BE 4306: Engineering Entrepreneurship II Fall 2013 Syllabus

Meeting Schedule: 115 E.B. Doran, Wednesday 4-7pm

Text Book: Technology Ventures from Idea to Enterprise, Authors: Byers, Dorf and

Nelson.

Biodesign: The Process of Innovating Medical Technologies (Cambridge

University Press), Author: Zenios

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. Garner experience in High Tech Business planning
- 2. Develop working knowledge of the New Product Development Process
- 3. Understand Cost and Pricing Techniques
- 4. Develop working knowledge Feasibility Analysis Techniques

Course Policies

- You will work on the **tissue engineering design 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://appl003.lsu.edu/slas/dos.nsf/\$Content/Code+of+Conduct?OpenDocument

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

Exams (2) 25% each, Business Plan Competition 50%

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

LECTURE SCHEDULE

	Topic	Readings
Week 1	Introduction to course and Identifying Technology	TV- Part 1 sec 2
	Opportunities and Needs/R&D	BD-4.5, 5.2
2 3 4		TV Part 1 sec 3
		BD- 5.9, 6.2 and
		Moodle
	Competitive Strategy	TV Part 2 sec 4
	•	BD 5.7 and Moodle
	IP Strategy	TV Part 2 sec 10
		BD 5.1 and Moodle
5	Business Plan	TV Part 2 sec 7
		BD 6.2
6	Types of Ventures/ROI	TV Part 2 sec 6 & 8
7	Regulatory Strategy	BD 4.2, 5.4 and
		Moodle
8	Clinical Strategy	BD 5.3 and Moodle
9 10	Market Strategy	TV Part 3 sec 11
	Sales and Distribution	TV Part 3 sec 11
		BD 5.8 and Moodle
11	Operations and Management	TV Part 3 sec 14
12 13	Financial Model	TV Part 4 sec 17
		BD 6.1 and Moodle
	Financing	TV Part 4 sec 18
		BD 6.3 and Moodle
14	Student Business Plan Competition	
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	2 3 4 5 6 7 8 9 10 11 12 13	1 Introduction to course and Identifying Technology Opportunities and Needs/R&D 2 Product Strategy and Models 3 Competitive Strategy 4 IP Strategy 5 Business Plan 6 Types of Ventures/ROI 7 Regulatory Strategy 8 Clinical Strategy 9 Market Strategy 10 Sales and Distribution 11 Operations and Management 12 Financial Model 13 Financing

Exams: There are two exams, a midterm and a final each worth 25% of the total course grade. The exams will have both qualitative and quantitative portions testing theory and practical knowledge.

Business Plan Competition: This project will require group of students (4-5) to develop and present a business plan for of a technology based company. Technologies should be chosen from the peer reviewed literature or university IP portfolio. The business plan is worth 50% of the total course grade.