

**Department of Computer & Electrical Engineering and Computer Science
Florida Atlantic University
Course Syllabus**

1. Course title/number, number of credit hours		
Electronics Laboratory 2 – EEL 4119L	3 credit hours	
2. Course prerequisites, corequisites, and where the course fits in the program of study		
<i>Prerequisites:</i> EEL 3118L Lab 1: EEE 4361 Electronics 2		
<i>Corequisites:</i> EEL 3470 Fields and Waves: EEL 4656 Linear System		
3. Course logistics		
Term: Spring 2014		
Lab manual will be posted on the BlackBoard.		
Class location and time: M,W 2:00-4:50 pm (Laboratory); EE 210		
4. Instructor contact information		
<i>Instructor's name</i>	Dr. Vichate Ungvichian, P.E., Professor	
<i>Office address</i>	EE 514 (Bldg. 96)	
<i>Office Hours</i>	Tu 9:30- 11:30 am and W 9:00-10:00 am	
<i>Contact telephone number</i>	561-297-3465	
<i>Email address</i>	ungvich@fau.edu	
5. TA contact information		
6. Course description		
Experiments and projects to supplement the theoretical work in core courses		
7. Course objectives/student learning outcomes/program outcomes		
<i>Course objectives</i>	This course will provide the student with hands-on experience, experiment setup and measurement techniques, equipment limitations and lab etiquette and in additional, EE theories to supplement the lectures from the previous prerequisite courses.	
<i>Student learning outcomes & relationship to ABET a-k objectives</i>	<ol style="list-style-type: none"> 1. The students will learn the measurement techniques and the measured data are compared with either the Pspice or ADS simulations. 2. The students are working in a team environment. 3. Formal written reports will enhance student's communication ability. 4. The students will learn the equipment limitations and its uncertainty. 5. The students will be introduced to the lab safety issues and lab etiquette. 	
8. Course evaluation method		
Experiments, reports and a special lab project	85%	Note: Passing grade is C
Lab Ethics/Etiquette	5%	
2 Quizzes (5% each)	10%	
Total	100%	
9. Course grading scale		
Grading Scale: A: 100%-96% ; A- 95%-90% B+: 89%-86%; B: 85%-80%; B-: 79%-76% C+: 75%-73%; C: 72%-68%; C-: 67%-62% D+: 61%-58%; D: 57%-55%; D-: 54%-50% F: below 50%		
10. Policy on makeup tests, late work, and incompletes		
Makeup exams are given only if there is solid evidence of a medical or otherwise serious emergency that prevented the student of participating in the exam. Makeup exams will be administered and proctored by department personnel unless there are other pre-approved arrangements		

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Incomplete grades are against the policy of the department. Unless there is solid evidence of medical or otherwise serious emergency situation incomplete grades will not be given.

11. Special course requirements

If you have to catch up with the experiment, you can access the lab off hours BUT you must have a partner for safety purposes. For your safety, you must wear shoes when working on the experiment (**No sandals allow**). Also no food (chips and fruits) allow since these will cause the instrument control knobs to get sticky or oily.

12. Classroom etiquette policy

University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones and laptops, are to be disabled in class sessions.

13. Disability policy statement

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton campus, SU 133 (561) 297-3880 and follow all OSD procedures.

14. Honor code policy

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and place high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. See University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

15. Required texts/reading

Lab 2 Experiment- Handouts (Posted on the blackboard)

16. Supplementary/recommended readings

Instructor's notes, posted on Blackboard

17. Course topical outline

Experiment 1: Active Filters
Experiment 2: Wideband Amplifier
Experiment 3: Class C & Colpitts OSC
Experiment 4: Spectrum Analyzer
Experiment 5: Transmission Lines (Demo on slotted line)
Experiment 6: Switching Regulator
Project on a design of an FM transmitter using 2N2222

Each experiment should take about two weeks to complete and the report is due one week after. If you have to catch up with the experiment, you can access the lab off hours BUT you must have a partner for safety purposes. No sandal and food allow in the lab area. Each quiz will take about 30 minutes.