

MGT 8803
Technological Innovation: Generating Economic Results (TI:GER[®])
Fundamentals of Innovation I
Fall 2008 Syllabus

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Class Logistics: Meeting Time: Tuesday, 4:35 - 6:55 pm
Locations:
Georgia Tech, College of Management, Room 201
Emory Law School, Gambrell Hall, Room 1C

Assignment & Lecture Postings on Lexis/Nexis Webcourse; Lexis/Nexis IDs and passwords will be provided to Tech students on Tuesday, August 26.

Class Discussions and Social Networking – LinkedIn

Required Textbook/Readings:

***Advances in the Study of Entrepreneurship, Innovation and Economic Growth, Volume 18, Technological Innovation: Generating Economic Results*; Libecap, Gary D. and Thursby, Marie C., Elsevier, 2008**
The text will be distributed at no charge in class on August 26.

Additional readings, resumes, cases and other course material will be reproduced in a coursepack and sold in class on Tuesday, August 26.

Additional readings may be distributed in class.

Course Overview

Technological innovation is not simply invention, but a process that includes all the steps from decision to conduct research and to identify opportunities and paths for that research to contribute to society, through commercial application and diffusion, and finally to its ultimate impact and consequences. This is the first of a two-course sequence on various techniques and approaches needed to understand the innovation process. Issues explored will include patterns of technological change, the identification of market and technological opportunities, competitive market analysis, the process of technology commercialization, intellectual property protection, and methods of valuing new technology.

This is not a course in entrepreneurship or managing product or process development per se. The primary focus is on acquiring a set of tools that are critical for capturing value from new technology, be it in a university setting or a large or small company. These tools can provide a framework for the types of problems that will be addressed in your TI:GER[®] teams.

The Fall Semester, Fundamentals of Innovation I, will focus on:

1. Identifying and evaluating business opportunities for technological innovation;
2. Learning forms of intellectual property protection and writing patent claims;
3. Identifying the capabilities and resources necessary to succeed in a particular industry;
and
4. Learning to work in a multidisciplinary team.

Students are also encouraged to “keep current” on general topics of innovation and technology commercialization. Excellent business-oriented web sites that provide free content (sometimes just excerpts of articles are free) that are helpful in individual development, class preparation, and team activities include Forbes at www.forbes.com and Fortune at www.fortune.com, the Kauffman Foundation at www.kauffman.org, Business Week at www.businessweek.com, the Wall Street Journal at <http://online.wsj.com/home/us> and www.researchoninnovation.org.

A library of relevant books on business startup and technology innovation and commercialization are housed in the TI:GER lab and available for check-out.

In the spring, Fundamentals of Innovation II will focus on identifying the value proposition of a potential product based on the technology, identifying potential markets, valuing the technology at various stages of research, evaluating legal structures for feasible business opportunities, understanding the business impact of legal decisions, and developing a commercialization plan.

These two courses will provide the academic core to the student's first year in the Technological Innovation: Generating Economic Results (TI:GER[®]) program. Students will take each course as a "community of participants" and will participate in innovation teams, which will be formed during the first month of fall semester. These teams will participate in in-class activities and team problem-solving exercises to obtain an understanding of the technology commercialization process. The research that will drive the innovation teams will be provided by the PhD candidates and their advisors.

Innovation Team Structure and Performance Expectations

Each innovation team will be composed of a PhD candidate, an MBA candidate, and two JD candidates. The teams will remain intact for the entire two-year TI:GER experience. Teams are expected to set their own priorities and "commercialization agendas" within the context and schedules determined by the Fundamentals of Innovation course.

Each team should develop shared patterns of understanding. Teams are expected to work through and develop their own set of positive team dynamics and work rules. Just as in an actual commercialization setting, each team is expected to leverage its mix of disciplinary skills and team members should learn from each other. Students will visit each of the nine Ph.D. student labs (8/28 – 9/16) and attend several socials during the first three weeks of fall semester. Students will give their preferences for team members, and the **teams will be formed with these preferences in mind. Teams will be announced prior to September 20, the day of the Ropes Course outing.**

Each TI:GER team will meet on a fixed schedule with the TI:GER Program Professors , Margi Berbari and Anne Rector, to provide updates on team activities and to receive any needed direction on specific team activities. These meetings can be conducted on either the Tech or Emory campus. All team members must be present. Teams that do not meet as scheduled will be penalized in terms of the overall course evaluation. **Team meetings will be scheduled during the weeks of September 29 and November 17.**

Mentors

Each of the TI:GER[®] teams will be assigned a mentor during fall semester. Teams are expected to contact their mentor(s) and schedule a face-to face meeting. All communication and interactions with mentors should be guided by the TI:GER[®] Mentorship Program Guidelines.

