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| **1. Course title/number, number of credit hours** |
| Circuits 2 – EEL 3112-001 CRN 811572 |  2 credit hours |
| **2. Course prerequisites, corequisites, and where the course fits in the program of study** |
| Prerequisites: EEL 3111 - Circuits 1 |
| **3. Course logistics** |
| *Term*: Spring 2016*Class location and time*: T – R 9:30-10:50 AM (Lecture) PS 113This course has no design content. |
| **4. Instructor contact information** |
| *Instructor’s name**Office address**Office Hours* *Contact telephone number**Email address* | Dr. Martin G. Gazourian, Professor EmeritusEE 531 (Bldg 96)M: 9:30 – 15:30; TR 11:00 – 15:00 561-297-3414gazouria@fau.edu  |
| **5. TA contact information** |
| *TA’s name**Office address**Office Hours* *Contact telephone number**Email address* | N/A |
| **6. Course description** |
| Analysis of and design with second order circuits, complex power, 3-phase power, frequency response, two-port networks. |
| **7. Course objectives/student learning outcomes/program outcomes** |
| *Course objectives* | This course will provide the student with both the theory and applications of the fundamental principles of electrical circuits. Thevenin equivalence, RLC circuits, power concepts, 3-phase power transmission, filters, amplifiers, 2-port networks are studied. |
| *Student learning outcomes**& relationship to ABET a-k objectives* | 1. The student will understand response of RLC circuits to switching and sinusoidal inputs. (a,e,k)
2. The student will be able to understand instantaneous, average and complex power (a,e,k)
3. The student will learn 3-phase power concepts. (a,e,k)
4. The student will learn frequency response of circuits and the use of the Laplace transform to analyze circuits. (a,e,k)

5. The student will learn the concept of 2-port networks. (g) |
| **8. Course evaluation method** |
| Weekly homework assignments 20% 4 Tests, 20% each | *Note*: The minimum grade required to pass the course is C. |
| **9. Course grading scale** |
| Grading Scale: 88 and above: “A”, 85-87: “A-“, 82-84: “B+”, 78-81: “B”, 75-77 : “B-“, 72-74: “C+”, 68-71: “C”, 65-67: “C-“, 62-64: “D+”, 58-61: “D”, 55-57: “D-“, 54 and below: “F.” |
| **10. Policy on makeup tests, late work, and incompletes** |
| *Makeup tests* are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student of participating in the exam. Makeup exam should be administered and proctored by department personnel unless there are other pre-approved arrangements*Incomplete grades* are against the policy of the department. Unless there is solid evidence of medical or otherwise serious emergency situation incomplete grades will not be given. |
| **11. Special course requirements** |
| **12. Classroom etiquette policy** |
| University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions. |
| **13. Disability policy statement** |
| In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Student Accessibility Services (SAS) and follow all ASA procedures. In Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); in Jupiter, SR 110 (561-799-8585). SAS website athttp://www.fau.edu/sas/  |
| **14. Honor code policy** |
| Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at [www.fau.edu/regulations/chapter4/4.001\_Code\_of\_Academic\_Integrity.pdf](http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf) |
| **15. Required texts/reading** |
| *Instructor’s notes. No text books.* |
| **16. Supplementary/recommended readings** |
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| **17. Course topical outline, including dates for exams/quizzes, papers, completion of reading** |
| 1. Phasors, complex numbers, Thevenin’s Theorem (3 hours)2. RLC circuits (3 hours)3. Power: instantaneous, average, RMS, complex (6 hours)4. 3-phase power transmission (6 hours)5. Frequency response of circuits (6 hours)6.2-port networks (6 hours)(Total 30 hours) |