TIM 101: Management of Technology Seminar

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Office Hours: Tuesday 3:30 – 6:30 PM   Office Hours: Wednesday 3:00 PM– 5:00 PM

Seminar Times: Thursday, 3:20 PM - 4:55 PM

Class Location: Jack Baskin Engineering 152

About the seminar

The Management of Technology (MOT) seminar series will expose students to the breadth and depth of the management of technology through weekly talks by leading industry practitioners and university researchers in the fields of technology and business. Topics covered will include engineering/product design and development, information technology, operations, business strategy, microeconomics, finance, and marketing. These topics will be addressed within the context of high technologies such as software, information systems, semiconductors, storage and networks, nanotechnology, and biotechnology.

Operation of the seminar:

This quarter the course will consist of talks given either by executives and managers from High-Tech companies, or by faculty members at UCSC. Week 1 will provide an introduction to the MOT seminar series, while week 10 will discuss what we have learned during this quarter, and summarize the key lessons learned.

Contents of the seminar

The actual topics covered during any quarter will depend on the speakers selected for that quarter and will include many of the topics listed below:

- Understanding Technology and Product Life Cycles in High-Tech, e.g., software, semiconductors, networking, telecommunication
- Technology and Product Development in high-tech domains such software, semiconductors, networks and storage, and biotechnology
- Assessing markets for new technologies and products
- Developing strategies for competitive advantage in new technologies and products
- Planning technology development using decision making and risk analysis methods
- Economics and finance of technology development
- Managing and executing the technology development process
- Information systems for integrating the management, planning, execution, and monitoring of the technology development process
- Innovation and creativity in new technology and product development
- Understanding and managing value chain networks for the technology enterprise

- Information Systems for effective and efficient value chain network management

Work involved in the seminar

The workload for this seminar will involve approximately 1.5 hours per week of "in-classroom" time and an average of 2 hours per week of "out-of -classroom" time. Students are expected to write a comprehensive two-part term paper as follows:

- Choose one of the "**technology**" domains presented by a UCSC faculty member. For this domain briefly describe the technology, summarize the state of the art, and discuss opportunities for innovation and the corresponding commercialization challenges. This will form one part of your paper.
- Choose one of the "**business**" topics covered by a speaker from industry. For this topic define the problem or issue, briefly describe how the problem was addressed /solved, present key results, describe lessons learned, and discuss future opportunities. This will form the other part of your paper.
- You can do these two parts in any order you choose, i.e., first the technology part and then the business part, or, vice versa.

Grading

- Attendance: 20%
- Notebook: 20%
- Term Paper, Part A: 30%
- Term Paper, Part B: 30%
- Extra Credit: 10% (for asking and answering questions in class)

Term Paper Due Dates:

(Instructions for writing each term paper will be provided the week before the term-paper is due.)

- Part A **due on Thursday 11/2/17 (week 6)**
- Part B **due on Thursday 12/7/17 (week 10)**

General comments and classroom etiquette

- **Note** that TIM 101 is a **seminar**, which is intended to get you interested in and excited about the field of Management of Technology (MOT). To learn and master the fundamentals of MOT you must take the MOT sequence of **courses** TIM 105 (MOT1) and TIM 125 (MOT2) that are offered, respectively, in Fall and Spring.
- Please **turn off** your laptops, PDAs, and cell-phones during the presentation. You need to "check-in" with the instructor if you plan on using your laptop to take notes.
- Please **do not disrupt the presentation** by engaging in conversations among yourselves when the speaker is making his/her presentation.
- **Attendance is mandatory**. Please contact me ahead of time if you have to miss a seminar for some important reason.
- **Keep a notebook** (including speaker names, titles, and dates of each talk) in which you take notes for each seminar. These notes will also be very helpful when writing the term paper.
- **Immerse** yourself in this experience. Don't be too concerned if you're a little lost during a talk. If you are too lost see me, and we can take care of the issue.

- Help make the talk interactive by **asking questions**, and **answering questions** posed by the speaker.
- Speaker presentations will be available on the **class website**, if the speaker uses Power Point slides and gives permission to make these slides available to the class.
- Your **constructive feedback** on an ongoing basis (what you like, what you don't like, suggestions for changes and improvements) will help improve the seminar in this and following quarters.
- If you have any problems related to the seminar, please see me immediately so that we can quickly resolve the issue.

Fall 2017 Presentations

Week-1- 09/28/17: Introduction to the TIM 101 Fall Seminar Series

Week 2- 10/05/17: Tom Gill, "IT Management: A CIO Perspective"

Week 3- 10/12/17: Paul Vroomen, VC Partner & UCSC Graduate Student, "What Drives Venture Capital?"

Week 4- 10/19/17: Ben Rus, Cisco, "Project Management at Cisco"

Week 5- 10/26/17: Kevin Mann, Plantronics, "Project Management at Plantronics"
 "Term Paper, Part A" assignment handed out to the class

Week 6- 11/2/17: Victor Chien, Nvidia, "How Nvidia Works" **"Term Paper, Part A" due**

Week 7- 11/09/17: Diana Lara, Xantrion, "Managed IT Service Providers & Security"

Week 8- 11/16/17: Sam Huynh, AMD, "Evolution of Computer Technology & AMD"

Week 9- 11/30/17: John Schneider, Jive Software, "Strategy Development and Leadership"
"Term Paper, Part B" assignment handed out to the class

Week 10- 12/7/17: Course Closure; Lessons Learned; Student Feedback; **"Term Paper, Part B" due**