



## Opportunity Recognition: Technology and Entrepreneurship in Silicon Valley

Cross listed between Business, Engineering and School of Information Management and Systems

3 Units

### SYLLABUS

#### Course Purpose

Successful entrepreneurial high tech ventures require individuals with mastery of two skill sets: marketing and management expertise, and technological ability. This course is intended to provide the core skills needed for the identification of opportunities that can lead to successful entrepreneurial high technology ventures, regardless of the individual's "home" skill set, whether managerial or technical. We examine in depth successful approaches to opportunity recognition at entrepreneurial companies as a function of markets and technologies. Emphasis is placed on the special requirements for creating and executing strategy in a setting of rapid technological change and limited resources. This course is particularly suited for those who anticipate founding or operating technology companies.

#### Objectives and Teaching Methods

The primary objective of this course is to develop critical analysis skills needed to compete aggressively as an entrepreneur in high tech. The course examines present-day issues in high technology business, especially in Silicon Valley. Upon completion of the course, the student should have developed the following skills: (a) the ability to assess and predict customer needs in markets that may not yet exist; (b) the ability to create and execute marketing, technology development and strategic plans that integrate technological development with evolving customer requirements; (c) an understanding of how the confluence of technological innovation, marketing, market forces and venture finance drives new technology ventures.

#### Deliverables and Requirements

##### Case studies

Twelve case studies will be discussed in this class. Instructions for preparing for discussion of the cases will be reviewed during the first class meeting. The cases posted on study.net are copyrighted material; each student must purchase their own access to the cases. The two UCB cases are posted on the class ERES site. Two cases will be distributed in class:

Endius, HBSP  
Matrix Semiconductor, HBSP

Case study questions: On the class ERES site you will find questions for the cases. These are graded assignments, due by 12:00 noon on the day of the class meeting, and 12:00 noon on the day before the class meeting in the case of the two guest instructors.

##### Guest Lecturers

There will be several guest lectures during the semester. These lectures are an integral part of the course and **attendance is required**.

##### Group Project: develop a new opportunity in high tech

Students will be assigned to a team based on the course roster at the third week of class. Following the initial team assignment, students may change teams if the other team members agree. Final teams must consist of 4-6 students

and include both MBA and Engineering students. The team should select their project no later than the 4th week of class, and clear their choice with the instructor at that time.

The goal of this project is to develop skills in marketing, technology development and strategic planning necessary to develop an opportunity in high tech.

Write the opportunity and market assessment segment of a business plan for an opportunity in high tech that is of interest to you. The opportunity you choose may be

- (a) one at an existing start-up,
- (b) your own idea for a new venture or
- (c) an opportunity being pursued by a friend or colleague.

Students are expected to synthesize marketing strategy from readings and discussions. The business opportunity described in your plan should be comprehensive enough to serve as a vehicle for raising capital and a roadmap to launch and grow a company. You should develop a detailed strategic vision.

Groups are encouraged begin work on this project immediately, and to meet with me regularly during the semester to verify that their work meets the requirements of the assignment.

#### Group Work Product:

- a. 15 minute presentation + Q&A, totaling approximately 30 minutes. Your presentation will be in an open discussion format, with questions from the class encouraged.
- b. A legible hard-copy handout of the materials presented
- c. Maximum 4,000-word paper (plus appendices) due at 4:00PM on May 9th in hard copy.

#### Group Project FAQs

- a. Utilize the tools we discuss in class and those in the posted materials.
- b. Combine objective data, your synthesis of those data, and your own subjective views.
- c. Use both primary and secondary sources.
- d. Cite the sources of your data.
- e. When in doubt, follow the description of the assignment in the syllabus.
- f. Who presents: one, some, or all team members – it is up to you.
- g. You may organize your presentation and paper however you wish, but be sure to emphasize analysis and interpretation of the market and the opportunity, and place less emphasis on background data about the market landscape. A reasonable weighting is 30% on background and 70% on analysis and recommendations.
- h. A few of the group projects will be presented in class at the end of the semester; most will be presented during office hours.
- i. If you want to review your work with me prior to presenting it, please schedule a date to so do well in advance.
- j. If your project addresses a specific product, consider beginning your presentation with a brief (1-2 minute) demonstration of the actual product.

