

# Course Schedule - Spring 2006

## Bioengineering

598 **Special Topics** Credit: 1 to 4 hours.

Study of selected topics in regular course format; variable content. May be repeated up to 8 hours a term to a total of 12 hours. Prerequisite: As specified for each topic offering; see Schedule or departmental course information.

CRN	Type	Section	Time	Days	Location	Instructor
45455	laboratory-discussion	MFI	11:00 AM - 12:50 PM	T		Insana, M
45455: Instructor Approval Required						
45455: 2 hours Topic: Ultrasonic Array Signal Processing. Class will meet in instructor's research lab at Beckman. Topics: Basics of acoustic wave propagation. Pressure fields from focused, extended single-element radiators and arrays. Introduction to Fourier Optics for designing ultrasonic transducers. Linear systems and complex field representation for imaging and velocity estimation applications. Introduction to Field II for simulating pressure fields. Introduction to data acquisition on the Siemens Antares scanner for research applications.						