Academic Honesty and Student Rights

This course will follow the guidelines established by Georgia Tech's honor code and student handbook and the Professional Conduct Code for Emory Law. All sources of information utilized in any of the course assignments are to be appropriately acknowledged. Please keep in mind that academic dishonesty includes (a) cheating, (b) fabrication and falsifications, (c) multiple submissions, (d) plagiarism, and (e) complicity in academy dishonesty. For any questions involving these or any other Academic Honor Code issues, please consult the

Class Attendance and Participation

In-class discussions and participation are an integral part of the TI:GER curriculum and account for 20% of the final grade. The participation grade will be based on overall class attendance (including timeliness), quality of participation in class discussions, team meetings preparedness, and attendance at other required meetings or events.

Class attendance will be taken weekly and is an important part of the participation grade. Because this three-credit class meets only once per week, missing a class means missing an entire week of information. We understand that job interview conflicts or illness can impact attendance. Any student needing to miss a class must notify Professors Berbari and Rector in advance. After one class absence, students will be expected to ask in advance for an excused absence, without which they will receive a reduction to their course grade appropriate to the number of unexcused absences.

Written Answers to Class Discussion Questions

Due 9/2; 9/16; 9/30; 10/21; 10/28; 11/11; 11/18; 12/2

Please provide a 2-3 page written document at the beginning of class that responds to the discussion questions noted on the class syllabus. Note that some classes do not require a written response to the class discussion questions. A student who will be absent can email the write-up **in advance of the class time** with no penalty. Write-ups turned in after the class meeting time will be subject to the late assignments penalty.

IP Search and Analysis Project – Due 11/4

This will be assigned by Emory Law faculty. Project requirements and grading criteria will be provided during the first IP-oriented class session.

Industry Analysis – Due 12/5

This assignment involves an analysis of an industry that is relevant to the each TI:GER team's technology. The industry will be assessed in terms of resources and capabilities offered or lacking, and the opportunities and threats of its competitive environment. More details regarding this assignment will be available in class.

Team Evaluations – Due 12/8

Each student will evaluate fellow team members, whose final grades will be based in part on the point allocations assigned in those evaluations.

Lecture Series write-ups - Due 12/8

Plan to attend **two outside lectures** on relevant commercialization topics and write a one-page summary of what you learned and how it might impact your team and its commercialization process. These lectures could be part of the Georgia Tech Impact Series, Georgia Tech Public Policy Series, Emory Law's TechLaw® Series, or relevant community organizations such as IEI or TAG. These write-ups must be emailed to the professors by December 8.

Late assignments

A penalty of 10% of the total points available for each assignment will be imposed for every day the assignment is late (i.e., 10% deducted if one day late, 20% deducted if two days late, etc.)

Grade Calculation:

A total of 400 points will be available for each student. The percentage of points for each assignment is reflected below.

Assignments will be evaluated as follows:

Basis	% of Grade
Class Participation	20%
Write Up Questions	20%
IP Search and Analysis	20%
Industry Analysis	30%
Team Evaluation	5%
Lecture Series Write-ups	5%

Assignment/Activity	Due Date	Submission Method
TI:GER Social Reception	After class 8/26	
Research Lab Visits	8/28 – 9/16	
TI:GER Lab Open House	After class 9/2	
ROPEs Course	Saturday, 9/20	
Team Meetings	9/29 – 10/7	Sign up in class 9/23
Written Discussion Questions	9/2; 9/16; 9/30; 10/21; 10/28; 11/11; 11/18; 12/2	Submit hard copy in class to Berbari
IP assignment	11/4	email to Tina McKeon
Team Meetings	11/17 - 25	Sign up in class 11/11
Industry Analysis	Friday, 12/5 by 5:00 pm	email to Rector, Berbari
Lecture Write-Ups	Monday, 12/8 by 5:00 pm	email to Rector, Berbari
Team Evaluation	Monday, 12/8 by 5:00 pm	email to Rector, Berbari