

COURSE SYLLABUS

Course:	Advanced Circuits and Systems EET K119	Lab, Advanced Circuits and Systems EET K120
Location:	Room B229	Room B229
Time:	MW 2:30-4:10	T 2:30-4:10
Prerequisites:	EET K105/106, MAT K137	EET K105/106, MAT K137
Co requisites:	EET K120, MAT 186	EET K119, MAT 186
Instructor:	John Forella <u>forella@earthlink.net</u>	Dan Courtney dcourtney@trcc.commnet.edu 860-885-2338
Office Hours:	By appointment	As posted – office C134
Text:	The Science of Electronics – DC/AC, David M, Buchla & Thomas Floyd	N/A

Course Description:

This course develops the concepts of DC and AC electric circuits introduced in (K105) Electric Circuits and Systems. More advanced configurations and applications of DC and AC principles are covered, including: Capacitors and inductors in AC circuits; network theorems; power systems and magnetic circuits. This course will supplement the course Electric Circuits and Systems. Students will apply the concepts learned in the classroom and develop their skills in making electrical measurements using a variety of test instruments.

Course Topics:

DC series/parallel and AC principles review Reactance and impedance Filters and frequency response Superposition & Thevenin network theorems Power systems Magnetic Circuits MultiSim Weekly laboratory experiments supporting course lecture topics.

K119/120 Course Outcomes (based on ABET accreditation):

- 1. Mastery of electrical technology concepts as defined in this syllabus.
- 2. Knowledge of advanced electrical quantities, units and relationships.
- 3. Demonstrate an ability to build and test advanced electrical circuits and systems.



- 4. Demonstrate an ability to analyze and solve problems relating to advanced electrical systems.
- 5. Demonstrate senior level oral and written communications skills.
- 6. Demonstrate an appreciation for lifelong learning.
- 7. Demonstrate proper professional and ethical behavior.
- 8. Demonstrate a commitment to quality, timeliness and continuous improvement

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 10th week of classes. From the 11th week through the end of the 13th 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.