# Graduate Programs—NEW COURSE PROPOSAL

**Department Name:** MANAGEMENT  
**College of:** BARRY KAYE COLLEGE OF BUSINESS

**Recommended Course Identification:**
- **Prefix:** MAN  
- **Course Number:** 6874  
- **Lab Code (L or C):**  

*(TO OBTAIN A COURSE NUMBER, CONTACT ERUDOLPH@FAU.EDU)*

**Complete Course Title:** TECHNOLOGY COMMERCIALIZATION STRATEGIES

**Effective Date**
(first term course will be offered)

**Credits:** 3  
**Textbook Information:** SEE ATTACHED

**Grading (Select only one grading option):** Regular _X_  
Pass/Fail _____  
Satisfactory/Unsatisfactory _____

**Course Description, no more than 3 lines:**
Commercialization of science and technology including commercialization options, technology strategy, market analysis, product adoption likelihood, evaluating licensing opportunity, intellectual property, and the market for ideas.

**Prerequisites w/Minimum Grade:**  
**Corequisites:**  
**Other Registration Controls (Major, College, Level):**

**Prerequisites, Corequisites & Registration Controls shown above will be enforced for all course sections.**

*Default minimum grade is D-.*

**Minimum Qualifications needed to teach this course:**

Other departments, colleges that might be affected by the new course must be consulted. List entities that have been consulted and attach written comments from each.

__CHANDRA S. MISHRA, CMISHRA@FAU.EDU, 561-297-0251__
Faculty Contact, Email, Complete Phone Number

**Signatures**

**Approved by:**
- Department Chair:
- College Curriculum Chair:
- College Dean:
- UGPC Chair:
- Dean of the Graduate College:

**Date:**

**Supporting Materials**
- **Syllabus**—must include all details as shown in the UGPC Guidelines.
- **Written Consent**—required from all departments affected.
  - Go to: [http://graduate.fau.edu/ugpc/](http://graduate.fau.edu/ugpc/) to download this form and guidelines to fill out the form.

Email this form and syllabus to sfulks@fau.edu and eqirjo@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website by committee members prior to the meeting.

*FAUnewcursaGrad—Revised May 2008*
Course Objectives and Career Focus

The course is aimed at professionals who work in or with innovative industries. The focus is on commercialization of science and technology, moving research from the lab to the market place. This is not a product development course. The course covers topics such as commercialization options, technology strategy, market analysis, product adoption likelihood, evaluating licensing opportunity, intellectual property, and the market for ideas. The emphasis is on strategies to capture value under uncertainty and profit from technological opportunities. A central part of the course is to assess a technology’s commercialization potential.

Required Readings

1. A course packet is available through the Harvard Business School Publishing web site at the following link: http://harvardbusinessonline.hspp.hbr.org/relay.jhtml?name=cp&c=c05283
2. The Art & Science of Technology Transfer by Speser, John Wiley & Sons (Speser)

Grade Determination

Grading will be on a percentage basis where 90% = A-, 80% = B- etc. The breakdown of individual grades will be determined by the overall class performance. Points will be allocated as follows:

Quicklook Commercialization Assessment 40%
Midterm Exam 30%
Case Quizzes 20%
Class Participation 20%

Office Hours

My office hours are on Tuesday/Friday 9:00-12:00 noon. I am also available by appointment and before and after the class on Wednesday. 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:

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Student is absent, unprepared or makes no comments</td>
</tr>
<tr>
<td>5</td>
<td>Student adds minimally to the discussion.</td>
</tr>
<tr>
<td>8</td>
<td>Student makes a significant contribution to the discussion.</td>
</tr>
<tr>
<td>10</td>
<td>Student provides regular and substantive insights</td>
</tr>
</tbody>
</table>

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.
Tentative Schedule of Sessions

Week 1
Introduction and Overview
Additional Readings: Ch. 1, 2, 3 (Speser)

Week 2 and 3
Case: Beta Golf
Additional Readings:
1. Innovating for Cash
2. Ch. 7, 8, 9 (Speser)
Class Preparation Questions:
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?

Week 4 and 5
Case: Elliot Lebowitz
Additional Readings:
1. Note on Corporate Partnership
2. The Life Science Revolution: A Technical Primer
Class Preparation Questions:
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?
5.

Week 6 and 7
Case: Cardiac Thoracic Systems
### Additional Readings:
1. Note on Innovation Diffusion: Rogers’ Five factors
2. Ch. 4, 5, 6 (Speser)

### Class Preparation Questions:
1. What are the obstacles to adoption for the CTS product? Of these, which is most critical?
2. What is the size of the market for CTS?
3. How has CTS done to date and why?
4. What can CTS do to maximize the speed of adoption?

#### Week 8
Library Database Presentation and Review

#### Week 9
Midterm Exam

#### Week 10 and 11
Merck & Company: Evaluating a Drug Licensing Opportunity

#### Additional Readings:
1. The Role of Royalty Rates in the Licensing Process
2. Decision Tress for Decision Making
3. Ch. 10 and 11 (Speser)

#### Class Preparation Questions:
1. Build a decision tree that shows the cash flows and probabilities at all stages of the FDA approval process.
2. Should Merck bid to license Davanrik? How much should they pay?
3. 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.
4. 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?

#### Week 12 and 13
Case

#### Class Preparation Questions:
1. How big is the market for intellectual property today? What has prevented the emergence of a bigger market for IP?
2. How has PL-X addressed these constraining factors? Are there any that have not been addressed?
3. What issues do you see for PL-X in the Japan launch that might be different from its efforts in the U.S.?

#### Week 14 and 15
Team Deliverables
Quicklook Assessment Report due
Final Presentations
Technology Commercialization Bibliography

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

Cases:
Beta Golf
Innovating for Cash
Cardiac Thoracic Systems
Note on Innovation Diffusion: Rogers’ Five factors
Merck & Company: Evaluating a Drug Licensing Opportunity
The Role of Royalty Rates in the Licensing Process
Decision Tress for Decision Making
Elliot Lebowitz
Note on Corporate Partnership
The Life Science Revolution: A Technical Primer