ECE 836: Advanced Electromagnetic Fields and Waves II
Spring 2016

3:00 – 3:50 MWF 1230 Engineering Building

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Office Hours: MWF 11:30-12:20 2234 EB

Text: R.F. Harrington, Time-Harmonic Electromagnetic Fields, IEEE Press, 2001.

Primary reference: E.J. Rothwell and M.J. Cloud, Electromagnetics, 2nd ed., CRC Press, 2008.

Course web site: MSU Desire2Learn system (https://d2l.msu.edu/)
Class Notes: Dennis P. Nyquist, ECE 836 Class notes. Available on D2L.

Grading:

Homework:	25%	
Midterm exam:	25%	
Final Exam:	50%	

Assumed background: ECE 835 or familiarity with Maxwell's equations and experience with techniques for solving canonical problems in electromagnetics

Suggested References (on reserve in the Engineering Library)

J.A. Stratton, Electromagnetic Theory, McGraw-Hill, 1941.
C.A. Balanis, Advanced Electromagnetic Theory, Wiley, 1989.
S. Ramo, et.al., Fields and Waves in Communications Electronics, Wiley, 1994.
J.A. Kong, Electromagnetic Wave Theory, Wiley, 1990.
D.H. Staelin, et. al., Electromagnetic Waves, Prentice Hall, 1994.

Course Outline --

TOPIC	TEXT PAGES
Cylindrical Wave Functions	198-263
Spherical Wave Functions	264-316
Microwave Networks	381-446
Perturbational and Variational Techniques	317-380

Final exam: Wednesday, May 4, 2016, 3:00-5:00 pm.