

BE 4305: Engineering Entrepreneurship I
Fall 2010 Syllabus

Meeting Schedule: Wednesday 4:30pm to 7:20pm , Location 115 E.B. Doran

Text Book: **Biodesign: The Process of Innovating Medical Technologies** (Cambridge University Press), **Author: Zenios**
Technology Ventures: From Idea to Enterprise (McGraw-Hill), **Author: Byers, Dorf and Nelson**

Instructor: Daniel Hayes, E-mail: danielhayes@lsu.edu
Office Hours: By appointment

Teaching Assistant: None

Final Exam Date: TBD

Course Description:

This course is designed to familiarize engineering students with concepts and current practice in technology related business. Key instructional areas will be business planning, business finance, intellectual property and marketing. Several case studies of technology based businesses will be analyzed during the semester to illustrate the relationships between technology, finance, intellectual property, and marketing decisions in product development and deployment.

COURSE LEARNING OBJECTIVES:

1. Understand the key paradigms of business finance, intellectual property and marketing
2. Develop a more complete understanding of the business of technology and product development.
3. Develop skill sets in the management of business finance, intellectual property, marketing and sales.
4. Improve critical thinking and presentation skills.

Course Policies

- You will work on the **Case Study projects** in groups. Each group will have the opportunity to present their work in front of the class at the end of the semester.
- **Examinations** missed due to an unexcused absence cannot be made up and a grade zero will be given for each one missed.
- Any student requiring **special arrangements** for taking exams, taking-notes and other special arrangements please see or contact the instructor within the first two weeks of class.

Academic Integrity

Students are expected to comply with the Code of Student Conduct throughout this course. For your information, the Code of Student Conduct can be found at [http://app1003.lsu.edu/slas/dos.nsf/\\$Content/Code+of+Conduct?OpenDocument](http://app1003.lsu.edu/slas/dos.nsf/$Content/Code+of+Conduct?OpenDocument)

Grading policy: Grades will be determined based on the following break down:

Exams (2) 20% each, Group Case Study 60%

Grade Assignments: A (> 90), B (80-89.9), C (70-79.9), D (60-69.9), F (<60)

LECTURE SCHEDULE

Date	Topic	Readings
Week 1	Strategic Focus	Section 1.1 & Business Model Archetypes
2	Observation & Problem Identification	Section 1.2 & Attributes of Entrepreneurs
3	Need Statement Development	Section 1.3 & Contexts and Traits
4	Assessing a Disease State	Section 2.1 & The Importance of the Entrepreneurial Economy
5	Understanding Treatment Options	Section 2.2 & TBD
6	Stakeholder Analysis	Section 2.3 & TBD
7	Market Analysis	Section 2.4 & TBD
8	Weighing Factors and Filtering Needs	Section 2.5 & TBD
9	Need Brainstorming	Section 3.1 & TBD
10	Organizing and Selecting Concepts	Section 3.2 & TBD
11	Intellectual Property & Regulatory Basic	Section 4.1 & 4.2
12	Business Models	Section 4.4. & TBD
13	Leadership-Vision and Motivation	TBD
14	<i>Student Case Study</i>	

Exams: There are two exams, a midterm and a final each worth 20% of the total course grade. The exams will have both qualitative and quantitative portions testing theory and practical knowledge.

Case Study: This project will require group of students (4-5) to present a case study of a technology company. The project will include an analysis of the company, identification of problem areas, analysis of alternatives and proposed solutions/plan of action. The project is worth 60% of the total course grade.