CSCE 5610 Computer Systems Architecture
Course Syllabus – Fall 2017

Class Meetings: T/TH 4 – 5:20 pm in Room B190 Discovery Park
Instructor: Hui Zhao
Office: F278
Office Hours: T/TH 3-4 pm
Email: Hui.Zhao@unt.edu
TA: Thota, Pranavi (pranavithota@my.unt.edu)
Office Hours: M/W 11:00 -1 pm

Course Objectives

The focus of this course is to improve your understanding of the technology factors, design techniques, architectural innovations and evaluation methods that will determine the form of today's computers. Given that you have basic knowledge of computer system design, this course will introduce more advanced design technologies and will help you build solid foundations in systems/hardware design through programming and simulations.

Prerequisites

CSCE 4610 or equivalent knowledge is required. Fundamental concepts of computer architecture and organization will be necessary for the course. It is helpful to have basic understanding of “Computer Organization and Design” by Hennessy and Patterson. Programming experience in C/C++ will be necessary for the course in order to finish the programming assignments.

Text Book


Grading Policy (I reserve the rights to make changes to this policy)

Homework/Simulation assignments: 30%
Midterm exam: 15%
Final exam: 20%
  - The exam will be held in class and will be closed book. The exams will test your understanding of the basic ideas and objectives of the class as covered in the course book and the lectures.
Research project: 30%
  - pair/group assignment
  - Several stages to demonstrate/encourage progress
Expected result publishable as original research work
Topics will be made available

Class participation: 5%

Project

There is a three-phase project to be performed by students (organized into teams of two members). The goal of this project is for students to gain in-depth knowledge and hand-on experiences on certain issues of computer system design. Teams will make presentations of different project phases in the class.

Presentations and Review

- Proposal (3 pages) – whitepaper with initial references
- Mid-point Progress Report (3 pages) – abstract, list of sub-tasks completed and pending, additional references, plan of experiments
- Final Report (8 including ref pages) – IEEE conference paper format
- Project Presentations – last 2 weeks

Writing

The quality of technical writing in your project reports and individual writing assignments (included with homework assignments) will constitute a significant portion of your overall course grade.

Late Policy

Students are strongly encouraged to turn in any assignments on-time. Unless otherwise noted for a particular assignment, the following late policy holds. Late assignments will be penalized by subtracting 20% of the total achievable points of that deliverable, if turned in within the first 24 hours after the due date. Between 24 to 48 hours late turn in will result in a reduction of 50% of the total achievable points.

Certain deliverables may not have ANY LATE day, as announced. Late point reductions cannot be made up by later improvements.

Academic Integrity

Unless explicitly noted, all work is to be done on an individual basis. Any violation of the university's guidelines for academic integrity will result in no credit for the course and further disciplinary action.