Course: Technology Innovation, MBA 511 -1
Semester: 2014, Spring
Instructor: Gerrit Wolf
Instructor Contact Information: 631-632-7744, Gerrit.Wolf@stonybrook.edu
Meeting Time: Class: T-TH 11:30-12:50pm,
Location: Harriman 111
Office Hours: T-TH 2:20-3:40pm, 314a Harriman Hall

Course Description:
Innovation drives the modern firm by the interaction of technical invention and managerial entrepreneurship. This course explores the variety of sources of new products, processes, and services, such as inventors, universities, research and development departments in industry, and government labs. In addition, the course explores the variety of ways of bringing new products, processes, and services to market, including startup firms, acquisitions, mergers, and entrepreneurship within the firm. Case studies showing the interaction of invention and entrepreneurship are analyzed. A term project is required in which the student either analyzes the history of invention and entrepreneurship in a major firm or writes a business plan for high technology startup firm.

Course Overview:
Issues of importance to organizations in high technology industries are often very complex. They may involve multiple conflicting objectives, scarce resources, uncertain technologies, and ambiguous or contradictory information. These lead to conflicts among functions (e.g., finance, marketing, production) within the organization, and environmental (e.g., economic, regulatory) uncertainties and change. Yet, the long-run success of any organization depends on being able to formulate and implement good policies and decisions.

In order to deal with these issues, you must be able to understand and structure complex situations in systematic, useful ways. You must develop an ability to see the “forest” while working to reshape it tree by tree. Thus, unlike other core courses that tend to focus on a single functional area of management, we will look at the “big picture.”

Most often we will examine situations from the perspective of the general manager,
defined as anyone responsible for the management of one or more complete business units or profit centers firm. However, functional specialists (e.g., in financial analysis, information systems, human resource management) can also benefit from the course’s general management perspective, because every function’s actions should be coordinated with the overall needs of the business in order to maximize performance.

Required Texts: Strategic Management of Technological Innovation by Melissa Schilling.

College of Business Program Learning Outcomes

Innovative Business Practices – Graduates will be able to develop innovative business practices, identify obstacles to success and design strategies to overcome these obstacles. Grades of the weekly homework case analyses is the assessment

Managerial Communication Skills – Graduates will be able to communicate an organization’s visions and strategies to advance goals and address challenges through the use of multiple modes of communication – oral, written & visual. Grading of the term project presentation and report is the assessment

Course Specific Learning Outcomes By the end of the course, you should be able to analyze a firm in the following ways:

● Identify the key competitive innovative forces that drive an industry
● Identify the innovative opportunities and threats presented to a firm
● Identify a company’s innovative strengths, weaknesses, and source(s) of competitive advantage
● Develop your own creative solutions to business problems that are too complex to solve optimally
● Compare and contrast the strengths and weaknesses of several potential strategies for a company

Course Requirements & Grading Information:

Weekly Class Time

Lecture and discussion: 80 minutes
Case Analysis Discussion of Homework Cases: 40 minutes
Practitioner Visit or Student reports: 40 minutes

Grading

Attendance (10 points) for learning from guest speakers
Contribution to class discussion (10 points) demonstrating understanding
Written homework case analyses each week (35 points) showing strategy analysis
Term Project: Class presentation (10), Written report (15 points)
Final Exam (20 Points) test knowledge from text
Project Opportunities:

A) Consult on business plan for startup in LI Boot Camp
B) As a team of 2 students, research issues in innovation in Alternative Energy, Cars, Wireless, IT, Space travel, Public transportation, Health Care, or Education markets or on innovative firm in these markets.
C) Write a business plan for your or your friend’s high tech startup and enter DARE competition

Class Schedule and Assignments and Assessment of student work

I. Introduction: The Innovation Revolution 1/28-30
   Readings: Text: chapter 1
   Homework: None for first class period. See homework due for next week in next week’s assignment to be discussed next week.
   Speaker:

II. Industry Dynamics

Who Innovates? 2/4-6
   Readings: Sources of Innovation Text Chapter 2
   Homework: Case analysis of a WSJ article of your choice
   Speaker: Jennifer Hseih
   What was the creative activity in WSJ article?

What does innovation look like? 2/11-13
   Readings: Types and Patterns of Innovation, Text Ch. 3
   Homework: Case analysis of a WSJ article of your choice
   Speaker: David Crane
   What are the types of innovation in the WSJ article?

