

CALIFORNIA STATE UNIVERSITY, CHICO
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

Course Outline: EECE 484 Power System Distribution and Analysis (4 units)

Instructor: Dr. Adel A. Ghandakly OCNL 308

Catalog Data: EECE 484 Power Systems Distribution and Analysis. 4 hour. Prerequisite: EECE 311. Power system symmetrical components, fault analysis, transient stability analysis, sequence impedances of transmission systems, and distribution networks.

Objective: This course is designed to teach seniors in EECE how modern large power systems perform under contingency situations, including fault, load change and other dynamic conditions.

Textbook:

“Power system Analysis”, Hadi Saadat, 2nd edition, McGraw-Hill, 2002.

Reference Books:

“Analysis of Faulted Power Systems”, Paul Anderson, Iowa State University Press.

“Electric Energy Systems Theory: An Introduction”, O. Elgerd, McGraw-Hill.

Topics:

1. Power system symmetrical components
2. Sequence impedances of transmission systems
3. Fault analysis
4. Concept of power system dynamics and stability
5. Power System Stability analysis
6. An overview of power system distribution networks.