ECE 565: INTRODUCTION TO OPTICAL ELECTRONICS

W 7:20 -10:00 pm – Music/Theater Building, Room #1002

Instructor:  Dimitris Ioannou, ENG Room #3248, tel. 993-1580, dioannou@gmu.edu

Office Hours: W 6:00-7:00 pm; other times by appointment

Textbook: "OPTOELECTRONICS AND PHOTONICS: Principles and Practices” by S.O. Kasap (Prentice Hall)

COURSE OUTLINE

1. Wave Nature of Light (two weeks)
2. Dielectric Waveguides and Optical Fibers (two weeks)
3. Semiconductors: A “Resume” (one week)
4. Light Emitting Diodes (one week)

Midterm Exam: Wednesday, March 16th

5. Stimulated Emission -- LASER Devices (two weeks)
6. Photodetectors (one week)
7. Optical Communication Systems (two weeks)
8. Solar Cells (one week)

Course Review

Final Exam: TBA

Grading

Homework -10%
Midterm - 40%
Final - 50%