



Biomedical Micro/Nanotechnology

BIOMEDE 4610

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Introduction to micro/nanotechnology in biomedical settings, including micro/nanotechnologies used to investigate biological systems, physiological responses to nanotherapeutics, and first principles of microfluidics and microfabrication.

Prerequisites and Co-requisites:

Prereq: 2000, MatScEn 2010, and Biochem 4511 or BiomedE 2200; or permission of instructor.

Course Goals / Objectives:

- Describe design features of micro/nano therapeutics and diagnostics
 - Describe processes occurring at micro/nanoscale that can be exploited in therapeutic or diagnostic devices
 - Make predictions of nano- and microparticle behavior in flow
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Course Topics:

- Microdevices
 - Nanodevices
 - Immunological Response
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Designation:

Elective