CS/ECE561: Hardware/Software Design of Embedded Systems (Fall)

Week	Topic
1	Introduction to Embedded Systems
2	Introduction to SystemC (Hardware/Software Modeling and Codesign)
2-3	Specification and Modeling of Embedded Systems
4-6	Software Components in Embedded Systems
6-7	Hardware Components in Embedded Systems (Communication, Memory)
7-9	Embedded Machine Learning
9-10	Hardware Components in Embedded Systems (Processing, Energy)
11	Hardware/Software Partitioning Algorithms
12	Sensors, Actuators, and Embedded Controls
13	Software Optimizations in Embedded Systems
13	Embedded Software Security
14	Fall Recess
15	Embedded Hardware Security
16	Embedded Vision (Advanced Driver Assistance Systems)
17	Finals (Closed book)

Course Policies

Grading is based on the following components:

- Homework Assignments: 15%
- Class Participation: 10%
- Examinations: 45%
    - midterm – take-home: 15%
    - final – closed book/notes: 30%
- Embedded systems Project: 30%
    - Final presentation: 10%
    - Project report: 20%

Grading Scale:

>95%	90-94%	85-89%	80-84%	75-79%	70-74%	65-69%	55-64%	40-55%	<40%
A+	A	A-	B+	B	B-	C+	C	D	F

Homework Policy: Homework assignments and projects will be assigned throughout the semester. All homework assignments and project files should be submitted before the deadline via Canvas. ***Late submissions will not be accepted!***

Re-grading Policy: Re-grading requests should be made within a week from the date of the graded item (homework, exam, or project) becoming available.

Academic Integrity: All submitted work should be your own. Copying of language, structure, images, ideas, or thoughts of another, and representing them as one's own without proper acknowledgement (from web sites, books, papers, other students, solutions from previous offerings of this course, etc) and failure to cite sources properly is not acceptable. Sources must always be appropriately referenced, whether the source is printed, electronic, or spoken. My policy is that of zero tolerance. Minor first infraction in HWs and presentations will lead to a zero score + one letter level (e.g. A to B) reduction in course grade. Project or Major or repeated infractions in HWs and presentations will result in "F" grade for the course + report to Dean's Office. Moreover, remember that you may have to face me in other exams (e.g. M.S. project, Ph.D. prelims, Ph.D. qualifiers) and professionally! Bottom-line: please don't risk engaging in such behavior. For more information see CSU's Academic Integrity Policy: http://tilt.colostate.edu/integrity/ and Student Conduct Code: http://www.conflictresolution.colostate.edu/conduct-code

Attendance: I encourage everyone to attend all the lectures and actively participate in class discussions.

Appointment: I encourage you to make at least one appointment with me during the semester for advice or to discuss research opportunities, independent study, research ideas, course suggestions, concerns, or any other topic you feel is appropriate.