ECPE 71 - Digital Design - Spring 2004 Syllabus

General Information

Professor Julie Kenrow
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Office Hours: MW 11-11:45am, TF TBA, or by appointment

Lecture: MWF 9:30-11am, Anderson 215
Class Website: http://www1.uop.edu/eng/courses/ecpe/ecpe71
Prerequisites: some computer exposure Co-Req: ECPE 71L

Course Description

Number systems, binary arithmetic, codes, Boolean algebra. Analysis and design of combinational circuits using small- and medium-scale integrated devices. Elements of sequential circuits, Finite state-machines.

This course consists of three 1 hour 15 minute lectures per week. Lectures will follow the class schedule (see webpage) that will adhere closely to Chapters 1-7 (& part of 8) of the text.

Educational Objectives

Upon completion of this course you should be able to:

1. describe the difference between a digital and an analog system.
2. simplify equations using Boolean algebra.
3. design, build, analyze and test simple digital systems.
4. use CAD tools to design digital systems.
5. describe the difference between combinational and sequential digital.
6. present and explain in detail a topic relating to digital design to class peers.

General Course Objectives

Having completed this course you should have improved in the following areas:

1. Basic learning skills;
2. Critical thinking skills;
3. Written and oral communication skills;
4. Understanding of the value and need of life long learning

Homework

Homework will be assigned approximately every week and will be due one week later. All homework must be turned in by noon on the due date shown. If assignments are not turned into me, then you must turn them into my mailbox and have them signed by Barbara Stanton before the deadline. NO EXCEPTIONS WILL BE MADE. If for some reason you cannot turn in your assignment in person you must arrange someone else to turn it in on time. LATE HOMEWORK WILL NOT BE ACCEPTED! The purpose of homework assignments is to master concepts and develop problem solving skills as well as individual thinking skills. Students are encouraged to discuss homework problems with other students and to work in groups if desired. Assistance with homework is available during my office hours. Please bring in pointed questions when you need help. Attempting to cheat on Homework by having someone else complete the homework for you will result in expulsion from the class and possibly the University. (refer to the Honor Code found in the Student Handbook, Tiger Lore). Everyone must turn in their own homework solutions. Solutions must be written on either lined paper or engineering paper and solutions need to be thorough, neat and well organized. Excessively sloppy homeworks will be marked down and possibly not graded!

Presentation

Each student will be responsible for writing an abstract and giving a 5-7 minute presentation on a topic closely related to digital design/electronics/technology. More detailed information will be given later in the semester.
Quizzes

Some quizzes will be given throughout the semester. A 1-2 day notice will be given prior to each quiz. Quiz problems will be similar to those assigned in the homework as well as examples worked out in class. All quizzes will be closed book, closed notes and no calculators allowed. If it is unavoidable that you should be absent for a quiz, then you need to schedule, prior to your anticipated absence, to take an oral quiz before the scheduled quiz date. NO MAKE-UP QUIZZES WILL BE GIVEN.

Exams and Final

There will be three midterm exams and a final. Tentative dates are listed in the class schedule. The exams will be comprehensive, covering the course material presented up to the time of the exam and the final will be comprehensive over the entire semester. Each of these exams are meant to be more difficult than the quizzes and should thoroughly test your knowledge of the subject. All exams will be closed book, closed notes and no calculators allowed. No make-up exams will be given with the exception of a written medical excuse. An equivalent oral exam will be given with an approved medical excuse.

Class Schedule

A class schedule for the semester is kept on the class webpage (http://www1.uop.edu/eng/courses/ecpe/ecpe71). All reading assignments, homework/exam dates, lecture content and lab schedules can be found here. Please refer to it periodically since this page may be updated weekly.

Blackboard

Class announcements, homework assignments, solutions and other course material will be posted on Blackboard for ECPE 71. Also, all class announcements (via email) will be made through Blackboard.

Attendance

Daily attendance will not be taken and will not directly be calculated into your course grade. However, you will quickly find that attending the lectures will contribute to a very large portion of your grade since homework problems, quizzes and examinations are all closely tied to the lectures. It is your responsibility to obtain any missed assignments, handouts and lecture material. Missed assignments or handouts can be obtained from the instructor, but, any missed lecture material needs to be obtained from fellow classmates.

Class Etiquette

Lecture begins at 9:30am. Please be on time. Repetitive tardiness is disruptive to the class and will not be tolerated. If you must be late for a lecture please let me know ahead of time. Eating and drinking in class should be avoided. If your class schedule does permit you time for lunch, then I ask you to be courteous when you eat in class. I encourage you to send me emails when you have questions regarding class material. I will answer them as time permits. HOWEVER, I will not respond timely to any "midnight" and "last minute" emails!

Grading

Homework: 10%
Presentation: 10%
Quizzes: 10%
Exams: 45%
Final Exam: 25%

Course grades will be based on a class distribution.

Honor Code

The University Honor Code is an essential element in academic integrity. It is a violation of the Honor Code to give or receive information from another student during an examination; or to submit all or part of someone else’s work as one’s own. If a student violates the Honor Code, the faculty member may refer the matter to the office of student life. If found guilty, the student may be penalized with failure of the assignment, or failure of the course. The student may also be reprimanded or suspended from the University. A complete statement of the Honor Code may be found in the student handbook, the Tiger Lore.