Computer Science 5C
Introduction to Programming in C

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CMPS 5C - 1/7/09
Details

• Class: MWF 9:30-10:40, Phys Sci 114
• Office Hours: E2 347B, Mondays 3-5
• Class web page:
  • http://www.cs.ucsc.edu/~sbrandt/5C
• Labs: BE 105 M: 4-6, Th 10-12 & 2-4
• TA: Melanie Witt (mwitt@cs.ucsc.edu)
• TA office hours: TBD
• Note: class and lab attendance are mandatory
About me

• Professional computer research scientist / programmer in industry for 10 years
  • Mostly research and development
  • I have programmed professionally in most major modern programming languages

• My research: Systems
  • Big distributed storage systems
  • Real-time systems
About the course

• This course covers the fundamentals of computer programming, including:
  • Software Development
  • Fundamentals of programming
  • The C programming language

• It covers:
  • Basic concepts of programming
  • Core syntax of the C programming language
Required reading

• C by Dissection, by Kelley and Pohl
Course plan

• 10 chapters in 10 weeks
  • 1: Class overview/Introduction
  • 2: Lexical elements, operators, the C system
  • 3: Flow of Control
  • 4: Functions and Structured Programming
  • 5: Character Processing
  • 6: The Fundamental Data Types
  • 7: Enumeration Types and typedef
  • 8: Functions, Pointers, and Storage Classes
  • 9: Arrays and Pointers
  • 10: Strings and Pointers
Evaluation

• 8 Weekly programming assignments (20%)
  • 4 graded
  • 4 ungraded (but required)

• 2 Midterms (40%)
  • At roughly 1/3 and 2/3 through the quarter

• Final Exam (40%)
  • Thursday, March 19, 8-11 am

• A minimum of 50% on all three aspects of these is necessary but not sufficient to pass the class
Programming assignments

- **General**: You may freely give and receive help with the computers, editors, UNIX, debugging techniques, the meaning and proper use of C, etc.

- **Ungraded assignments**: Do whatever you want to maximize what you learn from these assignments, but the work you submit must be your own.

- **Graded assignments**: You may not discuss the programs or share solutions in any form with anyone.
Preparation for this class

• Prerequisites
  • I’m not sure

• Strongly recommended
  • CMPS 10 or some experience with programming (and computers)

• Because
  • 10-20% of the class will fail
  • And, based on past experience, 10% will have discussions with me about cheating
Academic honesty

- You are expected to adhere to the highest ethical standards
- You cannot
  - Look at, copy, or modify anyone else’s code
  - Allow anyone else to look at, copy, or modify your code
  - Collaborate on exams or graded assignments
- A program will be used to detect cheating
  - It is better than you are
  - If you are good enough to fool it, you are good enough to do the assignment yourself
- If you have any questions, talk with me
Consequences of cheating

• You will receive a 0 for the assignment or the exam
• You may receive an F for the course
• A letter describing the incident will be sent to the department, School, Dean, and Provost
  • If this is not the first time, you may be expelled
Turning in assignments

• TBD

• Late assignments will not be accepted except in special circumstances
  • Serious illness (with a note from your doctor)
  • Emergencies
  • Death
How to do well in this class

• Attend class and labs
• Do all of the assignments (carefully)
• Do more than the minimum required
• Read everything
  • Reread everything
• Start early
• Review your work
  • Before submitting
  • After grading
• Study everything
  • Review things you don’t understand
Resources

- Class
- Labs
- The book
- Other books
- Office hours (mine and the TAs)
- Class web page
Other details

• Labs start next week
• Who isn’t registered yet?
• I like questions
  • They help me get a feel for how well everyone understands the material
  • If you are confused, ask a question
• Questions about homework? Start with the TA
• Questions?