

## **BME 322: Sensors and Nanodevices in BME** <u>Biomedical Engineering</u>

Introduction to fundamentals and major types of sensor systems, scaling laws of device, miniaturization, and detection mechanisms, including molecular capture mechanisms; electrical, optical, and mechanical transducers; micro-array analysis of biomolecules; semiconductor and metal nanosensors; microfluidic systems; and microelectromechanical systems (MEMS, BioMEMS) design, fabrication and applications for biomedical engineering. 3 Credits

## Prerequisites

BME 311: Biomechanics

## Instruction Type(s)

• Lecture: Lecture for BME 322

## **Subject Areas**

Bioengineering and Biomedical Engineering

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

