EE420 Fourier Optics

Fall 2012

Prerequisite: EE 320 or equivalent, Familiar with Fourier Transform

Instructor:

Zhiwen Liu N-211 MSC, (814)865-2362, zliu@psu.edu

Times & location:

Tuesday & Thursday 9:45 am - 11:00 am at 109 EE West

Office hours:

Wednesday 4:00 pm - 5:00 pm, Thursday 4:00 pm - 5:00 pm, or by appointment

Textbook:

Introduction to Fourier Optics (J. W. Goodman)

Topics:

- Two dimensional Fourier transform
- Diffraction
- Fourier transform lens
- Imaging (lens, holography, novel imaging techniques)
- Introduction to fiber optics
- Special topics and lab demos

Policies:

1. Grading policy:

Homework 30%, midterm 30%, Final 40%

- 2. Homework Policy:
 - ✓ Put your name and the course number on the right upper corner of the first page. Staple all the pages together. Write down your solution clearly.
 - ✓ Collaboration is allowed but you must write down your own solution.
 - ✓ Homeworks are due one week after the assignment. They will be collected in class. Late homework will not be accepted unless approved by the instructor.
- 3. Exam policy:
 - \checkmark Both midterm and final exams will be close-book. No collaborations are allowed.
 - \checkmark In case of an illness, doctors' note is required.
 - ✓ In case of a conflict schedule, the instructor must be notified two weeks in advance.