Purdue University
ECE438: Digital Signal Processing with Applications
Fall 2011

Instructor: Prof. Mireille (Mimi) Boutin
Email: mboutin@purdue.edu, Office: MSEE 342, Tel: 494-3538

(Supplementary) Reference:
"Digital Signal Processing," 3rd edition, John G. Proakis and Dimitris G. Manolakis, Prentice-Hall, Inc. Englewood Cliffs, New Jersey, ISBN 0-13-373762-4, 1996.

Prerequisites:
ECE301, ECE302, and a working knowledge of MATLAB.

Course Related Webpages:
• Course Wiki: https://www.projectrhea.org/rhea/index.php/2011_Fall_ECE_438_Boutin
• VISE Lab Web Site: https://engineering.purdue.edu/VISE/

Grade:
Your final grade will be computed as follows:
    Homework (worst score dropped) 10%. No late HW accepted.
    Laboratory 20%.
    2 Midterm Exams 20% each, no make up.
    Final 30%.
For a re-grade on any homework, quiz, or exam, you must submit a written request to the instructor.

Attendance Policy:
Students are expected to attend every lecture and every lab whenever they are healthy, and to stay home whenever they are sick.

Laboratory:
The laboratory for this course is the Video and Image Systems Engineering (VISE) lab, in MSEE184. Each student is registered for a mandatory weekly 3 hour lab session. In order to get a passing grade for this course, you must complete and hand in the lab every week. See the lab syllabus for more details.

Homework:
A weekly homework will be assigned. No late homework will be accepted. However your lowest homework grade will be dropped. It is ok to discuss your approach to solving the problems with a friend or on Rhea, but the write-up of the solution you hand in must be your own. Be careful not to plagiarize! Plagiarism will be severely punished and reports to the Assistant Dean of Students and to the ECE Assistant Head for Education will be filed. Please write the name of the persons you collaborated with on the cover page of your homework.

Intra-semestrial Tests (in class)
Test 1 Covers Part 1 of the material, in class, Friday October 7, 2011.
Test 2 Covers Part 2 of the material, in class, Friday December 2, 2011.
There will be no make up exams. If you miss an exam for any reason, your final exam grade will automatically be used to replace this exam grade.
Scratch paper policy: scratch paper will be distributed prior to each exam; the work on your scratch paper will not be graded.

Final Exam:
The final exam will be a comprehensive, traditional style (not multiple choice) exams.

Academic Honesty:
• In order to prevent cheating, we ask that you keep your eyes on your sheet at all times during tests. Looking around is forbidden. Electronic devices (e.g., calculators, cell phones, PDAs, iPods) are strictly forbidden during tests.
• Working on an exam/quiz either before or after the official time is considered teaching. The exams/quiz of any student who is caught writing after time is up or before the exam begins will receive a grade of zero, and this will be reported to the Assistant Dean of Students, as well as the ECE Assistant Head for Education.
• We keep an electronic copy of all graded exams in order to compare them with any exam brought in for a grade revision. Any student who alters his/her exam post grading and asks for a grade revision will be caught and will suffer severe disciplinary actions.
• Be careful not to plagiarize on Rhea! In particular, do not cut and paste the material from other websites without citation, and if you do cite, do not copy more than a small portion of the text.

ABET:
The learning objectives for ECE438 are:
• An understanding of linear time invariant systems
• The ability to manipulate discrete parameter signals
• Knowledge of how to use linear transforms
• The ability to apply linear system analysis to engineering problems