

**THE WHARTON SCHOOL
UNIVERSITY OF PENNSYLVANIA**

**MGMT 235
TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP
FALL 2012**

This course introduces the challenges and choices associated with the development of technical ventures. Students will learn how to identify technology-based venture opportunities, evaluate technical feasibility and business potential, and develop a plan for successful commercialization. Class sessions will focus on the issues which must be faced in starting a new venture and the options which are available to the technological entrepreneur. Particular emphasis will be placed on rigorous assessment of the technical and business merits of selected innovations through individual and group projects.

PREREQUISITE:

Junior standing in Management and Technology Program or permission of instructor. Because of team project requirements, class size will be limited; priority will be given to graduating Management and Technology students. *(Please Note: Because of the similarities in course objectives and content, credit cannot be earned for both MGMT 235 and MGMT 230 or EAS 346; MGMT 235 credit is approved for both the Wharton Management Entrepreneurship Concentration and the SEAS Engineering Entrepreneurship Minor.)*

TIME/LOCATION:

Tuesdays and Thursdays, 1:30 to 3:00 pm

Location: Lauder-Fischer Hall (ground floor auditorium, 256 South 37th Street)

INSTRUCTOR:

Professor William F. Hamilton
3537 Locust Walk
Philadelphia, PA 19104
Telephone: 215-898-4145
Email: hamilton@wharton.upenn.edu

COURSE TA: Omar Qari, WHG '13 (omarqari@wharton.upenn.edu)

COURSE ORGANIZATION AND REQUIREMENTS:

Assigned text and supplementary readings will be augmented by cases and guest lectures. Students will submit written case analyses, individual project reports, and a team business plan project focused on a proposed technological venture. Team project topics will be selected by students in consultation with the instructor. The final course grade will be based on individual written assignments and quizzes (50%), team venture project assignment (35%), and class participation (15%).

COURSE MATERIALS:

Required Readings: Bulk pack (BP) available from Wharton Reprographics.

Canvas (C): <https://wharton.instructure.com/courses/402112>. Files>Course Materials>Readings.

Text (T): Baty, Gordon B. and Blake, Michael S. Entrepreneurship: Back to Basics.

Mgmt. 235 Resource Guide: <http://gethelp.library.upenn.edu/guides/business/MGMT235.html>

Supplementary materials as appropriate: Available in the M&T Resource Center, 3537 Locust Walk.

MGMT 235 - TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP - FALL 2012

PRELIMINARY CLASS SCHEDULE

<i>Date</i>	<i>Topic</i>	<i>Assignment</i>
1. TH 9/6	INTRODUCTION TO TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP	BP: 1, 2, 3; [C: 1, 2, 3, 4, 5 & <u>skim entire text</u>]
2. T 9/11	CONVERTING TECHNOLOGY INTO NEW BUSINESS (Guest Resource: Steven Polsky, M&T '86)	BP: 4, 5
3. TH 9/13	EVALUATING AND TESTING NEW VENTURE IDEAS	<u>Project #1</u>
4. T 9/18	FEASIBILITY ANALYSIS/INTELLECTUAL PROPERTY	T: 4; BP: 6, 7, 8, 9; C: 6
5. TH 9/20	INVENTIONS AND INVENTORS	<u>Project #2</u>
6. T 9/25	VENTURE DEVELOPMENT SUCCESS FACTORS; IDENTIFYING AND SHAPING OPPORTUNITIES (Guest Resource: Lee Hower, M&T '00)	T: 1, 2; BP: 10, 11; [C: 7, 8]
7. TH 9/27	INITIAL TEAM PROJECT DISCUSSIONS	Venture Project Summaries
8. T 10/2	VENTURE ANALYSIS	<u>Case # 1</u> , BP: 12, 13
9. TH 10/4	THE BUSINESS PLAN	T: 11; BP: 14, 15, 16, 17; C: 9, 10
10. T 10/9	TEAM PROJECT ASSESSMENTS & SELECTIONS	Project Assessments
11. TH 10/11	BUSINESS PLAN EVALUATION	<u>Case #2</u> ; BP: 18
12. T 10/16	MARKETING CHALLENGES & CHOICES (Guest Resource: Rob Weber, M&T '82)	BP: 19, 20
13. TH 10/18	BUSINESS PLAN EVALUATION (Guest Resource: Rob Weber, M&T '82)	<u>Case #3</u> : C: 11
T 10/23	Fall Break	
14. TH 10/25	MARKET ANALYSIS <u>Initial Project Market Estimates</u>	T: 4, 18, 19, 20; BP: 21, 22; C: 12
15. T 10/30	FINANCING AND FINANCES- Finding Capital & Structuring the Deal	T: 8, 9; BP: 23, 24, 25, 26, 27, 28; [C: 13, 14]

