

ECE 476 - Power System Analysis Fall 2016 TR 12:30-2 pm

Instructor: Tom Overbye, 4054 ECEB, 333-4463, overbye@illinois.edu

Office Hours (tentative): Tuesday 2 – 4 pm

TA: Iyke Idehen, idehen2@illinois.edu

TA Office Hours: Wednesdays 3-5 pm (tentative); location to be determined

Course Text: Glover, Overbye & Sarma *Power Systems Analysis and Design*, Sixth Edition, Cengage Learning, 2016.

Course Syllabus

Approx. # of hours

Introduction, review of phasors and three phase power	5
Transmission line parameter computation and analysis	5
Models for transformers, generators, and loads	3
Power flow analysis and control	8
Generation Control, economic dispatch and restructuring	4
Short circuit analysis, including symmetrical components	5
System protection	3
Transient stability	4
Distribution Systems and Load Control	3
Exams	3

Evaluation:	Two in-class exams (25 % each)	50%
	Final exam	35%
	Homework/Quizzes/project	15%

+/- grading will be used for the final course grade

Tentative Dates for Hour exams: Thursday, October 6 (in class)
Tuesday, November 15 (in class)

Final Exam: During Final Exam Week (date/time not yet set)

NoteSheets for Exams: All exams are closed-book, closed-notes. You may bring in one notesheet (8.5" by 11"), and may use standard calculators.

Homework and Computer Project(s): Homework based quizzes will be given most weeks; occasionally homework will be turned in, counting the same (and replacing) the quiz for that week. Additionally, there will be one graded design project.