

ECE 424 RF and Microwave Guided Propagation

Fall 2010

Lecture: 2:00-2:50 PM, M W F, 219 Taft Hall , CRN 25776 & 25777

Laboratory: 8:00 PM -10:50 AM, Friday, 4255 SEL, CRN 25775

Course Description: Maxwell's equations, transmission lines, Smith chart, strip lines, rectangular and circular waveguides, TE and TM waves, wave impedance, resonators, two-port parameters, power and energy considerations. Credit 4 U/5G.

Prerequisite:

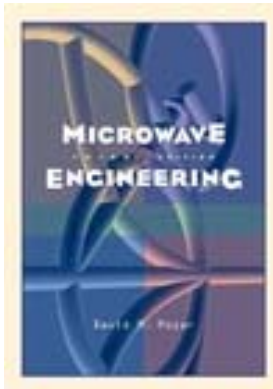
ECE 322

Instructor:

Prof. Sharad Laxpati Office: 1105 SEO Laxpati@uic.edu (312) 996-5493

Teaching Assistant:

Textbook:



Microwave Engineering, 3rd Edition

[David M. Pozar](#) (Univ. of Massachusetts at Amherst)
February 2004, ©2005

Microwave Engineering, 3rd Edition
by David M. Pozar
ISBN 978-0-471-44878-5
February 2004, ©2005
Hardcover, 720 pages
US \$177.95 [Add to Cart](#)

E-Book

Microwave Engineering, 3rd Edition
by David M. Pozar
ISBN 978-0-470-50872-5
March 2009, ©2005
E-Book
US \$106.50 [Purchase This E-Book](#)

Material to be covered:

- Review of Electromagnetics
- Coaxial, Rectangular and Circular Waveguides (TEM, TE and TM modes)
- Microstrip Transmission Lines
- Multi-Port Network Analysis; S-parameters
- Impedance matching devices and Quarterwave Transformer Design
- Resonators
- Passive Components: attenuators, phase shifters, directional couplers, filters

Student Assessment:

Laboratory assignments and reports	25%
Homework/Project	10%
Exams/Quizzes	40%
Final Exam	25%