MGMT 235 - TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP - FALL 2012

PRELIMINARY CLASS SCHEDULE

<i>Date</i>	<i>Topic</i>	<i>Assignment</i>
16. TH 11/1	FINANCING AND FINANCES-VENTURE CAPITAL (Guest Resource: James Millar)	T: 12; BP: 29, 30, 31; [C: 15, 16, 17, 18]
17. T 11/6	FINANCING AND FINANCES Project Requirements	<u>Initial Estimates of Project Requirements</u> ; BP: 32
18. TH 11/8	PROJECT DISCUSSIONS-Organizational Issues and Options; FVA comments review	T: 5, 6, 7, 16, 17 [13,14,15,21,22,28]; BP: 33; [C: 19]
19. T 11/13	VENTURE EVALUATION (Guest Resource: Dr. Daniel Skovronsky)	<u>Case #4</u> ; TBD
20. TH 11/15	RUNNING THE SHOW-Lessons of Experience	T: 23, 29, 30; BP: 34, 35; [C: 20, 21]; <u>Annotated Bibliography</u>
21. T 11/20	CLASS PRESENTATIONS & DISCUSSION OF FIRST VENTURE ANALYSIS	<u>First Venture Analysis</u>
TH 11/22	Thanksgiving Holiday	
22. T 11/27	LEGAL ISSUES (Guest Resource: Steven Goodman, Esq.)	T:25; BP: 36; C: 22
23. TH 11/29	CONVERTING TECHNOLOGY INTO NEW BUSINESS (Guest Resource: Doug Alexander, M&T '83)	C: 23
24. T 12/4	COURSE SUMMARY / WRAP-UP	<u>Concepts & Perspectives</u>
25. TH 12/6 & 26. TBA	TEAM PROJECT PRESENTATIONS	BP: 37, 38; <u>Final Project Presentations</u>
MO 12/10		<u>Business Plans, Team Peer Evaluations</u> (to M&T office by 5pm)

- Notes:**
1. Underline=> written assignment due
 2. BP=> Bulk Pack reading; T=> Text Chapter
 3. C=> Canvas reading
 4. [.....]=> Skim read

MGMT 235 - TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP - FALL 2012

BULKPACK READINGS (BP)

1. Five Myths About Entrepreneurs: Understanding How Businesses Start and Grow
2. Built to Flip
3. Retooling the Entrepreneur
4. Beating the Odds: Avoid These Mistakes at All Costs!
5. Cautionary Tales – Plus Encouragement – From Three Veteran Entrepreneurs
6. Innovation Evaluation Instrument
7. Critical Factors for Obtaining Venture Funding
8. Top 10 Intellectual Property tips for Early-Stage Companies
9. Business Owners Adjusting to Overhaul of Patent System
10. Finding Fertile Ground
11. How LinkedIn First Raised Money (and endured rejection)
12. Analyzing the New Venture's Feasibility
13. A First Venture Analysis: Rapidrill Corporation
14. Writing a Compelling Executive Summary
15. Developing the Business Plan
16. How to Write a Great Business Plan
17. Business Insight Special Report: Why Business Plans Don't Deliver
18. Datacom International, Inc.
19. Network Effects
20. Inside the Tornado
21. Estimating Market Potential
22. Marketing Research
23. Splitting Equity with Backers
24. Structuring the Financing
25. What are the Terms?
26. How to Find the Right Investors for Your Business
27. Non-traditional Financing Sources
28. Those High-Flying Angel Investors
29. You Can Negotiate with Venture Capitalists
30. How Venture Capital Works
31. Venture Capital in Practice: A Case History
32. How Much Money Does Your New Venture Need?
33. How to Build an Organization
34. Do the Right Thing
35. The Harvest and Beyond
36. Learn to Love Your Lawyer
37. The Ten Commandments of Fundraising
38. Guidelines for an Investment Presentation

MGMT 235 - TECHNOLOGICAL INNOVATION AND ENTREPRENEURSHIP - FALL 2012

CANVAS READINGS (C)

1. Why You Should Start a Company in... Philadelphia
2. Global Heroes
3. European Entrepreneurs: Les Miserables
4. For Tech Start-Ups, New York Has Increasing Allure
5. Redeye VC -- Hello Philly!
6. Beyond the Search for the Really Cool Idea
7. Success and Failure Factors
8. The Opportunity: Creating, Shaping, Recognizing, Seizing
9. Does Business Planning Facilitate the Development of New Ventures?
10. 'Pivoting' Pays Off for Tech Entrepreneurs
11. CustomClothes Business Plan
12. Understand Your Customers
13. Giving Ideas Wings
14. Ownership, Dilution, Negotiation, and Valuation
15. Battelle Ventures
16. The Venture Capital Cycle: Introduction
17. Venture Capitalists
18. What do Entrepreneurs Pay for Venture Capital Affiliation?
19. The New Venture Team
20. Pyramiding to the Top
21. True Lies
22. Risks and Mitigation
23. Internet Capital Group: Douglas Alexander