

UNIVERSITY OF UTAH
DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

ECE 5320/6322

MICROWAVE ENGINEERING I

Fall 2012
WEB L120

1. I will attempt to cover the important topics discussed in Chapters 1-9 and Chapter 14 of the textbook by David M. Pozar, *Microwave Engineering*, Fourth Edition, John Wiley & Sons, Inc., 2012. Rather than cover each and every section of these Chapters, I will focus on the important concepts and cover these in detail.

Since there is very little difference between the new 2012 Fourth Edition and the older 2005 Third Edition of this book, you can use the Third Edition of the textbook by David M. Pozar, *Microwave Engineering*. I would refer to the corresponding pages and equations in the Third Edition on the few occasions when necessary.

2. I will also supplement some of the material by several handouts that will be posted on the course website.
3. The homework, typically two to three problems, will be assigned during each class period. The homework will be turned in at the ECE 5320/6322 drop-in locker by the Electrical and Computer Engineering office and will be due as follows:

Homework Assigned

Due

Mondays
Wednesdays
Fridays

following Fridays 5:00 p.m.
following Mondays 5:00 p.m.
following Wednesdays 5:00 p.m.

A student may miss three homework assignments (typically six homework problems) during the semester without any loss of credit. Two additional homework assignments (four homework problems) during the semester may also be turned in late by no more than three days without any loss of credit. If all of the assignments are turned in, we will ignore the two assignments with the worst grades in counting the total score for the homework.

Homework is important and will count for 15 percent toward the grade in the course.

4. The laboratory will start in the fifth week of the semester and will involve design using Agilent ADS software followed by fabrication and testing of the designed circuits.
5. I would like to encourage you to come and talk to me or else send me an email on problems with the homework or course material. My office hours are as follows:

Om Gandhi (4508 MEB)
MTWF 1:30-2:30 p.m.
e-mail: gandhi@ece.utah.edu

6. There will be two 50-minute open-book midterm examinations during the semester. Each examination will cover material in text, lectures, and homework assignments. Whereas Midterms I and II will be based on the material covered during each of the preceding five-week periods, the two-hour final examination will be based half on material covered after Midterm II and half on the earlier parts of the course.
7. At least two brief research assignments will be made both for ECE 5320 and ECE 6322 students during the semester. These will involve starting with a search on Google followed by study of important papers to determine the present state-of-the-art for areas of Microwave Engineering.

A report of 6-8 pages summarizing this research will be required for these assignments.

8. Some additional research assignments will be made for students registered for **ECE 6322**.

These additional research assignments will culminate in submitting reports of 6-8 pages summarizing the research.

9. The course grade will be based on the following:

Homework	15 percent
Laboratory	20 percent
Midterm I (Friday, September 21, 2012)	20 percent
Midterm II (Friday, November 2, 2012)	20 percent
FINAL EXAMINATION	
(Thursday, December 13, 2012	
10:30 am to 12:30 pm)	25 percent

I will grade on the curve with the grade average of the class between B and B+.

Semester Breaks

Monday, September 3	Labor Day
Sunday-Sunday, October 7-14	Fall break
Thursday-Friday, November 22, 23	Thanksgiving break
Friday, December 7	Classes end