


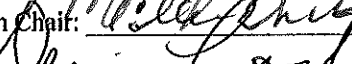
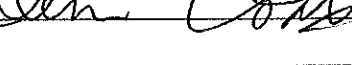
FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—COURSE CHANGE REQUEST

UGPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: MANAGEMENT PROGRAMS	COLLEGE: COLLEGE OF BUSINESS
COURSE PREFIX AND NUMBER: ENT 6186	CURRENT COURSE TITLE: TECHNOLOGY COMMERCIALIZATION STRATEGIES
CHANGE(S) ARE TO BE EFFECTIVE (LIST TERM): SPRING 2012	_____ TERMINATE COURSE (LIST FINAL ACTIVE TERM):
CHANGE TITLE TO: CHANGE PREFIX FROM: TO: CHANGE COURSE NO. FROM: TO: CHANGE CREDITS FROM: TO: CHANGE GRADING FROM: TO: CHANGE DESCRIPTION TO:	CHANGE PREREQUISITES/MINIMUM GRADES TO*: ENT 6016 AND ADMISSION TO ANY FAU GRADUATE PROGRAM CHANGE COREQUISITES TO*: CHANGE REGISTRATION CONTROLS TO: *Please list both existing and new pre/corequisites, specify AND or OR, and include minimum passing grade.
Attach syllabus for ANY changes to current course information.	
Should the requested change(s) cause this course to overlap any other FAU courses, please list them here.	Departments and/or colleges that might be affected by the change(s) must be consulted and listed here. Please attach comments from each.

Faculty contact, email and complete phone number: Gary Castrogiovanni, castrogi@fau.edu, 7-3654

Approved by: Department Chair: <u></u> College Curriculum Chair: <u></u> College Dean: <u></u> UGPC Chair: _____ Graduate College Dean: _____	Date: <u>9/26/11</u> <u>9/26/11</u> <u>9-27-11</u> _____ _____	ATTACHMENT CHECKLIST ♦Syllabus (see guidelines for requirements: http://www.fau.edu/graduate/facultyandstaff/programscommittee/index.php) ♦Written consent from all departments affected by changes
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Email this form and syllabus to diamond@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

Technology Commercialization Strategies
ENT 6186 (3 Credits)
Spring 2010
Wed. 7:10 – 10:00 p.m., BU 102
Prereq: Graduate standing and ENT 6016

Professor Chandra S. Mishra
DeSantis Pavilion, Room 207
Phone : 561-297-0251
E-mail : cmishra@fau.edu

Course Description

Commercialization of science and technology including commercialization options, technology strategy, market analysis, product adoption likelihood, evaluation of licensing opportunities, intellectual property, and the market for ideas. This course is an elective course in the MBA and a required course in the Technology and Innovation Certificate Program. The prerequisites are ENT 6016 and admission to an FAU graduate program.

Course Objectives and Student Learning Outcomes

Upon completion of this course, you should be able to do the following:

- Assess the commercial potential of a new technology
- Evaluate commercialization options for a particular technology
- Develop a technology strategy
- Understand and evaluate intellectual property considerations
- Manage the process for moving new technology from the lab to the market place

Required Readings

A course packet is available through the Harvard Business School Publishing Web Site. To access the Harvard Business Education site, follow this link: <http://cb.hbsp.harvard.edu/cb/access/4909496>. If you have not registered with the Harvard Business Education site, it will be necessary to do so now. Once you have completed the brief registration process, you will be able to log in. Once logged in you will be able to access the material.

Recommended Readings

The Art & Science of Technology Transfer by Speser, John Wiley & Sons (Speser)

Grade Determination

Quicklook Commercialization Assessment	60%
Case Quizzes	20%
Class Participation	20%

Office Hours

My office hours are on Tuesday/Friday 10:00-12:00 noon. I am also available by appointment and before and after the class. Please e-mail me for an appointment prior to your coming from off-campus.

Case Quizzes

Each student is expected to read the case and assigned readings, and adequately prepare the class preparation questions before coming to each class. Each student is expected to take all case quizzes and keep up with the class assignments on a weekly basis.

