CMSC 104: Problem Solving and Computer Programming

Fall 2002

Instructor:
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Office: SS 204
Office hours: Monday, Wednesday 1:30 - 2:00, 3:15 - 3:45, by appointment, or send e-mail.
I normally read my e-mails everyday.

Teaching Assistance:
Kevin Atkinson
Email: kevina1@umbc.edu
Office: ECS 230
Office hours: Tuesday, Thursday 4:00 - 5:00 PM.

Class Time:
Monday, Wednesday 2:00 - 3:15 PM. Room: SS 204.

Course Objectives:
This course is designed to prepare students for CMSC 201 by providing an introduction to computer programming that does not require prior programming experience. Students will be taught the basic use of a programming environment and the basic elements of the C programming language. This course also introduces general computer science concepts such as operating systems, computer organization, computer architecture, data representation and memory usage.

Note: This course does not fulfill any of the computer science major requirements. Students who have taken and received transfer credit for, or who are taking concurrently any computer programming course in a high-level programming language will not receive credit for CMSC 104.

Text:
C How to Program, 3rd edition
by Deitel & Deitel, Prentice Hall

Prerequisites or concurrent registration: None.

Academic Dishonesty:
All class work is to be done independently. You may discuss class material, homework problems, and general solutions with others, but when it comes to formulating, writing, and programming solutions you must work alone. Instances of academic dishonesty will be dealt with harshly, and usually result in a grade of F. For a more complete description of academic misconduct, refer to the UMBC Student Handbook.
Course Work:
Course work will consist of a combination of homeworks, programming projects, exams and a final exam. Programming assignments will be on the gl system. All programming assignments are to be done independently. Programs should be structured, clear, and well-documented.

Grading:
- Homeworks: 10%
- Programming Projects: 40%
  - Correctness: 80%
  - Good Structure and Documentation: 20%
- Exams: 30
- Final exam: 20%

Homeworks are due at the start of class. Late homeworks are not allowed. Projects are due at midnight of the due date. They are subject to the following late penalties: subtract 20% each day after the due date (Saturday, Sunday and holidays count as days). No make-up final will be granted without a doctor’s note or prior permission of the instructor.

Topics:
- Basic Computer Architecture and Data Representation
- Introduction to Operating Systems
- Problem Solving and Algorithm Development
- Introduction to Computer Usage and Programming Techniques
- Introduction to C Programming Language