# Overview

## CSMC 104 – Problems Solving and Computer Programming

# Overview

- Are you in the right class?
  - Careers / degrees in the computer technologies
  - UMBC Undergraduate degrees
  - CMSC 104
- UMBC Information Resources
  - My UMBC, Email, Blackboard
  - Course web site
- BBC History of Computers Part 1
  - www.youtube.com/watch?v=NbhbssXWDAE&feature=related

# Careers / Degrees in Computers

- Slides adapted from textbook
  - Chapter00_Grasso.pdf

# UMBC Computer Degrees

- UMBC - Colleges
  - College of Arts, Humanities and Social Sciences
  - College of Natural and Mathematical Sciences
  - College of Engineering and Information Technology
    - **Department of Chemical and Biochemical Engineering**
    - **Department of Civil & Environmental Engineering**
    - **Department of Computer Science & Electrical Engineering**
    - **Department of Information Systems**
    - **Department of Mechanical Engineering**

# UMBC Computer Degrees

- [Computer Science and Electrical Engineering Department](#)
  - **Chemical & Biochemical Engineering**
  - **Mechanical Engineering**
  - **Information Systems**
  - **Computer Science & Computer Engineering**
    - http://www.umbc.edu/catalog/2010/display.php?major=18#ComputerScienceMajorProgram

# Am I in the Right Class?

- CMSC 104
  - Assumes **NO** programming experience
  - Prepares you for CMSC 201
  - Does NOT count towards the CS major
  - Meets a requirement for other majors: i.e. Physics, Financial Economics

- CMSC 201
  - Assumes some programming experience
  - First CMSC course for CS majors
  - MUCH more challenging

# CMSC 104 - What Will We Cover?

- General computer hardware and software concepts
- Basic computer use
- Problem solving
- Basic computer programming in the C programming language

# CMSC 104 - Hardware and Software Concepts

- Introduction to computer architecture
- Data representation and memory usage
- Introduction to operating systems

# CMSC 104 - Basic Computer Use

- Basic use of
  - an operating system – Linux
  - a text editor

# CMSC 104 - Problem Solving

- Problem solving and algorithm development
  - general vs. specific solution to a problem
  - use of top-down design
  - use of pseudocode

# CMSC 104 - Basic Computer Programming

- C programming language
  - just the basics
- Compiling, linking, and executing a computer program
- Testing and debugging a computer program

# UMBC Information Resources

- My UMBC
- Email
- Blackboard
- Course web site

# MyUMBC

- [my.umbc.edu](my.umbc.edu)

- **Log In** button is on the far right

- You should have been given a username and initial password by the university.
  - Change your password the first time you log in

# If Someone Knows Your Password

- **Change it NOW!!!**
- Your password is just that - **yours** and only yours. You should not share it with anyone.
- If you think someone knows your password. Here is what you should do…

  - Change your password *immediately*.

  - Report this incident to <u>helpdesk@umbc.edu</u>. OIT keeps a log of all activities in all UNIX accounts. Any unauthorized access can be tracked given ample research time.

- You are legally liable for any action caused under your account.

# MyUMBC - Email / Gmail

- **gmail.umbc.edu**

- Your e-mail address is :
  - *username@umbc.edu*

- You can:
  - Add other email accounts
  - Forward Gmail to other addresses
  - Set it up to work with Outlook, Eudora, etc

- Google @ UMBC
  - http://my.umbc.edu/groups/google

# MyUMBC - Blackboard

- Click on **Blackboard** tab on MyUMBC home page
- Links to all your courses will appear in the **My Courses** box

- [CMSC 104 Problem Solving and Computer Programming](#)
  - Announcements
  - Grades
  - Calendar
  - Syllabus
    - Link to course web site

# Course Web Site

- [userpages.umbc.edu/~cgrasso/cs104.f11/index.shtml](userpages.umbc.edu/~cgrasso/cs104.f11/index.shtml)

- Home
  - Contact Info
  - Compute Science Help Center

- Syllabus
- Schedule
- Homework
- Resources

# Division of Information Technology (DoIT)

- **www.umbc.edu/doit/**

  - Accounts and Passwords

  - Computing Labs and Facilities

  - Email and Calendaring

  - Wireless and Infrastructure Support

- Help Tickets
  - https://my.umbc.edu/help/request
  - COEIT queue

# Your GL Account

- GL is short for "General Labs."
  - These labs contain an assortment of dual-bootable Windows / Linux PCs, Macintosh's, and several IRIX machines.

- GL lab locations and hours of operation:
  - wiki.umbc.edu/display/doit/Computing+Labs+and+Facilities.

- The username and password on this account are also your username and password for my.umbc.edu/.

# BBC History of Computers - Part 1

- www.youtube.com/watch?v=NbhbssXWDAE&feature=related