Syllabus
CS 2613 - Computer Organization
Spring 2009


Course Web Address: https://learn.ou.edu/

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Office Hours: Mondays and Wednesdays 11.30 – 12:30 and by appointment


Lab: F: 9:30 - 11:20, Carson 119

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Office Hours: Tues (10.30 – 11.30 AM) and Thu (3 – 4 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 six homework sets will be assigned. A short in-class quiz will be given covering the material of each homework assignment.

Approximately six 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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<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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<tr>
<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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**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/)