Syllabus
CS 2613 - Computer Organization
Spring 2010


Course Web Address:  [https://learn.ou.edu/](https://learn.ou.edu/)

Instructor:  Dr. Mohammed Atiquzzaman
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Email:  atiq@ou.edu

Office Hours:  Mondays and Wednesdays 9.30 – 10:30 and by appointment


Lab:  F: 10:30 - 12:20, DEH 125

Teaching Assistant:  Md. Shohrab Hossain
Office:  DEH 115
Email:  shohrab@ou.edu
Office Hours:  Tues (10.30 – 11.30 AM) and Thu (3.30 – 4.30 PM)

Prerequisite:  ECE 2213 (Introduction to Digital Design) or CS 2603 (Applied Logic for Hardware and Software)

Course Description:  An introduction to the architecture, organization and design of uniprocessor-based computer systems. Topics include processor, control and memory design and organization, pipelining and vector processing, computer arithmetic, I/O organization and a brief introduction to multiprocessors.

Course Outline:
- Overview and Background (Chapters 1-3)
- Register Transfer and Microoperations
- Basic Computer Organization and Design
- Programming Issues
- Microprogrammed Control
- Central Processing Unit
- Principles of Pipelining and Vector Processing
- Computer Arithmetic
- I/O Organization
Memory Organization
Introduction to Multiprocessors

**Grading:** Approximately five homework sets will be assigned. A short in-class quiz will be given covering the material of each homework assignment.

Five lab exercises will be assigned. Each lab exercise will typically consist of a pre-lab portion followed by an in-class exercise where hardware circuits will be constructed.

One assembly language programming project will be assigned. Three exams, including the final, are also scheduled.

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Quizzes</td>
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<td>Labs</td>
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<td>Programming Project</td>
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<td>Exam 1</td>
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<td>Exam 2</td>
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<td>Final Exam</td>
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**ABET Outcomes:** The course will measure ABET outcome I – an ability to use current techniques, skills, and tools necessary for computing practice.

**Students with Disabilities:** Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible to make necessary accommodations.

**Academic Integrity:** Rights and responsibilities under the academic misconduct code, University of Oklahoma Norman Campus can be found here: [http://www.ou.edu/provost/integrity-rights/](http://www.ou.edu/provost/integrity-rights/)