Three Rivers College
THE COMMUNITY COLLEGE OF SOUTHEAST MISSOURI

Master Syllabus
ELEC 115 Applied DC/AC Electrical Circuits

3 Credit Hours
2 Lecture Hours / 2 Lab Hours
Semester (ex. Fall 20XX)
Start Date: End Date: Last Day to Drop: Last Day to Withdraw:

Prerequisite/Corequisite:

Instructor: ***(To be filled out by Class Instructor)***

Instructor Credentials and Title:
Office Location:
Phone:
Email:
Office Hours:

Textbook(s) and Materials:

Title: Electricity (Principles and applications) Author: Fowler, Richard J.
Publisher: Glencoe / McGraw-hill Edition: Sixth Year: 2003
TI-30 Calculator, pencils, and paper are required for problem solving and note taking.

Course Description

Catalog Description: This course introduces fundamental properties of DC and AC electrical waveforms. Topics include the electrical parameters of power, current, and voltage as they apply to Resistive, Capacitive and inductive type loads common to electronic components, and circuits. Course includes a lab component where student will learn to use basic test equipment, required to do simple circuit troubleshooting and circuit repairs.

Student Learning Outcomes:

Upon successful completion of this course, student will be able to: Define fundamental principles of electronics and electricity, recognize basic schematic symbols, letter designations, and units of measure for the fundamental electronic parameters, describe basic component functions, waveforms and their physical interfaces. Interpret basic electrical circuit functions from simple electrical circuit diagrams. Test and evaluate basic circuit functions using basic test equipment and troubleshooting techniques

Course Purpose (or Course Rationale):

Course Evaluation Policy

Grading Scale: Based on 10% ranking

Semester Average	Grade
90% -100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
<60%	F

Assessment Measures:

Homework:	100 points.
Tests (3)	100 points each.
Lab	200 points
Participation/Att.*	100 points
Final exam	200 points(**Comprehensive)**
Total Points	**900* / 800 points**

*** This grading item will be assessed in the total if you request it.**

Attendance: It is expected that students will attend each and every class period.

Missed Tests: All test must be taken on the assigned day.

Late Work: Once student H/W are graded & returned late H/W will not be accepted.

Extra Credit: There is no planned extra credit assignments in this course.

Course Procedures:

All homework assignments, assigned labs, and test must be completed on the assigned date unless otherwise approved prior to due date. It is expected that all students will participate in class in courteous and professional manner to help maintain a true learning environment in the classroom. Cell phones must be placed in a silent mode while in the classroom. During Testing the Cell phones must be turned off unless special permission is given by instructor prior to the test.

Electronic Devices within the Learning Environment [ISE 6410]

Electronic devices including, but not limited to, laptop/netbook computers, cellular devices, e-readers, and MP3 players will be turned off within the learning environment. Exceptions include the use of such devices for medical emergencies, or contacts which must be maintained due to work requirements. In such cases the student must advise the instructor, and the device must be in "silent mode." The instructor may make adjustments to this policy for specific usage in their unique learning environments. The usage of such electronic devices in relation to approved ADA accommodations is exempt from this regulation.

Disciplinary actions related to the violation of this regulation may include but are not

limited to: a verbal warning to the student(s); the student(s) being asked to leave the learning environment; reductions in the grade for an assignments or examinations.

Student Code of Conduct [SR 2610]

Three Rivers College created for its students a Student Code of Conduct to clearly communicate to students what is expected of them. All students should go to http://www.trcc.edu/forms/policiesregs/SR2610.pdf to review the student code of conduct regulation and the list of expectations for students.

Harassment (Title IX) [GAR 1240]

It is the policy of Three Rivers College and its Board of Trustees that each employee and student be allowed to work and attend the college in an environment free from any form of improper discrimination. All students should go to http://www.trcc.edu/forms/policiesregs/GAR1240.pdf to review the student harassment regulation.

Academic Assistance:

Academic Resource Commons (ARC): Located in ARC with a library, computer resource center with printing, and web access. Visit http://www.trcc.edu/arc/ for more information, call 573-840-9654, email library@trcc.edu or send questions via text to 573-298-6105.

Tutoring and Learning Center (TLC): Located on the second floor of the ARC. Tutoring help is available for math, English, and some science classes. Computers with internet access are available. Call 573-840-9638 or email tlc@trcc.edu with general questions. Email writing@trcc.edu with questions specific to writing and writing assistance.

ACHIEVE Program: Located on the second floor of the ARC. Provides free services to eligible students. Find information about services and eligibility at http://www.trcc.edu/studentsuccess/achieve.php.

Technical Difficulties: If you have difficulties accessing myTRCC, student email, or Blackboard, call 573-840-9605 or visit Login Assistance for more information (http://www.trcc.edu/loginhelp/). For all other non-login Blackboard issues, email blackboard@trcc.edu.

Students with Disabilities: Three Rivers College complies with the Americans with Disabilities Act. If you need accommodations or academic adjustments due to a documented disability, please call the Office of Disabilities Accommodations at 573-840-9608 for assistance.

Course Schedule (Assignments and Activities):

Week:	Activity
1	Introduction & Chap1 Basic Concepts
2	Chap 2 & Lab 1 Electrical Quantities
3	Chap 3 & Lab 2 Basic Circuit Laws & Measurements
4	Chap 4 & Lab 3 Circuit Components
5	Review and Test 1
6	Chap 5 & Lab 4 Series Circuits
7	Chap 5 & Lab 5 Parallel Circuits
8	Chap 5 & Lab 6 Series/parallel Combination Circuits
9	Chap 7, & 8 Lab 7 Electromagnetism and AC Current & Voltage
10	Lab 8 and Review 2
11	Test 2 Chap 9 Trigonometric Functions & Reactance
12	Chap 10 & Chap 11 Capacitive and Inductive Reactance
13	Chap 12 & Lab 9 Capacitance and Inductance in AC Systems
14	Chap 13,14 & lab 10 Impedance and effect on Electrical Waveforms
15	Review3 & Test 3
16	Final

The instructor reserves the right to modify the assignments and other course criteria to create the best learning environment possible.

This master syllabus has been approved by the Three Rivers College Faculty. All full-time and part-time faculty are required to follow this syllabus. Therefore, the course description, student learning outcomes, and the course rationale are not to be altered in any way. Participation in the assessment of student learning outcomes is required by all faculty.