Fourier Optics

EE4256/5520
Instructor: Professor Zhijun Zhao

Office Hour: 1. MWF following lecture. 2. Email appointments.
Class Schedule: 10:05 – 10:55AM, MWF, EERC Room 227
Midterm: TBA.
Final Exam: TBA.

Textbook:

Course Website:
http://www.ece.mtu.edu/faculty/zjzhao/teaching/FourierOptics_Fall2007/FourierOptics.html

Syllabus:
Background requirements: Fourier Transforms, Electromagnetics, and Signal Processing.
Chap. 2 – Analysis of Two-Dimensional Signal and Systems
Chap. 3 – Foundations of Scalar Diffraction Theory
Chap. 4 – Fresnel and Fraunhofer Diffraction
Chap. 5 – Wave-Optics Analysis of Coherent Optical Systems
Chap. 6 – Frequency Analysis of optical Imaging Systems
Selected Topics – TBA

General Policy:
1. Academic integrity is strictly enforced during the semester.
2. Cellphones and other electronic devices are supposed to be turned off during class.
3. Students are allowed to discuss homework problems in groups. However, students MUST finish and turn in homework solutions individually and independently.
4. Late homework will not be graded.
5. Midterm exam, final exam, and all quizzes are closed book exams. No notes and reference books are allowed. No electronics devices, including cellphone, calculators, ..., are allowed.
6. Undergraduate and graduate students will be graded separately.

Grading:

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<th>Component</th>
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<tr>
<td>Homework</td>
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<td>Quizzes</td>
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<td>Midterm</td>
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<td>Final</td>
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Quizzes are given during regular class meetings.
Graduate students are expected to do extra work during the semester.