EE 314 - COURSE SYLLABUS FALL 2016

Instructor : K. Dudeck
Office : L-104
Hours : Hours are posted, additional hours by appointment.

Text: Eriwn, Basic Engineering Circuit Analysis, 11th Edition, Wiley Publishing, 2015.

EE 314: *Signals and Circuits II* (3:3:0) Circuit analysis including op-amps, and ideal transformers; frequency response; one/two port network models; three-phase and industrial loads; engineering professionalism. Prerequisites: EE 210, CMPSCI 200, or 201, or 121

Policies:

1. Students are expected to read the listed text sections prior to each lecture period. (See outline)

2. Students are expected to complete the assigned homework problems after each lecture period. (See outline)

3. At the end of each chapter students should be prepared to discuss their solutions in class.

4. Regular class attendance is expected.

5. Three quizzes will be given during duration of the course, each quiz has a in class part and a take home part. Students may elect to work together on the take home part, however excessive collaboration may affect individual performance on examinations.

6. Academic integrity in expected. Cheating will result in an issued zero for the said exam or quiz. See attached PSU policy.

7. Grading: Grading is strictly on a point system.

(3) QUIZZES :	100 pts (25, 25, 50pts , highest doubled)
(3) EXAMS :	250 pts (100, 100, 50pts)
FINAL EXAM :	100 pts
TOTAL :	450 pts

(A=405; B+=391; B=360; C+=346; C=315; D=270)

Academic Integrity at Penn State : A Statement by the Council of Academic Deans

Academic integrity mandates the pursuit of teaching, learning, research, and creative activity in an open, honest, and responsible manner. An academic community that values integrity promotes the highest levels of personal honesty, respect for the rights, property, and dignity of others, and fosters an environment in which students and scholars can enjoy the fruits of their efforts. Academic integrity includes a commitment neither to engage in acts of falsification, misrepresentation, or deception, nor to tolerate such acts by other members of the community.

Academic integrity is a fundamental value at Penn State. It must be at the heart of all our endeavors and must guide our actions every day as students and as members of the faculty, administration, and staff. Because we expect new and continuing members of the University community to meet the high standards that are the foundation of a Penn State education, this message must be clear and reinforced frequently.

The primary responsibility for supporting and promoting academic integrity lies with the faculty and administration, but students must be active participants. A climate of integrity is created and sustained through ongoing conversations about honesty, trust, fairness, respect, and responsibility and the embodiment of these values in the life of the University. Students and faculty should contribute actively to fostering a climate of academic integrity in all their scholarly activities, through discussions in first-year seminars and in other courses, and through involvement in college Academic Integrity Committees. The University community should be continually mindful of the need to preserve academic integrity even as technology changes methods of information access and use.

Colleges will provide all faculty members and teaching assistants information about appropriate ways to promote academic integrity and handle dishonesty cases. Faculty members and graduate assistants must make clear their expectations about academic integrity in every course they teach.

As members of the Council of Academic Deans, we strongly support efforts to enhance academic integrity at Penn State. We will provide individual and collective leadership to strengthen further the University's commitment to the highest standards of academic integrity.

August 29, 2000

EE 314 Tentative Outline and Homework Assignments - K. Dudeck Text : Erwin 11th Edition 2015

Period	Topic	Text Reading	Problems
1	Intro	Chapter 7	7.106, 112
2	Review of Phasors/Complete Response	Chapter 8	8PFE- 1,2,3,4,5
3	RMS and Average Power	9. 1,2	9. 1, 4, 7, 58
4	MAX Power	9. 3,4	9. 23, 32, 35
5	Apparent Power	9. 5	9. 74, 76, 78
6	Homework		
7	Complex Power	9. 6	9. 69, 92
8	Power Factor Correction	9. 7	9. 96, 101
9	Magnetically Coupled Circuits	10. 1	10. 1
10	Homework/Quiz 1		
11	Magnetic Field Equations	10. 2	10. 3, 7, 9
12	Transformers	10. 3,4	10. 45, 46, 48
13	Transformer Applications	10. 5	10. 50, 52, 68
14	Review		
15	Exam I		
16	<Open>		
17	Three Phase Circuits	11. 1	11. 5
18	Delta/Wye Connections	11. 2	11. 12, 13, 19
19	Delta/Wye Transformations	11. 3	11. 9, 45, 50
20	Three Phase Power	11. 4	11. 57, 58, 72
21	Homework		
22	Three Phase Power	11. 5	11. 83, 86
23	3 ¢ Power Factor Correction	11. 6	11. 92, 93
24	Transfer Function	12. 1	12. 2, 3
25	Homework/Quiz 2		
26	Bode Plots	12. 2	12. 11, 14, 31
27	Bode Plots		12. 20, 13,26
28	Bode Plots: Complex Roots	12. 3	12. 24, 30
29	Review		
30	Exam II		
31	<Open>		
32	Two Port Networks	16. 2	16. 8, 17
33	Z- Parameters		16. 16, 22, 36
34	TPN Analysis		16. 9, 53
35	Y- Parameters	16. 1	16. 2, 3, 38
36	Homework/Quiz 3		
37	Interconnected TPN's	16. 5,6	16. 26, 49
38	Transmission Parameters	16. 3,4	16. 30, 41
39	Review		
40	Exam III		
41	Laplace Transform	13. 1,2	13. 2
42	Laplace Transform Pairs	13.3	13. 3
43	Laplace Properties	13.4	13. 17,45
44	<Open>		
45	Review		**FINAL EXAM**