ECE 438 Digital Signal Processing
Lab Syllabus Fall 2019

Lab page: https://www.projectrhea.org/rhea/index.php/ECE438_Lab_Fall_2019

TA information

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Office hours - Office hours will be posted on the lab page.

Lab Content

The experiments in this course generally build upon material covered in lecture. Each experiment describes one or more theoretical concepts, and then presents exercises to implement the concepts within the MAT-LAB environment. All of the lab content is directly relevant to the exercises, so it is important that each section be read and understood before performing the corresponding exercises. As a rule, the entire lab should be read before your section meeting. You will spend less time in lab that way. If the lab work is not completed during the lab period, the remaining work should be done during open lab time or at home.

Prerequisite

Fluency in MATLAB. Students who had few or no experience in MATLAB programming usually have much difficulty doing 438 labs.

Attendance

Students must attend every laboratory. If you need to miss a lab due to an academic/business trip, job interview, or illness you should notify your TA (not the instructor) before the missing lab and should submit suitable documentation. There will be NO EXCEPTION! Students are not allowed to leave before the end of their lab section unless they hand in the completed lab report to the TA. At the end of the section, students should sign out. If the signature is missing, your quiz score will be reduced by 2 points.

Laboratory Components

1. Weekly Quiz:

   – 30% of total lab grade (Your lowest quiz grade will be dropped.)
   – 15 minutes to complete and 10 points per quiz, which is based on homework assignments and lab content of the previous week.

– If a student is late more than 10 minutes for the quiz, they will NOT be allowed to take a makeup without a valid excuse. The makeup quiz may be held during your TA's other lab section or by an appointment. A student can take up to 2 makeup quizzes.

2. Laboratory Report:

   – 70% of total lab grade
   – Lab reports will consist of plots, written work, and code specified in the lab document.
   – Two students make one group and each group turns in one report (hard copy) every week due beginning of the next lab session before quiz.
   – If a student needs to miss a lab for a valid and documented reason, then she/he still needs to do the lab and submit the report at the beginning of the following lab. The student can attend a different lab session with the same TA or with the other TA. In this case, she/he needs to notify the TAs in advance so that the TAs can make necessary preparations. If the student who is missing the lab and her/his teammate can collaborate during the week, then they are allowed to submit one lab report. Otherwise, they each submit individual reports.
   – You only need to turn in what is specifically requested in the "INLAB REPORT" boxes in the lab instructions. No formal reports are required. Please use a cover sheet (a sample is provided in "Introduction, Report Guidelines, and Ethics"). Include your name and the lab number/title in the cover page. It is the student's responsibility to staple the lab report together (TAs are not responsible for unstapled pages that get lost).
   – Lab report is graded out of 100 points
   – Late reports will be penalized at 10 points per day. Submitting a report right after the quiz will be considered a one-day delay.
   – Discussions about concepts and equations are encouraged, but sharing/copying code is prohibited.
   – Grading rubrics established in previous semesters (contain list of points for each exercise and question)will be used to grade lab reports. Rubrics will not be distributed to the students.
   – At the end of the semester, if the average proportion, as indicated on the lab cover sheets, of your participation for lab reports is below 40%, your lab grade will be dropped by one level. (e.g., if you get B for labs, you will be given a C.)

3. Code Submission

   – Affect report score
   – Late code submission will be penalized at 10 points for report per day. Submitting a code right after the quiz will be considered a one-day delay.
   – Each student will submit her/his own code (electronic copy) before the due time of lab report.
   – Compress all your codes into one zip/rar/tar file and name it "Lab#_Sec#_FirstName_LastName"
   – Email them to 438lab@gmail.com with a subject title "Lab#_Sec#_FirstName_LastName" (e.g., Lab1_Sec3_Daulet_Kenzhebalin).
     * Tue 11:30 – 2:20 (Sec 5), Tue 2:30 – 5:20 (Sec 6), Thu 2:30 – 5:20 (Sec 7),
     * Fri 2:30 – 5:20 (Sec 3).

– Please follow the formatting. Otherwise, your code will not be accepted.

– Do not look at other one's code. Looking at other one's code and making yours similar is also considered cheating. Any kind of cheating will result in failure of the 438 lab.

Cheating

Don't do it. Specifically, if you have access to a previously graded lab report, do not even look at it. Certainly do not use someone else's code to perform the exercises. Some examples of cheating would be:

– Downloading large portions of code from the internet.

– Looking at other student's completed code.

– Writing code while looking at other's code.

– Copying written work from others.

– Copying your lab partner's code.

– Submitting report or code that includes someone else's work.

– Requesting a re-grade of lab report that has been altered.

– Looking at another student's quiz.

Any kind of cheating will result in a failing lab grade. This would require the student to retake the lab in a subsequent semester. All occurrences of academic dishonesty will be reported to the Assistant Dean of Students and copied to the ECE Assistant Head for Education. If there is any question as to whether a given action might be construed as cheating, please see the professor or the TA before you engage in any such action.