Class Participation

Each student is responsible for all in-class and e-mail announcements. *You must check your FAU e-mail account regularly.* Effective participation is when a student provides regular and substantive insights into the problem and its solution while taking into consideration the ideas provided by others. In assigning class participation grades, the following scale will be used:

0 points	Student is absent, unprepared or makes no comments
5 points	Student adds minimally to the discussion.
8 points	Student makes a significant contribution to the discussion.
10 points	Student provides regular and substantive insights

Quicklook Commercialization Assessment

The goal of a Quicklook assessment is to get an early indication of commercial interest in an idea, invention, or area of research. The primary benefits of the reports are the potential partners/licensees that can be found. In cases where inventions are not well received by the commercial marketplace, the reports can give early warning signals that the proposed area of research or proposed patent may be a non-starter and further investigation is needed prior to funding either more research or a patent submission.

The entire Quicklook process should only take 20-30 hours. It is not designed to be an in-depth market analysis report that will give a complete market picture to potential licensees. It is an information tool to be used for the targeting of the invention for license or information to be used in a go/no go decision.

Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Americans with Disabilities Act

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) -- in Boca Raton, SU 133 (561-297-3880); in Davie, LA 240 (954-236-1222); in Jupiter, SR 110 (561-799-8010); or at the Treasure Coast, CO 117 (772-873-3441) – and follow all OSD procedures.

Tentative Schedule of Sessions

Jan 13	Case:	The Langer Lab: Commercializing Science
Jan 20		Vertex Pharmaceuticals: R&D Portfolio Management (A)
	Additional Readings:	<ol style="list-style-type: none"> 1. Note on New Drug Development in the United States 2. Is It Real? Can We Win? Is it Worth Doing? Managing Risk and Reward in an Innovation Portfolio
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. Which of the project portfolio options currently facing Vertex do you favor? Specifically, which two projects would you advance in development? Would you license out the two others not chosen or keep them as back-up? 2. What criteria would you use to make the decision? What other information, if any, do you think Boger needs to make his decision? 3. How should a company value its investments in projects like these, which entail an extremely high degree of uncertainty? What management process should be used?
Jan 27 and Feb 3	Case:	Syndexa and Technology Transfer at Harvard University
	Additional Readings:	<ol style="list-style-type: none"> 1. Technology Transfer at US Universities 2. Intellectual Property and Strategy
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. What is your assessment of Dr. Gokhan Hotamisligil and his research? 2. Why have the negotiations of these agreements been so time consuming and difficult? 3. What are the goals and priorities of Gokhan Hotamisligil, Isaac Kohlberg, Barry Bloom (HSPH), and Teo Uysal (Syndexa)?
Feb 10 and 17	Case	Merck & Company: Evaluating a Drug Licensing Opportunity
	Additional Readings:	The Role of Royalty Rates in the Licensing Process
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. Should Merck bid to license Davanrik? How much should they pay? 2. What is the expected value of the licensing arrangement to LAB? Assume a 5% royalty fee on any cash flows that Merck receives from Davanrik after a successful launch. 3. How would your analysis change if the costs of launching Davanrik for weight loss were \$225 million instead of \$100 million as given in the case?
Feb 17 and 24	Case:	Cardiac Thoracic Systems
	Additional Readings:	<ol style="list-style-type: none"> 1. Why Consumers Don't Buy? The Psychology of New Product Adoption 2. Four Steps to Forecast Total Market Demand
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. What are the obstacles to adoption for the CTS product? Of these, which is most critical? What can CTS do to maximize the speed of adoption? 2. What is the size of the market for CTS? How has CTS done to date and why?

