

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

EE-465 (962)

Power Transmission and Distribution

Instructor: Dr. Ibrahim O. Habiballah

Office-Location: 14-265

Office-Hours: SMW 1:10pm-2:00pm

Extension: 4985

Text Book: Power System Analysis and Design, Glover & Sarma, 2nd Ed., 1994 (and Notes)

Course Description:

Fundamental concepts of transmission lines. Transmission line parameters and constants. Steady state and transient operation of transmission lines. Construction of overhead lines. Sag and tension analysis. Underground cables. Circuit breakers and protective relays for transmission lines. High voltage transmission lines.

Grade Distribution:	Home-works	15%
	Term-projects	20%
	Major Exams	30%
	Final Exam	35%

EE-465

Tentative Schedule

Semester (962)

Week #	Subject
1-3	Transmission Line Parameters
4-5	Transmission Line Steady State Operation
6-7	Transmission Line Transient Operation
8	Transmission Line Insulators
9-10	Underground Cables
11-13	System Protection
14-15	HVDC Transmission
Final Exams	16

Projects:

There are two design projects. These projects reflect implementation of certain topics from the course outline and may require the use of computer programming.

Field Trips:

There will be one or two field trips. These trips are meant to give clear pictures to some of the power system components that are covered in the course materials.