

EE 303/503-(3.0) – Circuit Analysis II

Instructor: Arnab Kumar Shaw, Dept. of EE, WSU

Office: 427 Russ Center (Phone: 775 5064; Fax: 775-5009)

Email: ashaw@cs.wright.edu

Textbook: — James W. Nilsson and Susan A. Riedel, Electric Circuits, 7th edition., Chapters 9, 10, 11, 14 (part) and 18 (part, if time permits); Pearson Prentice-Hall, 2005.

Note: In the New 7th Edition, Mutual Inductance has been moved to Chapter-6. If this topic has not been covered in EE-301, then Sections 6.4 and 6.5 will be included in the Syllabus.

Goals : — This second Circuits course is designed to provide each student with concepts and tools needed to understand alternating current, power and more advanced circuit analysis and design. The course is designed to be taken preceding or at the same time as the associated laboratory, EE 304 (1 Credit).

Prerequisites: — EE 301, 302/501, 502 (with a grade “D” or better)

Objectives: — Circuit Analysis II is designed to help the engineering students to understand the following concepts :

- **Chapter 9** : Sinusoidal Steady-State Analysis; **Homework Problems** : 9.4, 9.11 (d), 9.18, 9.24, 9.27, (due 9/14); 9.29, 9.40, 9.43, 9.46, 9.51 (due 9/21)
- **Chapter 14** : Frequency Selective Circuits (14.1-14.4); **Homework Problems** : 14.3, 14.8, 14.16 (due 9/28)
- **Chapter 10** : Sinusoidal Steady-State Power Calculation; **Homework Problems** : 10.7, 10.11, 10.15, (due 9/28); 10.22, 10.28, 10.19, 10.23, 10.37 (due 10/05)
- **Chapter 6, 9** : Mutual Inductance and Transformer Principles; **Homework Problems** : 6.41, 6.42 (due 10/05), 9.66, 9.67, 9.69, 9.71, 9.73 (due 10/12)
- **Chapter 11** : Balanced Three-Phase Circuits; **Homework Problems** : 11.6, 11.17, 11.18 (due 11/04), 11.23, 11.25, 11.30 (due 11/11)

Exam Schedule :	Mid-term I :	(Tentative Date : Oct. 5th)	20%
	Mid-term II :	(Tentative Date : Nov. 2nd)	25%
	In-Class Quizzes (about six)		5 %
	Home Work (weekly, about eight)		10%
	Final Exam (Comprehensive) :	(Thursday, Nov. 18th, 3:15-5:15 pm)	40%

Other Information

- (a) No make-up examination will be given unless the student has received permission from the instructor prior to the examination or has experienced some emergency beyond control!!
- (b) Students are permitted to use a self-prepared study guide (Formulas, Tables etc.) during the exams, as announced by the Instructor prior to the exams. Students are **not allowed** to bring in solved problems, steps or procedures to solve particular types of problems.
- (c) Homework will be assigned and graded regularly and the solutions will be posted in the EE Department. The lowest grades in Homework and Quiz will be dropped.
- (d) Students are expected to work out all the assignments **independently** and turn in his/her works on time (which will be announced in class).
- (e) The students are expected to make use of the posted office hours to have their academic difficulties resolved. Students are welcome at other times, but please give a call to make sure the Instructor is available.

Office Hours	Tuesday	Thursday	
	9:30–10:30 am	9:30–10:30 am	and by Appointments