



## COURSE SYLLABUS Spring 2016

<b>Course:</b>	Advanced Circuits and Systems EET K119	Lab, Advanced Circuits and Systems EET K120
<b>Location:</b>	Room B213	Room B213
<b>Time:</b>	T 5:00-7:45 pm	T 7:46-9:50 pm
<b>Prerequisites:</b>	EET K105/106, MAT K137	EET K105/106, MAT K137
<b>Co requisites:</b>	EET K120, MAT 186	EET K119, MAT 186
<b>Instructor:</b>	John Forella <a href="mailto:forella@earthlink.net">forella@earthlink.net</a>	John Forella <a href="mailto:forella@earthlink.net">forella@earthlink.net</a>
<b>Office Hours:</b>	By appointment	By appointment
<b>Text:</b>	Introduction to Electricity, Robert T. Paynter & B.J. Toby Boydell	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. Laboratory experiments are included throughout the course to allow the students to apply the concepts learned in the classroom and to continue to develop their skills in building and testing circuits.

**Course Topics:**

- Series/parallel review
- Multisim (circuit analysis simulation)
- Thevenin & superposition network theorems
- Inductive and capacitive reactance
- Series and parallel impedance
- Frequency response & filters
- AC power and transmission
- Transformers
- Power factor correction
- Three phase power
- Magnetism
- Motors

**Course Format:** This course is a combination of lecture and lab exercises. All classes are held in the lab for easy transition from lecture topics to hands-on demonstration of theoretical principles.

**Grading:** Homework, Lab Exercises and Reports. Tests, Class Participation, Attendance, Promptness, Professional Attitude are included in determining the final grade.



**Attendance/Timeliness:** Attendance is mandatory at all class and lab sessions. Tardiness of attendance and/or assignments can have a significant negative impact on grading.

### **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.

All students are required to maintain a learning portfolio in Digication that uses the (Three Rivers) College Template.