Where does innovation take place? 2/18-20
   Readings: Standards and Design Dominance Text Ch 4
   Homework: Case analysis of a WSJ article of your choice
   Discuss standardization is your WSJ article?
   Speaker: Nerds 2.01
   Discuss timing for in innovation in your article.

When does Innovation take place? 2/25-27
   Readings: Timings of Entry. Text Ch 5
   Homework: Case analysis of a WSJ article of your choice
   Discuss timing for in innovation in your article.
III. Innovation Strategies

What are the kinds of innovation strategies?

Reading: Strategic Direction: Text Ch 6
Homework: Case analysis of a WSJ article of your choice
Analyze Porter’s five forces in the firm in your article

How does one choose an Innovative Project?

Reading: Choosing Innovation. Text Ch 7
Homework: Case analysis of a WSJ article of your choice
Analyze the investment in innovation in your article

Who participates in Innovation?

Reading: Collaborative. Strategies Text Ch 8
Homework: Case analysis of a WSJ article of your choice
Discuss the role of collaboration in your article

Why are there Patents?

Reading: Protecting Innovation Text Ch 9
Homework: Case analysis of a WSJ article of your choice
What role, if any, did patents in your article?

IV. Implementing Innovation Strategy

How can one organize for innovation?

Reading: Organizational Innovation. Text Ch 10, 12
Homework: Case analysis of a WSJ article of your choice
How did the firm organize for innovation in the WSJ case?
Exercise: GM Video

How is a product brought to market?

Reading: Managing Product Development. Text Ch 11
Homework: Case analysis of a WSJ article of your choice
Describe the process of product development in the WSJ article
Speaker

How to market innovative products: 4/22-24

Reading: Crafting a Deployment Strategy: Ch 13
Homework: Case analysis of a WSJ article of your choice
What marketing techniques were used in the WSJ article?
Speaker

V. Conclusion: Student Term Reports 4/29,5/1, 5/6,5/8

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/

Academic Dishonesty:
The College of Business regards any act of academic dishonesty as a major violation punishable by severe penalties, including dismissal from the University. University policy requires that instructors and GAs and TAs report all suspected cases of academic dishonesty to the appropriate Academic Judiciary Committee, which is empowered to take strong action against violators. Under no circumstances will the College of Business permit cheating of any kind. Many activities constitute academic dishonesty. The following list is not inclusive, only suggestive:

- Cheating on exams or assignments by the use of books, electronic devices, notes, or other aids when these are not permitted, or by copying from another student.
- Collusion: two or more students helping one another on an exam or assignment when it is not permitted.
- Ringers: taking an exam for someone else, or permitting someone else to take one's exam. Submitting the same paper in more than one course without permission of the instructors.
- Plagiarizing: copying someone else's writing or paraphrasing it too closely, even if it constitutes only some of your written assignment.
- Submitting the same paper in more than one course without approval of the instructors.
- Falsifying documents or records related to credit, grades, status (e.g., adds and drops, P/NC grading), or other academic matters.
- Altering an exam or paper after it has been graded in order to request a grade change.
- Stealing, concealing, destroying, or inappropriately modifying classroom or other instructional material, such as posted exams, library materials, laboratory supplies, or computer programs.
• Preventing relevant material from being subjected to academic evaluation.

**Americans with Disabilities Act:**

If you have a physical, psychological, medical, or learning disability that may impact your coursework, please contact Disability Support Services at (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: http://www.sunysb.edu/ehs/fire/disabilities.shtml

**Critical Incident Management:**

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

**Blackboard:**

You can access class information on-line at: http://blackboard.sunysb.edu. If you have used Stony Brook's Blackboard system previously, your login information (Username and Password) has not changed. If you have never used Stony Brook's Blackboard system, your initial password is your SOLAR ID# and your username is the same as your Stony Brook (sparky) username, which is generally your first initial and the first 7 letters of your last name.

If you are having trouble logging into Blackboard, you will need to log into SOLAR to verify your Net ID username & set your Net ID Security Question and Password. For more information, visit: http://clientsupport.stonybrook.edu/

If you are a student and continue to have a problem logging into Blackboard, you will need to bring photo ID to either the Melville Library SINC Site Room S1460 or the Union SINC Site Room 080 and speak to a Blackboard Administrator from Saturday - Friday from 9 am - 5 pm.