Syllabus
CS 2613 - Computer Organization
Spring 2008


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

Instructor: Dr. John K. Antonio
  email: antonio@ou.edu
  office: Room 111 EL Building
  phone: 325-4397
  office hours: Tu & Th: 9:00 to 10:00 – and by appointment

  lectures: MW: 8:30 to 9:20, CEC 123
  lectures/lab: F: 8:30 to 10:20, CEC 123

Lab Assistant: Hira K. Shrestha
  email: hira@ou.edu
  office: Room 158 EL Building
  office hours: MWF: 9:30 to 10:30– and by appointment

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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<tr>
<th>Component</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>15%</td>
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<td>Labs</td>
<td>15%</td>
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<tr>
<td>Programming Project</td>
<td>3%</td>
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<tr>
<td>Exam 1</td>
<td>20%</td>
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<td>Exam 2</td>
<td>22%</td>
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<td>Final Exam</td>
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<td><strong>Total</strong></td>
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**Special Note:** 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.

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