

EE 205 ELECTRIC CIRCUITS II

| INSTRUCTOR | OFFICE | PHONE | OFFICE HOURS* | E-MAIL |
|-------------------------------|----------|-------|-------------------|--|
| Dr. Abdelmalek Zidouri | 14-209-1 | 3677 | SMW 10:00 – 11:00 | malek@kfupm.edu.sa |

* Or by prior appointment

First Semester (051) Tentative Schedule

Textbook: *ELECTRIC CIRCUITS*, Nilsson & Riedel, 6th Edition, 1999.

| W | Date | Topics | Text Section | Practice Problems | Quiz and Homework Due Date |
|---|--------------|---|--------------------|---|----------------------------|
| 1 | Sept. 10-14 | Balanced three-phase circuits | 11.1-11.3 | Hw#1: Ch.11 6,7,20,24,28,40 | 24-9-05 |
| 2 | Sept. 17-21 | Balanced three-phase circuits | 11.4-11.6 | | |
| 3 | Sept. 24-28 | Natural and step responses of RLC circuits | 8.1-8.2 | Hw#2: Ch.8 3,10,25,32,37,47 | 8-10-05 |
| 4 | Oct 1-5 | Natural and step responses of RLC circuits | 8.3-8.4 | | |
| 5 | Oct 8-12 | Natural and step responses of RLC circuits. State equations and computer aided circuit analysis. | 8.5 Handout* | Hw#3: Ch. 7 (Bobrow) 9,21,25,38,40 | 22-10-05 |
| 6 | Oct 15-19 | State equations and computer aided circuit analysis | Handout | | |
| Major I Oct 18, 6-7.30 pm (B14-108); Up to sec. 8.5 | | | | | |
| 7 | Oct 22-26 | Resonant circuits | Handout | Hw#4: Ch. 10 23,26,27,33 | 14-11-05 |
| Id Al-Fitr Vacation | | | | | |
| 8 | Nov 12-16 | Resonant circuits, Circuit analysis in s-domain | Handout | Hw#5: Ch. 10 40,42,50,54 | 26-11-05 |
| 9 | Nov 19-23 | Circuit analysis in s-domain | Handout | | |
| 10 | Nov 26-30 | Circuit analysis in s-domain Mutual inductance and transformers | Handout 6.4-6.5 | Hw#6: Ch.6:36,39 Ch.9:60,63,68 | 3-12-05 |
| 11 | Dec 3-7 | Mutual inductance and transformers | 9.10, 9.11 | | |
| 12 | Dec 10-14 | Filters and Bode plot | 14.1-14.4 | Hw#7: Ch. 14 4, 7,8,12,31,33(c),34 | 17-12-05 |
| 13 | Dec 17-21 | Filters and Bode plot | 14.6-14.7 | | |
| Major II Dec 20, 6-7.30 pm (B14-108); Up to transformers (sec 9.11) | | | | | |
| 14 | Dec 24-28 | Two-port networks | 18.1-18.2 | Hw#8: Ch. 18 3,10,11,20,30 | 31-12-05 |
| 15 | Dec 31-Jan 4 | Two-port networks | 18.3-18.4 | | |
| Id Al-Adha Vacation | | | | | |

* Lecture Notes can be downloaded from your WebCT course pages. Handout will be provided on the 4th week.

Grade Distribution

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| 2 Major Exams | 40% |
| Final | 35% |
| Quiz | 15% |
| Project | 10% |

- **Project:** Three projects will be assigned to the students during the term. The first one on three-phase circuit solution using Pspice, the second one on numerical solution of state equations using any computational language, and the third one will be a design project carrying more weight than the other two.
- **Official Excuses:** Any make up will require official excuses. Personal excuses will not be accepted. Excuses must be submitted within a week.
- **Practice problems:** Students will solve the practice problems. They will be tested for the problems through related quizzes. Solutions to the practice problems will be posted on WebCT
- **Quizzes:** Quizzes will be conducted on the basis of topics or chapters. The homework solutions will be made available accordingly.