CMPE 310: Systems Design and Programming
Course Syllabus and More
Spring 2007

● Course Instructor:
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● Text:

● Supplementary texts:

● Lab Supplementary Text:

● Course Description:
This course introduces Intel 80x86 assembly language and the basic architecture of the Intel microprocessor. We will discuss register architecture, segmentation and paging, hardware specs and support chipsets for the 8086 processor. There are two exams and labs will focus on assembly language programming and hardware projects.
● Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Midterm</td>
<td>20.00%</td>
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<tr>
<td>Final</td>
<td>25.00%</td>
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<tr>
<td>Programming Projects/ Labs/ Homworks</td>
<td>40.00%</td>
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<tr>
<td>Active Class Participation/Quiz/In-class exercise</td>
<td>15.00%</td>
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● Tentative Course Outline

Week 1  Introduction
Week 1  Intel Microprocessor History and Overview
Week 2  Intel Architecture Basics
Week 2  Intel Register Architecture: Basics
Week 3  8086/8088 Hardware Specs
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Week 4  Bus Timing
Week 4  Memory Interface
Week 5  Memory Interface
Week 5  Memory Interface
Week 6  Spring Break
Week 6  Spring Break
Week 7  Memory Interface
Week 7  Midterm exam
Week 8  Basic I/O
Week 7  Basic I/O
Week 9  Basic I/O
Week 9  Interrupts
Week 10  Interrupts
Week 10  Direct Memory Access
Week 11  Direct Memory Access
Week 11  Disk Storage and Video
Week 12  Disk Storage and Video
Week 12  Bus Interface
Week 13  Bus Interface
Week 13  OS Fundamentals
Week 14  Segmentation and Paging
Week 14  Protected Mode Addressing
Week 15  Paging
Week 15  Advanced Topics
Finals  Final Exam Week
NOTE: Cheating at any time in this course will cause you to fail the course.
By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory [or for graduate courses, the Graduate School website].

The following is taken from the UMBC Student Handbook:

DEFINITIONS OF ACADEMIC MISCONDUCT
Academic misconduct may include but is not limited to the following:

Cheating: knowingly using or attempting to use unauthorized material, information, or study aids in any academic exercise.

Fabrication: Intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

Facilitating Academic Dishonesty: Intentionally or knowingly helping or attempting to help another commit an act of academic dishonesty.

Plagiarism: Knowingly representing the words or ideas of another as one's own in any academic exercise, including works of art and computer-generated information/images.

POLICY FOR RESOLVING CASES OF ACADEMIC MISCONDUCT
Individual faculty members have the right and responsibility to deal directly with any cases of academic misconduct which arise in their courses. Instances of academic misconduct may be identified in one of two ways. If a faculty member believes a student has committed an act of academic misconduct--for example, by direct observation of student behavior, by comparing the contents of an assignment with that submitted by another student, or by reviewing notated sources or references--the faculty member, in consultation with the Chair of the Academic Conduct Committee, will assess the student's alleged misconduct and the faculty member's options. If a student believes that academic misconduct has occurred, the student will notify either the faculty member or the Chair of the Academic Conduct Committee. It is particularly important that the Chair of the Academic Conduct Committee be consulted. The Chair can provide knowledge and insight for the faculty member. Communication of instances of academic misconduct also protects the integrity of the university by providing a means of recording infractions that may be repeated by a particular student, or which may prove endemic to a particular course or department. Consultation with the Chair of the Academic Conduct Committee provides a formal record of the infraction and resolution, protecting the student, professor, and university should any questions later arise.

The student will have the opportunity to respond to an accusation of academic misconduct.