Prerequisite: This course is open to all graduate students with an interest in Biomedical Engineering. Only a basic knowledge of physics and calculus is required. Undergraduate students are encouraged to register.

Class Meeting: MWF 2nd period Location TBA

Class Homepage: http://plaza.ufl.edu/oostrom/bme5937.html


Course Objectives: This course will present all the major methods for measuring physiological signals from the human body. Whenever possible, actual physiological monitors will be used for the students to try out. Major topics include:

- Basic concepts of medical instrumentation
- Basic sensors and principles
- The origin of biopotentials
- Biopotential electrodes
- Blood pressure and sound
- Measurements of flow and volume of blood
- Measurements of the respiratory system
- Chemical biosensors
- Clinical laboratory instrumentation
- Electrical safety

Grade Determination: 1/3 Homework, 1/3 midterm, 1/3 Final

Policies: Late policy for homeworks: 20% deducted per day, unless prior arrangements were made with the instructor. All work is individual; students are encouraged to work together on the homeworks, but the work that's handed in must be individual work.

Academic Honesty

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." We agree to comply with the new Honor Code, which specifies that "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."