

Mathematics 3670: Principles of Computer Systems, Fall 2012

Instructor: Dr. Andrew Mertz **Office hours:** 1:00 – 2:00 MWRP and by appointment
Office: Old Main 3331 **Office phone:** 581-3828
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Prerequisite: Credit for Mathematics 2170.

Text: *Introduction to Computing Systems: From Bits & Gates to C & Beyond, 2nd Edition*, by Y. Patt and S. Patel, McGraw–Hill, 2004.

Overview: The topics covered in the course include: overview of computer systems, data representation, computer organization, instruction sets, syntax and semantics of assembly language programming, addressing modes, the assembly process, implementation of functions, language translation, interrupts, and an introduction to the C programming language.

Laboratories and Exercises: Course materials will be supplemented with laboratories involving hands-on experience. Exercises from the textbook and additional programming assignments will also be utilized to reinforce lecture topics. Unless otherwise indicated, *all assigned work is to be done individually*.

Evaluation: In addition to laboratories and homework exercises, there will be two exams and a comprehensive final, as shown below. Exam dates are tentative.

Exam 1	Wednesday, September 26	25%
Exam 2	Wednesday, November 7	25%
Final	Tuesday, December 11, 8:00–10:00	30%
Laboratories	—as assigned—	20%

The following scale will be used as a first approximation to your grade:

85–100: A 70–84: B 55–69: C 45–54: D 0–44: F

In borderline cases, factors such as overall trends and the final exam score will be taken into consideration. It is possible that the cut-off scores given above will be lowered, but they will not be raised. As a result, an overall score of 70 is guaranteed to receive at least a B, whereas a score of 69 might result in a B.

To receive a final grade of C or better, you must earn a minimum of a C in each of the graded components of this course.

Academic Integrity: All of work you do for this course is to be your own. You should not discuss the details of assignments with anyone other than your instructor and any tutors provided by the Mathematics department. Academic integrity is a serious issue. The University regulations, which can be found at <http://www.eiu.edu/~judicial/studentconductcode.php>, are clear in this matter. Instances of academic dishonesty will be referred to Student Standards. Never copy from another student, nor allow other students to copy your solutions. Do not let others access your computer accounts. Do not share your passwords. You are expected to take reasonable precautions in securing your files, computer accounts, and printouts.

(Over)

My Expectations:

- I expect that you will invest the amount of time it requires for you to succeed.
- I expect you to ask questions. Ask me questions in class, during my office hours or online.
- I expect you to use my office hours. My office hours are your time. If you cannot meet during my regular office hours, contact me about making an appointment to meet at another time.
- I expect that all of the work you submit is wholly your own. You are encouraged to study with other classmates. You may discuss the slides and text as well as Labs after they are due. However, when you work on lab or exams you are to work alone without any outside sources.
- I expect you to read the textbook and study the slides. The textbook contains valuable examples and material that may not be covered in lecture.
- I expect you to keep up with the course schedule. Except in the case of an university excused absence I do **not** accept late work. In such a case it is your responsibility to provide adequate documentation of the reasons for the delay. Be sure to give yourself time to complete assignments in the face of technical difficulties. In the rare case that difficulties are due to problems with Eastern's servers then an extension will be given.

Miscellaneous:

- Make-up exams are available only if you notify me in advance. If you are unable to contact me by phone or email, you can leave a message with the departmental office (581-2028). **Make-up exams are available only if agreed upon before the regular exam is given. Further, it is your responsibility to provide adequate documentation of the reasons for the delay.**
- Cell phones are to be turned **off and put away** during lectures and labs.
- Please ask questions when you experience problems. Ask in class, in the lab, or see me outside of the regularly scheduled meeting times.
- Attendance and participation is an important ingredient of your success in this class. You are responsible for any material you miss.
- Be courteous to others.

If you have a documented disability and wish to receive academic accommodations, please contact the Coordinator of the Office of Disability Services (581-6583) as soon as possible.
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