

## Survey of Medical Physics

ENU 6061

Fall 2005

**Instructor:** Dr. David E. Hintenlang  
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**Lectures:** Period 3 Thursdays  
Room 225 NSC

**Textbook:** Handouts

**Class Periods:** Class periods will typically include a 40 minute lecture and discussion on the designated topic, followed by a 10-15 minute discussion of current events in medical physics. Students are expected to become increasingly well informed of the implications related current issues in medical physics as the course progresses.

**Course Description:** An overview of the areas of medical radiological physics including diagnostic radiography, nuclear medicine, and radiation therapy. Basic radiation physics, biology, and safety.

**Course Objective:** The course is designed to provide a practical and technical introduction to the profession of Medical Physics and the Medical Physics Program at UF. The course has the objectives of having students:

1. Integrate the theory of radiation physics, detection, biology, anatomy/physiology, and safety to address problems in medical physics.
2. Develop a clear understanding of the requirements for pursuing a professional career in medical physics.
3. Develop an appreciation for the administrative requirements and academic and research resources available through the medical physics graduate program.
4. Maintain an awareness of state-of-the-art developments in medical physics and be conversant on these topics.

**Grading:**

Attendance	25%
Class Participation	25%
Exam #1	25%
Final Exam	25%

## Topics Outline & Course Schedule

### ENU 6061 – Survey of Medical Physics

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Date	Course Topic
August	25 Introduction to Medical Physics Program, Profession & Professional Societies
	30 Physical & Biological Principles of Med Physics
September	1 X-ray and Ultrasound Imaging Lab
	8 Medical Terminology & Basic Anatomy
	15 Professional Certification & Licensure
	22 ABR & Board Exam Problems
	29 Clinical Diagnostic Physics Practice
October	6 Clinical Therapeutic Physics Practice
	13 Clinical Nuclear Medicine Physics Practice Examination
	20 Radiation, Laboratory Safety & Important Regulations
	27 Medical Errors and PRA
November	3 Ethics and Professional Responsibility
	10 Reimbursement for Medical Physics Services
	17 Facility Accreditation Programs and the Medical Physicist
	24 Thanksgiving Holiday
December	1 Radiological Physics and Terrorist Attacks
	13 <b>Final Examination (12:30pm-2:30pm)</b>

## **Policies:**

### **Academic Honesty**

All students are required to abide by the University's honesty policy as published in UF Rule 6C1-4.017. Students should be familiar with the entire rule which can be reviewed at: <http://www.aa.ufl.edu/aa/Rules/4017.htm> and specifically addresses cheating;

Cheating -- the improper taking or tendering of any information or material which shall be used to determine academic credit. Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual(s) on a take-home test or homework when not specifically permitted by the teacher; looking or attempting to look at another student's paper during an examination; looking or attempting to look at text or notes during an examination when not permitted. Tendering of information includes, but is not limited to, giving your work to another student to be used or copied; giving someone answers to exam questions either when the exam is being given or after having taken an exam; giving or selling a term paper or other written materials to another student; sharing information on a graded assignment.

### **Class Attendance**

Students are expected to attend each class period. Periods which may be missed should be brought to the attention of the Instructor as far in advance of the class period as possible. In the event of an unexcused absence, it is the student's responsibility to obtain and review the material that was covered during that class period.

### **Make-up Assignments**

Make-up assignments will only be considered for exceptional circumstances and will be implemented by the instructor on a case-by-case basis.

### **Class Demeanor**

Class distractions such as cell phones and pagers are unacceptable. Students will ensure that any such devices that are brought into the classroom will be turned off, or operated in a silent mode, during the class period.

### **Students with Disabilities**

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.