Instructional Objectives and Methods:

Although this course is offered primarily to enhance the entrepreneurial skills of students in the FAMU-FSU College of Engineering, it is open to advanced undergraduate and graduate students of all disciplines. NO PREQUISITES! The course simulates, in an academic environment, the process of creating and analyzing business models and commercialization plans for technology-based products or services. Students will form teams and propose technology-based ideas/opportunities with commercial potential. Each team will then analyze the business potential of the idea, addressing key aspects such as the state of development of the technology (e.g. additional research needed, whether a prototype exists, etc.), needed intellectual property protection, competing technologies, the most appropriate target market, customer discovery and development, and the best business model for financial success (including developing a Business Model Canvas). The student teams will present the findings for their project in both a final written report and an oral presentation.

In addition to the team projects, the course will include lectures and class discussions on such topics as entrepreneurship, lean startup concepts, technology product development, intellectual property protection, how to conduct a technology market study, sources of financing for start-up companies, and case studies from successful entrepreneurs. Lectures will mix experience with educational content. Grades will be based primarily on the quality of the final written and oral reports, assessing individual and team efforts. There are no exams.

Faculty: Dr. Mike Devine, Entrepreneur in Residence and Professor, FAUM-FSU College of Engineering. For further information, please contact Dr. Devine at mdevine@fsu.edu; phone 850-410-6378, Office A-248B. Office Hours: Wed 10am-5pm and Thurs 10am-12 Noon or by appointment.

Co- and Pre-requisites: Graduate or Senior Standing or permission of your academic department.


Webpage Address: http://campus.fsu.edu (Blackboard)

Syllabus Change Policy: Except for changes that substantially affect implementation of the grading policy or grading scale, this syllabus is a guide for the course and subject to change with advanced notice.

Class Schedule: (Subject to Change Depending on Availability of Guest Speakers)

Week 1: January 6
Prior to class (if possible):
- Read the Forward, Preface, and the following sections from Chapter 1:
  - 1.1 Entrepreneurship in Context
  - 1.4 Innovation and Technology
  - 1.5 The Technology Entrepreneur
- Watch a few of the “elevator pitches” from U. Miami at http://www.youtube.com/user/2011epitch
- Watch the 4 Videos for Chapter 1 at http://ecorner.stanford.edu/userFavorites.html?uid=29817
- Learn some basic terminology and concepts about the INVENTURE CYCLE
  - Here’s the 2:30 minute version: https://www.youtube.com/watch?v=50k3fv7yR-w
- And the first 27 minutes of this video is the more complete version (but the discussion that follows is very interesting also): [https://www.youtube.com/watch?v=bWTWwps0ezQ](https://www.youtube.com/watch?v=bWTWwps0ezQ)
- Watch “Traction Jack” video at U. of Texas “Idea to Product” student competition: [http://www.ideatoproduct.org/ut/](http://www.ideatoproduct.org/ut/) (It is posted under “Competition Archives” for 2012. This one chosen because the technology is “simple” and obviously doable).
- Answer Q. 1.1 (p. 22) via email to Dr. Devine by Friday, Jan. 8th.

Class:
- WELCOME
- Introductions of students
- Overview of the course; expectations and grading;
- Examples of technology-based business ideas
- Class Discussion: Characteristics of technology-based enterprises and importance of “customer discovery”
- What makes a good project for this class?

**Week 2: January 13**
**Prior to class:**
- Read Chapter 2.1: Types of Opportunities, 2.2: Market Engagement and Design Thinking, and 2.4 Trends and Convergence
- Watch the 4 videos for Ch. 2 at the Stanford website above
- Prepare a 5-6 slide presentation of your idea/opportunity (more than 1 idea if you wish). **Email them to Dr. Devine no later than 3pm Wednesday** so they can be ready by class time
- Submit “Your Top 5 Key Facts About Successful Technology Entrepreneurship” via email to Dr. Devine by 5pm, Jan 13
- Post your BioSketch to Blackboard Discussion Board
- Investigate Sara Blakely