## Required Readings and Materials

The readings from the three required texts must be completed by the class meetings indicated on the Course Schedule. Class discussion will refer to material covered in these texts. Three additional texts are recommended reading for the course.

### Required:

- Christensen, Clayton M. *The Innovator's Dilemma*, Harvard Business School Press. CHAPTERS: ALL. NOTE: THERE ARE POSTED QUESTIONS FOR THIS READING
- Saxenian, Annalee *Regional Advantage : Culture and Competition in Silicon Valley and Route 128*, Harvard University Press. (paperback) CHAPTERS: Introduction + Chapters 2, 3 and 5
- Kenney, Martin, Ed., *Understanding Silicon Valley*, Stanford University Press. CHAPTERS: 2, 3 and 10

### Recommended:

- Moore, Geoffrey A. *Crossing the Chasm*, Harper Business.
- Moore, Geoffrey A. *Inside the Tornado*, Harper Collins.
- Schwartz, Peter *The Art of the Long View: Planning for the Future in an Uncertain World*, Doubleday.

## Evaluation and Grading

- 10% Class participation.** Your creative and constructive involvement in class discussion is an essential component of class.
- 65% Case study questions.** There are 12 case assignments + 1 textbook assignment; all 13 assignments are 5 points each. You will receive 1 point for turning in an assignment and additional points based on the quality and originality of your work. I will incorporate particularly creative responses into the class. You are welcome to contact me at any time if you wish to know how you are doing on these assignments.
- 25% Group Project** (live presentation 10 points + paper 15 points). In addition to my assessment of your work, you will be asked to grade your own and your teammates' participation on this project on a 1-10 point scale. All members of a group will receive the same initial grade, however the results of the peer review score may raise or lower a team member's individual grade by up to 10 points.

## Schedule

Class	Topic
1	Course Introduction
2	Case: InPart, HBS Case 9-898-213
3	Lecture: High tech marketing review
4	Case: eInk, HBS Case 9-800-143
5	Lecture: Essential screens for opportunity recognition
6	Case: Mu Chip, UCB Case
7	Lecture: Characteristics of good opportunities; funding your opportunity
8	Text: Christensen
9	Guest: Jeff Hawkins*

Class	Topic
10	Lecture: Ideal niches, ideal entrepreneurs, and the problem with B-plans
11	Case: Ecton, HBS Case 9-699-018
12	Guest: Sir Harold Evans*
13	Case: Intuit, HBS Case 9-501-054
14	Lecture: The venture capital lifecycle
15	Case: Beta Golf, HBS Case 9-898-162
16	Guest: Venture Capitalist
17	Case: Tellme, HBS Case 9-801-319
18	Lecture: How Silicon Valley works / Saxenian, Kenney
19	Case: Inktomi, HBS Case 9-699-156
20	Guest: Kevin Fong, Mayfield*
21	Case: Apple, HBS Case 9-704-460
22	Guest: Geoffrey Moore, Chasm Group*
23	Case: RAPT, UCB Case
24	Guest: Michael Marks, Flextronics*
25	Panel discussion: Innovation in the Developing World: Healthcare and Informatics".
26	Guest: Will Swope, Intel*
27	Team Presentations

\* - MOT Lecture Series Lecture

## Additional Information

### Class Etiquette

1. Be on time. I will begin class at 4:10 PM. If you arrive after 4:10, you will not be admitted to class that day.
2. Come to class prepared, and expect cold calling.
3. Please use your name card throughout the semester. Please print one, in 100 point, if you don't have one.
4. Beverages are permitted in class, but food is not.
5. If you cannot make a class meeting, or if you will be late for class, send me an email advising me of this in advance. The same applies if you must miss a guest speaker.
6. You will be asked to sign a plagiarism statement distributed at the mid-point of the semester.
7. Laptops, PDAs, cell phones and similar electronic devices will be turned off during class and left in your backpack or briefcase.