## Syllabus for Principles of Electrical Engineering II

332:222 Spring 2017

When and where: Tue & Fri, 12 Noon-1:20 PM, Beck Hall Auditorium, Livingston Campus

**Instructor:** John J. McGarvey (Assistant Teaching Professor)

email: johnmcg@rutgers.edu, Phone: 848-445-9126, Room: 115, EE Building Busch Campus

Office Hours: Tuesday and Friday 2:30 pm – 3:30pm (in my office or close by)

**Textbook/Package:** "Electric Circuits" by Nilsson & Riedel, Pearson, 10<sup>th</sup> Edition. Plus MasteringEngineering for online homework. (Purchase the package MasteringEngineering with the textbook because the package is at a discounted price.)

Class Web Page: sakai.rutgers.edu

<u>Topics</u>		<u>Week</u>	<u>Chapter</u>
Introduction and Review of Basic Circuit Elements		1	6 (some parts)
First-Order Circuits		1 & 2	7
Second-Order Circuits	Lab Experiment #1	3 & 4	8
Introduction to Laplace Transforms	Lab Experiment #2	5	12
Exam #1		6	
Laplace Transforms in Circuit Analysis	Lab Experiment #3	6 & 7	13
Bode Plots		7	Appendix E
Passive Filter Circuits	Lab Experiment #4	8 & 9	14
Exam #2		10	
Active Filter Circuits	Lab Experiment #5	10 – 12	15
Fourier Series		12	16
Fourier Transforms		13	17
Two-Port Circuits		13	18
Three Phase Circuits		14	11

## Final Exam

## Notes:

- There will be two in class exams. These exams will be closed book and closed notes. The above schedule is tentative. Laptops, tablets, and cell phones are not permitted during exams. There will be a 20 point (out of 100) deduction for any Make-Up Exam, except for medical emergencies, jury duty, or other documented special circumstances.
- 2. The associated laboratory class (332:224) will begin on the 3<sup>rd</sup> or 4<sup>th</sup> week of classes depending on which group you are in. More details on this will be given during the second week of classes.

## **Course Grading**

<u>Item</u>	<u>Percent</u>
Class Participation (Includes Attendance)	4
Homework (MasteringEngineering online) Filter Project	16 10
Exam #1 Exam #2	20 20
Final Exam	30
Total	100%