

EE455

Introduction to Energy Distribution Systems

Tuesday and Thursday 4:10 pm-5:30 pm
Coover Hall 1016

Instructor: Dr. Zhaoyu Wang

Office: 1113 Coover Hall

E-mail: wzy@iastate.edu

Office Hours: Tuesday 2:30-3:30 pm or by email
appointment

Required Texts:

Distribution System Modeling and Analysis, 4th edition, William H. Kersting, 2017.

Tentative Course Schedule:

Week	Class Dates	Class Topic	Book Chapter
1	January 17	Fundamentals of distribution systems	Chapter 1
	January 19	Fundamentals of distribution systems	Chapter 1
2	January 24	Nature of Loads	Chapter 2
	January 26	Nature of Loads	Chapter 2
3	January 31	Approximate method of Analysis	Chapter 2
	February 2	Approximate method of Analysis	Chapter 3
4	February 7	Approximate method of Analysis	Chapter 3
	February 9	Series Impedance	Chapter 4
5	February 14	Series Impedance	Chapter 4
	February 16	Series Impedance	Chapter 4
6	February 21	Shunt Admittance	Chapter 5
	February 23	Shunt Admittance	Chapter 5
7	February 28	Review and Examples	Chapter 5
	March 2	Distribution system line models	Chapter 6
8	March 7	Midterm exam	Midterm Exam
	March 9	Distribution system line models	Chapter 6

9	March 14	Spring Break	
	March 16	Spring Break	
10	March 21	Distribution system line models	Chapter 6
	March 23	Voltage regulation	Chapter 7
11	March 28	Voltage regulation	Chapter 7
	March 30	Voltage regulation	Chapter 7
12	April 4	Three-phase transformers	Chapter 8
	April 6	Three-phase transformers	Chapter 8
13	April 11	Three-phase transformers	Chapter 8
	April 13	Three-phase transformers	Chapter 8
14	April 18	Distribution system power flow analysis	Chapter 10
	April 20	Distribution system power flow analysis	Chapter 10
15	April 25	Distribution system power flow analysis	Chapter 10
	April 27	Distribution system power flow analysis	Chapter 10
16	May 2	Review and examples	
	May 4	Review and examples	
Final	May 8-12	Final exams	