

Tentative Schedule: EE 463 (071)

Power System Analysis

INSTRUCTOR	OFFICE	PHONE	OFFICE HOURS	E-MAIL
Dr. Ibrahim O Habiballah	59-2080	4985	SMW 12:00-12:50 pm	ibrahimh@kfupm.edu.sa

Textbook: Power System Analysis, by **Hadi Saadat**, McGraw Hill WCB, 2nd ed., 2002

References

- 1 Power System Analysis, **By Grainger** , McGraw Hill,1994
- 2 Elements of Power System Analysis, by **William Stevenson**, McGraw Hill 4th Edition, 1982

Chapter	No. of Lectures	Topics	Home Work problems
1-3	6	The Basic Concepts: representation, equivalent circuit, per unit system (notes + 3.13,3.14)	2.14,3.12,3.13,3.15,3.16
6	10	Power Flow Analysis (6.1-6.10)	TBA
7	5	Optimal Dispatch of Generation (7.1-7.4)	
8-9	9	Synchronous Machine Transient Analysis (8.1,8.2) & Balanced Fault (9.1-9.6)	
10	9	Symm. Components and Unbalanced Fault (10.1-10.9)	
11	3	Stability (11.1-11.6)	
	3	Project Presentations	

Grading

Home Work, Quizzes, and attendance	:	15
Exam I	:	20
Exam II	:	20
Term Project	:	10
Final Exam	:	35

Test I	:	5 November (7.30-9 pm)
Test II	:	8 December(7-8.30pm)

Each student should work all home work problems assigned by the instructor on an individual basis; some of these problems may be taken at random for grading. A grade of zero will be given for any problem turned in late unless excused in advance. There will be quiz for each homework.

Term Project:

The term project is supposed to simulate analysis and planning cases for a practical power system. The details of the project are to be elaborated by the instructors. Each student must submit his written individual report at the end of the semester. Each student's performance is evaluated based on the submitted report; on his case analysis results and based on his oral presentation at the end of the semester. Each student will be asked to defend his work individually.