

520.410 Fiber Optics and Devices

INSTRUCTOR: Jin U. Kang\ 'käng\

Course Time: TTh 1:30-3:00 AM

Hudson 305

(410) 516-8186, Email: jkang@jhu.edu

Office: Barton 205

Office Hour: Tues, Wed 10-11

TEXT: Fundamentals of Photonics, Saleh and Teich; Fiber Optic Communication systems, Agrawal; Elements of Photonics, vol I and II, by Keigo Ilzuka, recommended.

SUBJECTS:

1. Review basic optics
2. Review wave-optics
3. Introduction to waveguides
4. Fiber optics
5. Fiber optics devices
6. Fiber amplifier and lasers
7. Fiber optics sensors

HOMEWORK ASSIGNMENTS: I will assign homework after finishing the each subject area. The homework will be due at the beginning of next class period. No homework more than a week old will be accepted. Late homework will be panelized 1point per day.

EXAMINATIONS: There will be two written exams: one midterm and one final. The final exam will not be comprehensive.

Midterm Exam: March 13th, 1:30-3 pm

Final Exam: May 1st, 1:30-3 pm

FINAL PRESENTATION: Among the subjects above, you are to pick a subject that you will work on it for final presentation. The presentation would be much like a conference talk. You will pick a very specific topic, search all the references to identify prior works, and do your own calculations/simulations for the presentation which you will give during the final week. You should identify your subject before the end of February and I will advice each of you on your subject.

Presentations: May 1nd and 2nd, 9-10 am, Barton 117

GRADES: The final and mid term exam accounts for the 20% and 20% of total grade, respectively. The homework and the final presentation accounts for the 50% and 10% of total grade, respectively. Grades will be assigned according to the standard curve (A=90%, B=80%, C=70%, D=60%, F<60%).



ACADEMIC ETHICS:

An ethical campus fosters a positive sense of community and trust, while unethical actions and attitudes breed suspicion, cynicism, and negativity. Johns Hopkins University strives to be a community in which honesty and respect are valued and upheld, and in which all members of the community uphold the highest degree of ethical conduct.

Academic ethics is the responsibility of every student, faculty member, and staff person at Johns Hopkins University. You must take the time to learn about what is ethical and what is not - ignorance of ethical rules is not an excuse for cheating. If you see a violation take place, it is your responsibility to report it.

Examples of Academic Misconduct:

- * Cheating
- * Plagiarism
- * Reusing Assignments
- * Improper Use of the Internet
- * Improper Use of Electronic Devices
- * Unauthorized Collaboration
- * Alteration of Graded Assignments
- * Forgery and Falsification
- * Lying
- * Facilitating Academic Dishonesty
- * Unfair Competition

Contact Dorothy Sheppard, the Associate Dean of Students at 410-516-8208 or dsheppard@jhu.edu. For any question regarding ethics.

