

George Mason University
Department of Physics and Astronomy
Physics 407: Senior Laboratory in Modern Physics (3:0:9).
Fall 2005

Web Site:

complex.mu.edu/www-phys/phys407

Instructors:

Professor B. Gluckman

Offices: 316 S&T I 115 Krasnow Institute

Phone: (703) 993-1324 (703) 993-4384

Email: BGluckma@gmu.edu

Office hours: by appointment.

Text:

Experiments in Modern Physics, second edition

by A Melissinos and J. Napolitano (Academic Press, 2003)

Meetings:

Monday/Wednesday 12:30-4:20.

The first ~½ hour will be lecture, held in room 310 S&T 1

The lab is also available to students when the department office is staffed.

Course Requirements and Grading:

- 1) (60%) Complete and submit full written report on at least 4 experiments. Oral explanation of the objectives, methods and instrumentation must be passed before performing each experiment. Reports from previous experiments must be completed and submitted before proceeding onto the next.
- 2) (15%) Two tests.
- 3) (5%) Radiation Safety Quiz. All students must pass this.
- 4) (10%) Homework and In-Class Presentations.
- 5) (10%) Final presentation.

Written Reports and Qualification as a Writing Intensive Course

This course fulfills the Writing-Intensive requirement in the physics major. It does so through the four written experiment reports due during the semester. Criteria, suggestions and guideline for such reports are posted on the course web site and will be discussed in class. The first of these reports will be completed through a draft/feedback/revision process. The first draft will be due no later than 9/24. I will provide commentary on the draft, and the revised draft will be due within 1 week of receipt of commentary.

Phys 407: Schedule 2005

Week of		
8/29		
9/5	(9/5 Labor Day, class canceled)	(9/7) Radiation Quiz
9/12		
9/19		(9/24) Lab 1 due
9/26		
10/3	(10/3 Gluckman out by 2pm)	
10/11	Class Meets Tuesday, 10/11	(10/12 Gluckman out by 2pm)
10/18		(10-20) Lab 2 due
10/24		
10/31		
11/7		(11-5) Test 2
11/14	(Gluckman SFN meeting)	(11-14) Lab 3 due
11/21		(11/23 – no class Wed)
11/28		
12/5	(Gluckman AES meeting)	
12/13		(12/14) lab 4 due. Final Presentations