

EE 184 Electronic Design Project
Spring 2020
Class time:

However, one report may be resubmitted during the term if it was originally submitted on time. The resubmittal must be within 2 weeks of the date at which the report was returned graded to the student. If a report is resubmitted the grade for that report will be the weighted average of the two submittals with a weighting of 75% given to the best submittal, and 25% to the other submittal.

: The required report format is posted on the Blackboard site for this course.

Student teams will select their own final project, subject to TA and instructor approval. Final projects may build upon or extend any of the other 3 projects, or be entirely new. Some suggested final projects are:

Linear Power Supply
Curve Tracer
Precision capacitance or impedance measurement meter
IR transmitter/receiver with modulated signals
Function generator
Sound activated guided robotic car
Multi-stage amplifier (Good if you are interested in advanced analog design)

1. Project 1: Sound Activated Switch (Individual project, 3 week duration)
2. Common Emitter Amplifier (Individual project, 2 week duration)
3. Stepper Motor Controller (Team project, 4 week duration) (May be replaced based upon class interest)
4. Student Final Project (Team project, 4 week duration) (May be replaced by phase locked loop lab)

Parts for the first two projects should be available in your lab kits from EE183 and the supplemental parts listed on the Blackboard site. Everyone should have a lab kit from their previous EE lab courses at UVM (EE183). Some kits are available for purchase as needed. Additionally some general purpose parts (Op Amps, transistors, logic gates, flip flops, resistors, capacitors) are available in the lab for projects 3 and 4. Speak to the TA or instructor if you need parts. Students are welcome to discuss suggested parts with the instructor, or to request parts specific applicable to their project. These requests will be evaluated on a case to case basis.

Students are expected to attend all lab lectures and sessions and are responsible for assignments and material presented during these meeting times.

Students are encouraged to work together and to exchange ideas when working on lab assignments. However, students must be sure to submit only their own work and to reference that work properly, including all web sources. UVM's policy on academic integrity is clearly defined and can be found at <http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact SAS, the office of Disability Services on campus. SAS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations, which are communicated to faculty in an accommodation letter. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. A student's accommodation letter lists those accommodations that will not be implemented until the student meets with their faculty to create a plan. Please visit the following site for contact information. www.uvm.edu/academicsuccess/student_accessibility_services

Students have the right to practice the religion of their choice. Students should submit in writing to the instructor by the end of the second full week of classes their documented religious holiday schedule for the semester. An arrangement could then be made to make up the missed work.

As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to

learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. It is my expectation that you will do everything you can to optimize your learning and to fully participate in this course.

- *Outcome (1)*: An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

“telecommunication(s)” in the title must include advanced mathematics, such as differential equations, linear algebra, complex variables, and discrete mathematics.

Contribution: 0