# Syllabus EET K105 Electric Circuits & Systems

Spring 2010 Three Rivers Community College John Forella, Instructor E-mail: forella@earthlink.net Office Hours: By appointment

<u>Text</u>: Boylestad, Introductory Circuit Analysis, Eleventh Edition

This course provides an introduction to the basic concepts of DC and AC electric circuits. Voltage, current, resistance, energy, and power relationships are introduced. Circuit analysis of basic series and parallel circuits is covered. Instruments and techniques of electrical measurement for both DC and AC circuits are also discussed.

## Method of Evaluation

Homework assignments will be given routinely. Some homework problems will be collected for grading. When an assignment is to be collected, you will be given notice of that intent at the time the assignment is given. Each class will begin with a review of previously assigned homework. Collected assignments cannot be accepted once they have been reviewed in class.

There will be 4 tests during the course. Please plan to attend all tests. The only allowance for make-up tests will be by prior notification of me before the test is scheduled to start.

The final grade will be calculated using the average of the graded homework assignments weighed at 20% and the average of the tests weighted at 80%. Class participation will also be included in final grade calculation. All tests will be closed book and closed notes.

## College Withdrawal Policy

Students may withdraw, in writing or verbally at the Registrar's Office for any reason until the end of the 10<sup>th</sup> week of classes. From the 11<sup>th</sup> week through the end of the 13<sup>th</sup> week, a student may withdraw with the instructor's written approval.

## Disabilities Statement

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Services at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor.

\* Indicates homework to be handed-in on the following week for grading.

Week Date Chapter		<u>Chapter</u>	Homework Assignment	
1	1/25	Chapter 1 Introduction Chapter 2 Current & Voltage	Reading Reading	Sections 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10 Sections 2.1, 2.2, 2.3, 2.4
2	2/1	Chapter 2 Current & Voltage Chapter 3 Resistance	Reading Reading Homework	Sections 2.5, 2.6, 2.7, 2.8, 2.9 Sections 3.1, 3.2, 3.3, 3.4 Chapter 2 - 9, <u>16*</u> , 25
3	2/8	Chapter 3 Resistance	Reading Homework	Sections 3.5, 3.6, 3.7, 3.8, 3.9. 3.10 Chapter 3 - 3a, <u>4*</u> , 7, 15a, 23, 49a
	2/15	No Class (Presidents Day)	Tionic work	Chapter 5 3a, <u>-</u> , 7, 13a, 23, 15a
4	2/22	Chapter 4 Ohm's Law	Reading Homework	Sections 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 Chapter 4 - 1, 3, 29, 39, 51
5	3/1	Test 1 Chapters 1, 2 & Chapter 5 Series Circuits	& <i>3</i> Reading  Homework	Sections 5.1, 5.2, 5.3, 5.4, 5.5, 5.6 Chapter 5 - 12*, 17, 21
	3/8	No Class (Spring Break)	1101110	<u>== ,</u> 11, 21
6	3/15	Chapter 5 Series Circuits Chapter 6 Parallel Circuits	Reading Reading Homework	Sections 5.7, 5.8, 5.9, 5.10, 5.11 Sections 6.1, 6.2, 6.3, 6.4, 6.5 Chapter 5 - 25, 35a,b, Chapter 6 - <u>10*</u>
7	3/22	Chapter 6 Parallel Circuits Chapter 7 Series Parallel	Reading Reading Homework	Sections 6.6, 6.7, 6.8, 6.9 Sections 7.1, 7.2, 7.3 Chapter 6 – 1, 27, 29, 39, Chapter 7 - <b>2</b> <i>a</i> , <i>b</i> , <i>d</i> *
8	3/29	Chapter 7 Series Parallel	Reading Homework	Sections 7.4, 7.5, 7.6 Chapter 7 - 3, 12
9	4/5	Test 2 Chapters 4, 5 & Chapter 10 Capacitors	<b>k 6</b> Reading Homework	Sections 10.1, 10.2, 10.3, 10.4 Chapter 10 - 3, <u>8*</u> , 11
10	4/12	Chapter 10 Capacitors	Reading Homework	Sections 10.5, 10.6, 10.7, 10.8 Chapter 10 – <u>2*</u> , 27
11	4/19	Chapter 11 Inductors	Reading Homework	Sections 11.1, 11.2, 11.3, 11.4 Chapter 11 - 3, 13
12	4/26	Test 3 Chapters 7 & 1 Chapter 11 Inductors	<b>0</b> Reading Homework	Sections 11.5, 11.6, 11.7 Chapter 11 – 37, *43
13	5/3	Chapter 13 SineWaveforms	Reading Homework	Sections 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8 Chapter 13 – 5a, 7, *10a, 11a, *12b, 29a, *42a, 43c
14	5/10	Chapter 14 Phasors	Reading Homework	14.1,14.2,14.3,14.4,14.5 Chapter 14 – 5a, 7a, 11a
15	5/17	Final Exam Chapters 11, 13 & 14		