

Course Outline:

Week	Topic	Chapter
1 (8/28)	Review of dynamics and transient in Power Systems (2 classes)	GS Ch. 13 and 12 Kundur Ch.1 Greenwood Ch. 1
2-5 (9/6)	Transient Stability-Classical Modeling Generator and network models Swing Equation, Qualitative analysis Equal Area Criterion Network Reduction Simulation (7 classes) <i>Test 1</i>	GS Ch.13/Kundur Ch. 13
6-8 (10/9)	Advanced Modeling Synchronous Machine dqo model Simplified models for stability studies Excitation Systems (6 classes)	Kundur 3.1-3.7, 5.1-5.4, 8.1-8.3
9-10 (10/30)	Voltage Stability <i>Test 2</i>	Kundur 14
11-14 (11/8)	Electromagnetic Transients <i>Test 3</i> Overvoltage Transients-Lightning , Switching Lumped and distributed-parameter circuits Analysis Introduction to insulation coordination	Glover/Sarma 12 Greenwood 1-6, 9,14,15

Students with Disabilities:

If you have or believe you have a disability, you may wish to self-identify. You can do so by providing documentation to the Office for Services for Students with Disabilities, located at Garcia annex (phone 646-6840). Appropriate accommodations may then be provided for you. If you have a condition which may affect your ability to exit safely from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the director of Disabled Student Programs. If you have general questions about the Americans with Disabilities Act (ADA), call 646-3635.

Prepared by: Satish J. Ranade, August 1, 2006

Notes:

- 0. Collaboration on Homework Assignments/Projects/Summaries is permitted.
- 1. Do not provide or seek help from others on Tests.

Violation of rule 4 will result in an automatic "F" grade and a recommendation for suspension.

GRADING POLICY

Homework	Assigned each lecture, due following Monday	20%
Tests	3	60%
Projects		20%

On Campus Students – Each unexcused absence will cost you 2%

The grading scale is absolute 90 - 100 = A, 80 - 89 = B, 70 - 79 = C, 60 - 69 = D , < 60 = F

Late homework Policy: Unless prior arrangements are made, *Late Homework Will Not Be Graded*. However you will be given 50 % of the credit if you turn homework in prior to the next scheduled test.

