the faculty, the AI's, and your peers. You are encouraged to utilize the free writing tutorial service provided by the university. You can learn more about it at http://www.indiana.edu/~wts/.

Laptops

In order to encourage you to read on screen, rather than print the resources out on paper, you will be permitted to use laptops in class. The expectation is that you will use the laptops to look up things that are relevant to class. Please do not use the laptops to do things that are not related to the class. If the AI's or the instructor notice that you are doing things on your laptop unrelated to the class, you may lose your attendance points for that day.