Mar 3		<i>Inventors' Presentations</i>
Mar 17	Case:	Microsoft: Positioning the Tablet PC
	Additional Readings:	<ol style="list-style-type: none"> 1. Note on Innovation Diffusion: Rogers' Five Factors 2. Commercializing Technology: Imaginative Understanding of User Needs
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. Who should the initial target market for the Tablet PC be? 2. Imagine that you are Bert Keely. You know that there are going to be obstacles to consumer adoption of this product. What do you think the biggest obstacles are going to be? How do you plan to overcome those obstacles? 3. Bill Gates' prediction is that within five years, the Tablet PC will be the most popular form of PC sold in America. Why is Gates so excited about this product? What value does it create for users?
Mar 31		<i>Team Market Analysis due</i>
Apr 7	Case:	Beta Golf
	Additional Readings:	<ol style="list-style-type: none"> 1. Innovating for Cash 2. Commercializing Technology: What Best Companies Do
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. Why does Beta Group exist? What economic function does it serve? What is the business model for Beta? What does this tell us about translating innovation into value? 2. What is a sensible development plan for the HXL technology? Of the various choices for exploiting the technology which would you choose? Why? In what order? 3. Given the response from Callaway, what should Zider and Krumme do next? 4. What would happen to this project if it were developed inside an existing industry competitor?
Apr 14 and 21	Case:	Elliot Lebowitz
	Additional Readings:	Negotiating Strategic Alliances
	Class Preparation Questions:	<ol style="list-style-type: none"> 1. Does the strategic alliance with Mass General Hospital (MGH) make sense? For BioTransplant? For MGH? 2. What is driving the financing needs at BioTransplant? When will it turn cash flow positive? How certain are we of this estimate? 3. What are the potential sources of financing for BioTransplant? Which make sense now? Why? 4. Should BioTransplant pursue an alliance with a big pharma? When? For what products? In what form?
Apr 28	Team Deliverables	<i>Final Quicklook Reports due Team Presentations</i>

Additional Reading

- Berry, T. (2008). *The plan-as-you-go business plan*. Irvine, CA: Entrepreneur Press.
- Castrogiovanni, G. (1996). Pre-startup planning and the survival of new small businesses: Theoretical linkages. *Journal of Management*, 22: 801-822.
- Chrisman, J., & McMullan, W. E. (2004). Outsider assistance as a knowledge resource for new venture survival. *Journal of Small Business Management*, 42: 229-244.
- Cornwall, J. (2010). *Bootstrapping*. Upper Saddle River, NJ: Pearson.
- Fiet, J., & Patel, P. (2008). Forging business models for new ventures. *Entrepreneurship: Theory & Practice*, 32: 749-761.
- Herron, L., & Sapienza, H. (1992). The entrepreneur and the initiation of new venture launch activities. *Entrepreneurship: Theory & Practice*, 17: 49-55.
- Holcomb, T., Ireland, R. D., Holmes, Jr., R. M., & Hitt, M. (2009). Architecture of entrepreneurial learning: Exploring the link among heuristics, knowledge, and action. *Entrepreneurship Theory & Practice*, 33: 167-192.
- Honig, B. (2004). Entrepreneurship education: Toward a model of contingency-based business planning. *Academy of Management Learning and Education*, 3 (3): 258-273.
- Honig, B., & Karlsson, T. (2004). Institutional forces and the written business plan. *Journal of Management*, 30: 29-48.
- Korunka, C., Frank, H., Luenger, M., & Mugler, J. (2003). The entrepreneurial personality in the context of resources, environment, and the startup process: A configurational approach. *Entrepreneurship: Theory & Practice*, 28: 23-42.
- Lévesque, M., Minniti, M., & Shepherd, D. (2009). Entrepreneurs' decisions on timing of entry: Learning from participation and from the experiences of others. *Entrepreneurship Theory & Practice*, 33: 547-570.
- McGrath, R., & MacMillan, I. (1995). Discovery-driven planning. *Harvard Business Review*, 73 (4): 44-54.
- McGrath, R., & MacMillan, I. (2000). *Entrepreneurial mindset*. Boston: Harvard Business School Press.
- McGrath, R., & MacMillan, I. (2009). *Discovery-driven growth*. Boston: Harvard Business Press.
- Mintzberg, H. (1973). Strategy-making in three modes. *California Management Review*, 16 (2): 44-53.