

**UNIVERSITY OF HOUSTON**  
**DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING**  
**ECE 2100 – CIRCUIT ANALYSIS LABORATORY**  
**SUMMER SEMESTER 2018**

**Course:** Section 15536; MWF 9am – noon. Room S383/S385 Engr. Bldg. 1 (D)

**Instructor:** Dr. Dave Shattuck, Email: [shattuck@uh.edu](mailto:shattuck@uh.edu)  
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Cell Phone: (713) 498-6888  
Office Hours: TuTh 10am to noon, or by appointment

- **Required Text:** None. However, there is a required purchase. You need to purchase a Research Notebook. Purchase at the Research Stores (Location Lamar Fleming Bldg., Rm 70): <http://researchstores.nsm.uh.edu/> Item: **LAB-010** Lab recording media,UH,161 BOOKFACTOR. \$22.00
- Backup plan in case research store doesn't have them:
  - Book Factory, 96 pages, black scientific notebook. \$14.99
  - Item: [http://www.amazon.com/BookFactory%C2%AE-Black-Lab-Notebook-LIRPE-096-SGR-LKT1/dp/B00722FSW4/ref=pd\\_sim\\_op\\_1](http://www.amazon.com/BookFactory%C2%AE-Black-Lab-Notebook-LIRPE-096-SGR-LKT1/dp/B00722FSW4/ref=pd_sim_op_1)

**Course Web URL:** [www.ece.uh.edu/courses](http://www.ece.uh.edu/courses), then click on ECE2100

**Credit For Or Concurrent Enrollment In (CFORI) Requisite:**  
ECE 2202 - Circuit Analysis II

**Blackboard and Class Website**

We will be using the Blackboard **Learn** web site (<https://elearning.uh.edu/webapps/portal/frameset.jsp>) for posting of grades and email sent to the class, and to post certain documents. Many other documents and handouts will be available on the course website at [www.ece.uh.edu/courses](http://www.ece.uh.edu/courses), by clicking on the 'ECE2100' link on that webpage. Please explore both the Blackboard site and the course website for materials of interest. We will assume that your UH e-mail alias ([StudentName@uh.edu](mailto:StudentName@uh.edu)) is pointed to a working e-mail server that you check regularly.

## GENERAL INFORMATION

### ***Catalog Description:***

Circuit Analysis Laboratory Cr. 1. (0-3). Prerequisite: Credit for or concurrent enrollment in ECE 2202. Introduction to the electronics laboratory equipment. Introductory experiments in circuit analysis. Formal report writing. This laboratory course is a prerequisite for all other ECE laboratory courses.

### ***Expected Student Outcomes:***

- Students will design and conduct electrical engineering experiments. (Student Outcome b)
- Students will analyze and interpret their data, using and confirming fundamental circuit theory and concepts. (Student Outcome b)
- Students will use the techniques, skills and modern electrical engineering measurement tools typical of an electrical engineering laboratory. (Student Outcome k)
- Students will further develop their basic skills of circuit problem solving using experimental methods, and further develop their basic skills of critical thinking by learning measurement techniques such as time constant measurements and phase shift measurements. (Student Outcome e)
- Students will develop and demonstrate their technical writing skills by writing a formal report about at least one of their laboratory activities. (Student Outcome g)

### ***Academic Honesty Policy:***

Houston. It is your responsibility to know and follow this policy. You must sign the Academic Honesty Statement on the last page of this handout, detach it, and submit it to your instructor by Wednesday, July 11, 2018. If you fail to do this, you may be dropped from the course. For more information, see the Academic Honesty section of the catalog, which is available on-line:

<http://publications.uh.edu/content.php?catoid=25&navoid=9055>

### ***Religious Holy Days:***

Students whose religious beliefs prohibit class attendance on designated dates or attendance at scheduled exams may request an excused absence. To do this, you are **strongly encouraged** to request the excused absence, in writing, by Wednesday, July 11, 2018. Please submit this written request to your instructor to allow the instructor to make appropriate arrangements. For more information, see the catalog at

<http://publications.uh.edu/content.php?catoid=25&navoid=8903>.

### ***Students with Disabilities:***

Students with recognized disabilities will be provided reasonable accommodations, appropriate to the course, upon documentation of the disability with a *Student Accommodation Form* from the *Center for Students with Disabilities*. To receive these accommodations, you must request the specific accommodations, by submitting them to the instructor in writing, by Wednesday, July 11, 2018. Students who fail to submit a written request will not be considered for accommodations. For more information, see the web at <http://www.uh.edu/csd/>.