Class:
- Early technology-based business ideas presented by students (6 minutes each) including class discussion and feedback

**Week 3: January 20**
**Prior to Class:**
- Read Chapter 3. The Vision and Business Model
- Watch the 4 videos for Ch. 3 at Stanford website above
- Prepare revised/refined technology-based business idea (5-6 slides) utilizing lessons from 1st presentation, what you learned from Ch. 3, and adding more on customers and market potential. **Email them to Dr. Devine no later than 3pm Wednesday** so they can be ready to present by class time.
- Review “Customer Discovery” slide show posted on Blackboard. Send by email in your own words (limit 200) the key points about “**customer discovery**” no later than 4pm, Tuesday, Jan. 19

Class
- All students present their refined/refined technology-based business idea: 6 minutes each MAX including class discussion
- Discuss key challenges to commercializing new technologies and the importance of CUSTOMERS
- Discuss lessons from Sara Blakely’s experience (Founder of Spanx)

**Week 4: January 27**
**Prior to Class:**
- Students who want their project considered for a team semester project should post their 3rd Draft business idea Power Point to Blackboard (Discussion Board) by 5pm, Friday, January 22
Project Preference email sent by Dr. Devine Monday morning, January 25
Students indicate (confidentially) their top 3 preferred projects by replying to Dr. Devine’s email no later than 5pm, Tuesday, January 26
Teams assigned by Dr. Devine by NOON, Wednesday, Jan 27.
Read Chapter 4.1, 4.4, 4.6, and 4.7: Competitive Strategy and Alliances
Watch the 6 videos for Chapter 4 at the Stanford website http://ecorner.stanford.edu/userFavorites.html?uid=29817
Choose any company you are somewhat familiar with (even if it’s just because you are a customer of them). Describe them briefly (including a website for the company) and do a brief SWOT analysis of them like Table 4.4 (no more than 1 page total). Email to Dr. Devine by noon Wednesday, Jan 27.

Class:
Teams meet in class to discuss development of their Team Project

Week 5: February 3
Prior to Class:
Read Ch. 5.3-5.6 (Technology and Innovation Strategy and New Technology Ventures)
Watch the 4 videos for Ch. 5 at the Stanford website as before
Teams meet online and in person to develop/refine their Team Project
Each team meets with Dr. Devine to review their Team Project (to be scheduled Tuesday Feb 2 or Wednesday a.m., Feb 3).

Class:
Teams present their team idea/opportunity and discuss with class (10 min presentation, 5 min Q&A), including analyzing in terms of Figure 4.4 and Table 5.5 in textbook

Week 6: February 10
Prior to Class:
Each team will be choose a presentation from prior TEC Final Presentations (posted on BB) and then prepare a critique relative to how well they addressed the topics in the “Content Outline” for the Final Reports you are to prepare (posted under Syllabus and Requirements). Email Power Point to Dr. Devine no later than 4pm Wed.

Class:
Guest Speaker: (Confirmed) John Fraser, Burnside Development and Associates, (formerly Assistant Vice President for Research & Economic Development and Executive Director, Office of Commercialization, FSU) "Licensing As a Path to Commercialization of New Technologies"
Each team will present their critique of their chosen prior TEC Final Presentation using Power Point (8 minutes each)

Week 7: February 17
Prior to Class:
Review Ch. 2.2 (previously assigned) and the Customer Discovery Slides in the Library section of BlackBoard (also previously assigned)
Teams continue to refine/develop their team project, focusing on “customer discovery” (each team member should interview at least 2 potential customers)
Teams refine project commercialization plan focusing on the “value proposition” (i.e. what benefits will your idea provide for customers) as discussed in Chapter 3.3 of the Textbook and what was found from early “customer discovery” interviews
Send updated power points to Dr. Devine by 4:00 pm Wednesday, Feb. 17.

