ECE 3741: Instrumentation and Electronics Laboratory SPRING 2019 GTL Syllabus

 Instructors : **Dr. Suresh Sundaram and Dr. Taha Ayari** Email: ssundara@georgiatech-metz.fr & tayari@georgiatech-metz.fr

Office Hours: Every Monday between 14:00 to 17.00 am or Walk-ins, or by appointment

Prerequisites: ECE 3710 (can be taken concurrently in GTL)

Course Websites: <http://canvas.gatech.edu>

Required Materials: ECE 3741 Chip Set (Provided by GTL) USB flash drive

Attendance Policy: Attendance is mandatory. Any unexcused absence will result in a grade of zero for both the laboratory report for that experiment and the laboratory quiz for that week. Lab quizzes are administered during the first 10 minutes of the lab period. Students who arrive after the quiz is given will receive a grade of zero.

Grade Policy:

• 35% - Lab Reports • 30% - Lab Quizzes • 35% - Lab Exam

Letter grade assignments will be made by the instructor.

 Lab Reports: Lab procedures can be found on Canvas. No formal laboratory reports are required. At the end of each laboratory experiment, the questions and/or plots and tables of data taken in the lab for that experiment are to be turned in to the lab instructor. Each student should submit a lab report. The work must be submitted by the beginning of the next lab period.

Lab Quizzes: The lab quizzes are 10-minute timed quizzes and are held at the beginning of the laboratory. The quizzes may cover material from both the current experiment and the previous experiment, so read the lab procedure before coming to class. Quizzes are open book, but must be completed individually.

Lab Exam: The laboratory exam is a 1.5 hour comprehensive exam covering all of the experiments and will be completed individually on the specified day in lab.

Tentative Schedule:

|  |  |
| --- | --- |
| **Week of** | **Title** |
| 7th JAN | NONE |
| 14th JAN | LAB 1-Equipment |
| 21St JAN | LAB 2-Op-amps |
| 28th JAN | LAB 3-Sum and difference op-amps |
| 4th FEB | LAB 4-Op-amp filters |
| 11th FEB | LAB 5-Filters pt2 |
| 18th FEB | GTL Spring Break  |
| 25th FEB | LAB 6- Diodes and op-amps |
| 4th MAR | LAB 7-Design project |
| 11th MAR | LAB 8-Linear power supply |
| 18th MAR | LAB 9-Phase shifter |
| 25th MAR | LAB 10-Switches and sensors |
| 1ST APR | Exam review  |
| 8th APR  | In-lab exam |
| 15th APR | make-up any incomplete or missed labs. |

Final Exam Week: There will not be an exam during finals week. The only exam is in-lab during the last week of classes.

 Academic Misconduct:

All students taking this course are required to strictly adhere to the Georgia Tech Honor Code, whose complete text may be found at http://honor.gatech.edu/content/2/the-honor-code. Any violations of the Code are considered academic misconduct and will be submitted to the Office of the Dean of Students for appropriate action.