***Counseling and Psychological Services***

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS ([www.uh.edu/caps](http://www.uh.edu/caps)) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the "Let's Talk" program, which is a drop-in consultation service at convenient locations and hours around campus. [http://www.uh.edu/caps/outreach/lets\\_talk.html](http://www.uh.edu/caps/outreach/lets_talk.html)

***Attendance:***

Attendance at all classes is required. The instructor will take attendance at the start of class, and students not present will be marked "absent". Points will be deducted from the final class average for absences which are not excused. If the student can document sickness or other hardship, excused absences may be given. Heavy morning traffic in Houston is expected, and will not be considered an excusable hardship. Note that there is no "late"; there is only "present" and "absent".

***Grading Policy***

Grades will be determined on the basis of performance on lab and other written reports, and the final exam with the following **approximate** weights. The actual weights will be fixed at the end of the semester.

Informal Reports	30-35%
Lab Final Exam	20-30%
Formal Report	40-45%

***Grade Point Rule***

The following **approximate** grade point scale will be used in determining your grade. This scale may be modified somewhat, but is included here so that you will have a general idea of how well you are doing in the course. The final grade scale will be determined at the end of the semester.

90 - 100: A's      80 - 89.9: B's      70 - 79.9: C's      60 - 69.9: D's      below 60: F

## LAB EXERCISES AND REPORTS

Laboratory exercises include a set of six experiments, and a project that includes a written report. Students may work on the experiments individually or with one partner. It is expected that students will be able to complete their lab experiments during regular class hours, although extra time may be required for the project. If more time is needed for the project or for regular assignments, students are free to work in the lab whenever it is open. A schedule of lab hours will be posted separately. The experiments are described in handouts that will be available on the course web site. The project will be discussed in class.

### Reports

#### *Informal Reports*

The lab experiments (*informal reports*) are described in documents available on the class web site. Measurement results and answers to questions are to be filled in the Research Notebook. These reports must be neat, but are usually handwritten. The Research Notebooks will be collected on the due dates listed in the lab schedule. Late informal reports will not be accepted and will earn a grade of 0.

In each of the lab assignments, there is a section called the “Pre-Lab” that the student is expected to complete before coming to class. The Pre-Lab includes a few simple problems or written exercises designed to help the student prepare for the lab. The Pre-Lab will be collected at the beginning of class on the days indicated in the class schedule. It will be graded by the TA and returned during the same class, so that the student can work on the measurement portion of the lab. The Pre-Lab and the measurement portion of the assignment are to be turned in together when the experiment is completed.

If you are not able to complete the lab assignment during class, you may come to the lab on your own to do so. The labs are in rooms S383-D and S385-D. You may work in the lab any time it is open and a bench is available. In order to use the laboratory, you will need to show your ID card to the TA in charge and sign up for a lab bench. Sign up sheets for this purpose will be posted at the desk in the lab. When you have finished work, be sure you have cleaned up your station, and returned all cables and equipment to their proper places. If these procedures are not followed, credit may be deducted from the lab grade.

#### *Formal Reports*

The formal report is a written assignment that must conform to the *Electrical Engineering Formal Laboratory Report Format*. A copy of this document will be available on the class website. The formal report will be written on the Project, which will be an experiment on a subject that will be discussed in class. The formal report must be submitted to the plagiarism site [www.turnitin.com](http://www.turnitin.com). Details concerning the formal report format, its content, and its submission will be given in class. Formal reports submitted after the deadline indicated on the schedule will not be accepted.

### **Academic Honesty Policy and Plagiarism**

The issue of academic honesty is a very important one to the ECE department. In particular, copying of lab reports from another person, in whole or in part, will not be tolerated. When you work with a lab partner, shared work is restricted to data taking and discussion of the concepts involved. **Each student must prepare his/her own reports.** Each student must do the data analysis individually and answer any questions that may be asked. In a formal report, all writing must be done individually. Only experimental data is expected to be the same between lab partners.

For all lab reports, formal and informal, the following statements apply.

**If identical figures, derivations, plots, or calculations are found, without proper referencing as to their origin, it will be considered a violation of the academic honesty policy. If figures, text, tables, or other material are taken from any textbook without proper references, it will be considered a violation of the academic honesty policy. If figures, text, tables, or other material are taken from lecture notes or the lab handout without proper references, it will be considered a violation of the academic honesty policy. If you and your lab partner, or you and any other student, have the same figures, tables or plots, it will be considered a violation of the academic honesty policy for both of you. The data can be the same; but the figures, tables or plots made with this data must be developed individually. Do your own work, and don't share it.**

## Academic Honesty Statement

I have read the University of Houston Academic Honesty Policy available on the web at

<http://publications.uh.edu/content.php?catoid=25&navoid=9055>.

I agree to abide by the provisions of this policy. In addition, I understand that all work submitted in both informal and formal reports, including figures and charts, must be my own. The exception to this rule is that I may share my lab partner's data.

Name: (Please print) \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Please detach this page and submit it to the instructor by Wednesday, July 11, 2018. If you fail to do this, you may be dropped from the course.