Class
Guest Speaker: (Confirmed) Trip Wykcoff, Entrepreneur in Residence, FSU Library, “Business Research Resources at the FSU Library and Beyond”

Teams present updates on their team project (10 minutes each including Q&A)

**Week 8: February 24**

**Prior to Class:**
- Read Ch. 11 (Intellectual Property)
- Read Ch. 6.1-6.4 (Creating the Business Plan or “Commercialization Plan”)
- Watch the 3 videos for Ch. 6
- Watch Videos 2-4 on Business Model Canvas at http://ecorner.stanford.edu/authorMaterialInfo.html?mid=2875 (Watch the full 53 minute video if you have time!)
- Also, see BB Library for a Business Model Canvas Template and additional links for videos on the Business Model Canvas
- Teams prepare rough draft of their “Business Model Canvas” using the template in the BB Library

**Class**
- Guest Speaker: Reis D. Alsberry, Director of Technology Transfer, FAMU: “The Importance of Intellectual Property Protection”
- Teams present updated project plan focusing on their rough draft “business model canvas” (10 mins each including Q&A)

**Week 9: March 2**

**Prior to Class**
- Read Ch. 18.1, 18.3-18.7 (Financing New Technology Ventures)
- Watch the 4 videos for Ch. 18 at Stanford website
- Read Ch. 9.1-9.3 (Marketing and Customer Segments)
- Watch the 2 videos for Ch. 11 and re-watch Ch. 4 video by Jeff Housenbold on “Surviving Competition”
- Submit via email by Noon, Wednesday March 2 addressing what the key points are from video “Flying with Angel Investors”
- Teams update their presentations focusing on any weaknesses they see, including updates to their BMC.

**Class:**
- Teams meet during class time among themselves and individually with Dr. Devine (10-15 minutes each) to review/develop their projects (if some teams prefer to meet Dr. Devine before class so you can leave class early, contact Dr. Devine)

**Week 10: March 16**

**Prior to Class**
- Read Ch. 16.1-16.3 (Revenues, Costs and Profit Models) and watch Elon Musk video for Ch. 16
- Read Ch. 17.1-17.3 (Financial Plan Basics) and watch the video for Ch. 17
- Review Ch. 18.1 and 18.3-18.7 (you already read them earlier)
- Patent Homework: Using Google Patents, each student (not team) should find a patent closely related to their project technology, email me a pdf of the patent, and in the body of the email tell me briefly if judging ONLY from Claim 1 of that single patent if they think their idea might be patentable and why or why not. DUE 4pm, Thursday, March 17.

**Class**
- Guest Speaker (confirmed): Doug Dunlap, President, Syn-Tech Systems, Inc. (FuelMaster), Tallahassee
The Importance of Customer Focus in Establishing and Growing a Successful Technology Company

Each team presents updated project plan focusing on IP, estimated costs and revenues for at least first 2 years of their project and discusses possible sources of funding that might be utilized (10 minutes each including discussion)

Week 11: March 23

Prior to Class
- Read Ch. 19.1 & 19.2 (The “Elevator Pitch” and Critical Issues)
- Watch the 2 videos for Ch. 19 on Stanford website
- Watch elevator pitches from U. Miami competition at http://www.youtube.com/user/2011epitch
- Each person (NOT each team) prepares a 3-minute “elevator pitch” using at most 5 slides.
- Each team continues “customer discovery” (at least 2 more customers per team member)

Class
- Graduate Students Only: Each person presents a 3-minute elevator pitch for their team project. Any undergrad who want to present their elevator pitch may do so (great learning experience).
- Each team presents an update of their project commercialization plan focusing on additional customer discovery, revisions to the value proposition and competition assessment (15 mins each including Q&A). This update should include a revised/updated Business Model Canvas.

Week 12: March 30

Prior to Class
- Prepare a 15-20 slide Power Point attempting to address all aspects of your project following Content Outline and Kennedy Slide Template both posted on Blackboard and include an updated BMC.

