

BE467: Design, Development, Marketing and Entrepreneurship in Biomedical Engineering

FALL 2009

Professor: Thomas L. Szabo

MEETINGS: 2 Hours / Week; Fall Semester *Mostly Mondays 4-6 PM* in Photonics 206, 8 St. Mary's St.; UNLESS TIME SPECIFIED OTHERWISE Occasionally, Fridays 11 am -1 pm—please check schedule for times

A combined academic and industry taught course educating students on project definition, and on the design, development and technology transfer of potential biomedical products in the context of the student's project. Lectures will be provided by various members of the BME Industrial Advisory Board, as well as BU faculty. Students will learn best practices for bioengineering device development including: product development via design and process control, intellectual property and innovation in biomedical engineering (including patents), and clinical regulatory issues, including clinical trial design. School of Management faculty will emphasize marketing, technology transfer and entrepreneurship for bioengineering products. Faculty will provide case study examples of such. This is a required co-requisite to BE465 in the Fall for BME Seniors.

Grading: Course Assignments 70%, Quizzes 20%, Participation 10%

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SEMESTER 1: (BE 467)

Lect	Date/Lecturer	Topic
1	Coulter (Rosenthal) 9/14	Introduction to Course: Transition from Engineer to Product Developer: BME in Industry
2	SPH (Keusch) 9/21	Global Healthcare: (Joint lecture with BE 465)
3	Industry (Burns) 10/5	Medical Device Development: Quality Systems, Standards, Design and Process Control
4	Industry (Girouard) 10/9 <i>Note this lecture is given on Friday, 11-1 in PHO 206!</i>	Intellectual Property and Innovation in BME
5	Industry (Burns) 10/13 <i>Tues 4-6 *Monday schedule on Tuesday because of Monday holiday!</i>	Student Case Studies: Medical Device Development
6	SMG (Russo) 10/19	Marketing Driven Strategies and Marketing
7	Industry (Rosenthal) 10/26	Case Studies: Intellectual Property and Innovation in BME
8	SMG (Russo/Stevens/Rosen) 11/2	The University as a Catalyst for Biomedical Innovation
9	Industry (Kung) 11/9	Clinical Regulatory Issues in BME
10	Industry (Jones) 11/16	Quality Control and Reliability in Hardware and Software-based Medical Device Industry
11	SMG (Russo) 11/23	Entrepreneurship in Biomedical Engineering -1: Start up Process
12	SMG (Faculty) 11/30	Entrepreneurship in Biomedical Engineering – 2: Case Studies
13	BME (Szabo/Rosen) 12/07	Global Considerations of Biomedical Engineering

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