

California Institute of Technology

**E-102 “Entrepreneurial Development”
(3,0,6) Credit or P/F**

Course Schedule

Winter Term 2008 – Location BBB 24

Time 1:00 to 2:30

Text: “High Tech Start Up” by John Nesheim

Instructor: Kenneth A. Pickar

TA: Rahul Deb

Office: Thomas 101 *Best to e-mail for appointment*

pickar@caltech.edu 626 395 4185

rahuld@caltech.edu *E-mail for appointment, if needed*

Websites: Ken Pickar www.its.caltech.edu/~kpickar

E102 <http://www.its.caltech.edu/%7Ekpickar/e102/e102.html>

Be sure to check frequently for update. This is as of 1/8/08

Mentors: Tech Coast Angels: Al Schneider, Richard Morgenstern, Kevin Scanlon,
Saul Leonard, Consultant: Bob Buce

Entrepreneurial Resources:

Caltech Library ([Kristin Buxton](#))

Caltech Technology Transfer Office fred.farina@caltech.edu

Caltech Entrepreneurs Club adownard@caltech.edu or delacruz@caltech.edu,

[Caltech/MIT Enterprise Forum](#)

[Caltech Industrial Relations Center](#)

Art Center College of Design - Tony Luna tonyluna@aol.com

[Tech Coast Angels](#)

USC Marshall School of Business

UCLA Anderson School of Business

[LARTA](#) (Los Angeles Regional Technology Alliance)

[Entretech](#)

[LAVA](#) (Los Angeles Venture Alliance)

[Pasadena Angels](#)

Local VCs, etc

Students are invited to meet with guest speakers for lunch before the lectures. Rahul will send out e-mails a few days before guest speakers come advertising a lunch opportunity for interested students.

Mentors

E 102 will have mentors to coach student teams

Role of Mentor

The individual mentor is a designated coach for each E102 Team to provide project guidance. This includes networking contacts and introductory access to potential customers and partners; counsel on business behaviors including structured meeting methods, business communication techniques, team process, negotiating and sales skills, and overall entrepreneurial life lessons; advice on additional resources including books, other experts. Mentors guide rather than teach, offering an experienced sounding board on all aspects of starting a technology business. The Mentors will meet with the students at least once in person and attend the Final Presentation. Other meetings are at the discretion of each Team and could include additional face-to-face meetings and/or e-mail, teleconferences, etc. The Mentors are mostly members of the Tech Coast Angels. There will be an Angel meeting on Feb 22 at Caltech. There will be a few students allowed to observe local Entrepreneur's presentations to the Angels.

Teams

It is suggested that Team Members have a like degree of commitment. Usually this means that Auditors or P/F students form separate Teams than students taking the Course for a Grade. To increase the team diversity and benefit from their skills, we are inviting students from the Art Center School of Design in Pasadena to join our teams. To participate in this class, you must take these teams very seriously. You are obligated to attend team meetings and bear your share of the burden. Each team member will receive an identical grade for efforts produced by the team. However, there will be some grade differentiation based on contribution to class discussions. We will form these Teams very early in the quarter, beginning the first day of class. At each class homework may be presented by one or more Team.

All Homework will be done by all teams and submitted to the TA and myself on the date due. Your grade ("HW") will be based on these analyses. All other members of the class who are not presenting are required to do the Homework (in Teams) and be prepared to comment. The discussion which ensues simulates how business start-up or established is actually conducted; most business information is transmitted orally through presentation and discussion. Therefore, I will require all students to contribute. I know some students are not comfortable with this and I will make some allowances. However, I do want all to join in and 20% of the grade will be dependent upon this participation.

Please e-mail the instructor and TA all your assignments in PDF format prior to 11:00 AM of the day they are due. If you are presenting, in addition to the PDF, send a PowerPoint

presentation also by 11:00 AM. You may bring a memory stick back-up but it is your responsibility to get an e-mail version to the instructor and to the TA

Team Guide

Expectations

The above only works if the teams work as teams with everybody contributing. No free rides. The Caltech honor code applies here. Everyone in the class, presenting or not, does the homework. Everyone (or almost everyone) attends each class, *showing up on time*. If you have to unavoidably miss a class, I would like an e-mail or telephone message in advance informing me of the fact. There will be periodic team assessments to assure that the teams are functioning well. If there are irresolvable issues, teams can be broken up and the members re-assigned. This should be a rare occurrence. The importance of the team self assessments cannot be overstated.

This is the kind of learning where looking up lectures on the web or just doing the assigned readings will not suffice. The student needs to follow the arguments made and participate in arriving at an acceptable conclusion. The journey in getting there is part of the learning experience. Mathematically, the formula is as follows:

Learning = f(team effectiveness + team preparation + rest-of-class preparation) X (class attendance)}

GRADING

HW Presentations 20%

Midterm presentation plus

Midterm paper (5 pages) 20%

Criteria 1. *Depth of market research- especially primary research*
2. *Quality of understanding of the problem*

Final presentation plus

Final paper (20 pages) 40%

Criteria: 1. *Convincing argument (logic, self consistency, flow)*
2. *Originality of thought*
3. *Depth of Understanding*

Class contribution 20%

Criteria 1. *Prepared, show up, volunteer opinions*
2. *Not team based*

Extra credit: A 10 minute presentation on "New Learnings" At your volition, if you come across a subject of general business interest to the class, you can apply to the instructor to present it.

The extra credit will be 0-5% depending on quality of insight.

The Caltech/MIT Enterprise Forum and the Tech Coast Angel Meeting at Caltech are recommended as an Entrepreneurial opportunity to learn additional material and to Network. Students are strongly encouraged to attend one of these events during the course of the term.

References

Primary Recommended Text

John Nesheim, "High Tech Start Up" - Currently not in bookstore. Will try to have as reference in library.

Also Recommended:

Michael O'Donnell, "Writing Business Plans That Get Results"

Supplement

Timmons, "New Venture Creation"

Other

Kathleen R. Allen, "Bringing New Technology to Market"

Kathleen R. Allen, Launching New Ventures , Third Edition

Tech Coast Angels, "How to present your company",

<http://www.techcoastangels.com/resources/1>

PWC, Developing the Business Plan for Your Rapidly Growing Company <http://www.pwcglobal.com/extweb/industry.nsf/docid/BB534FA000C9016785256AC6005C42E7>

"How to Read a Balance Sheet, Income Statement" for example,

(<http://www.ameritrade.com/educationv2/fhtml/learning/uincomestates.fhtml>)

William Davidow, "Marketing High technology"

Constance E. Bagley, "The Entrepreneur's Guide to Business Law"

Peter Drucker, "The Discipline of Innovation" article on idea creation

Geoffrey Moore, "Crossing the Chasm"

Constance Bagley, "Ethical Leaders Decision Tree" HBS Publishing

Robert Anthony, "Core Concepts of Accounting" (program learning)

Robert F. Bruner, et al, The Portable MBA

Robert C. Higgins, Analysis for Financial Management, Sixth Edition (sent request for desk copy)

Ed McQuarrie Customer Visits