Class
- All teams present their early draft “complete” final project presentation (10 min presentation, 10 min critique/discussion)
  - Guest Critics: Lawrence Tinker, Florida Institute for the Commercialization of Public Research, and Christine Urban, Domi Station

Week 13: April 6

Prior to Class
- Teams continue with customer discovery (at least 2 more interviews per team member), updates to BMC, and any changes per GUEST CRITICS
- Each team meets with Dr. Devine to review Power Points (to be scheduled on Tuesday April 5 or Wednesday April 6

Class
- Guest Speakers: Patrick Bresland, Founder and CEO of Optimal Bagging, (and recent ECE M.S. Graduate, “Lessons from Doing a Technology Startup While an Engineering Student” along with other young entrepreneurs TBD (shortened class)
- Thursday April, 5pm: 1st Draft Written Reports Due (WORD document emailed to Dr. Devine). Critique/Comments by Dr. Devine returned by Monday April 11

Week 14: April 13

Prior to Class
- Continue with customer interviews and revise presentations as needed. Continue to work on written reports.

Class
- REHEARSE Oral Presentations (15 min each with 5 min for Critique/Discussion) NOTE: A presentation schedule will be published and teams only have to attend the presentation immediately before theirs. They can use the rest of the time to “polish” their presentation

Week 15: April 20
5:30-8:00 PM: Final Presentations (15 min each with 10 minutes Q&A)

- Monday, April 25 (Finals Week)
  Final Written Reports Due (WORD document emailed to Dr. Devine by 6pm)

Grading Scale: A 90-100; B 80-89; C 70-79; D 60-69; F 0-59

Grading:
- Final Commercialization Plan Report (Team): 35%
- Final Commercialization Plan Presentation (Individual): 35%
- Assignments/Class participation (Individual): 10%
- Team evaluation of your contribution (Individual): 20%

Academic Honor Policy:

FAMU Students: Florida A&M University is committed to academic honesty and its core values which include scholarship, excellence, accountability, integrity, fairness, respect, and ethics. These core values are integrated into its academic honesty policy. Being unaware of the Academic Honesty Policy is not a defense to violations of academic honesty. A link to the complete policy is given below. Academic Honesty Policy violations shall be reported and appropriate actions taken by the department chair and associate dean for student affairs and curriculum. The complete policy can be found here http://www.famu.edu/Students/NEWFANG%202008-2010X.pdf

FSU Students: The Florida State University Academic Honor Policy outlines the University’s expectations for the integrity of students’ academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University.” (Florida State University Academic Honor Policy, found at http://dof.fsu.edu/honorpolicy.htm.)

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the appropriate university office. For FAMU students, this is the Center for Disability Access and Resources (CEDAR). For FSU students this is the Student Disability Resource Center (SDRC); and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. This syllabus and other class materials are available in alternative format upon request. For more information about services available to students with disabilities:

FAMU Students should contact:
Center for Disability Access and Resources (CEDAR)
667 Ardelia Court, Tallahassee, Fl. 32307
http://www.famu.edu/index.cfm?cedar
Email: cedar@famu.edu
Phone: 850-599-3180
Fax: 850-561-2513
TDD: 850-561-2783

FSU Students should contact:
Student Disability Resource Center (SDRC)
874 Traditions Way, 108 SSB, Tallahassee, Fl. 32306-4167
Attendance Policy:

First week attendance is mandatory for both FAMU students and FSU students. Class attendance will be taken each session and factored into your final grade under the category of “Assignments/Class participation.” Students will not be penalized, for attendance purposes, for excused absences. However, students with excessive excused absences may be assigned a grade of incomplete “I” and be asked to submit missing work at a later time.

Make-up Assignments Policy:

Class assignments may be accepted late, without penalty, with a valid excused absence. However, you must notify me in advance if your absence involves a planned event or observance of a religious holy day. If an emergency prevents you from attending a class you must notify me at your earliest opportunity. Students with a valid excused absence will not be arbitrarily penalized for missing class assignments or activities.

Course Drop/Withdrawl Deadlines:

The 7th week deadline is Friday, February 19, 2016
The 12th week deadline is Friday, April 1, 2016