

CS 121 Final Exam Review Guide

The final exam for this class will be mostly multiple choice, with perhaps a few fill in the blank and matching questions. Subject material includes basic computing terminology and data representation as covered in the first two weeks of class, careers in computing and multimedia as addressed by exercise one and the in-class review of EOU curriculum, and special topics covered by group presentations.

General Objectives

Recognize instances of computer software.

Draw and label a diagram showing the basic components of a computer (Central Processing Unit, Main Memory, Mass Storage, Input and Output). State the function of each component.

Describe the purposes of registers and the program counter.

Rank the different types of memory (registers, main memory, secondary memory) according to speed and relative cost.

Describe the *general* idea of digitizing real world (analog) information (ie, sampling and quantizing).

State (within 50 years) when each of the following advances in computer science occurred:

- First mechanical calculator built (by Pascal) (Also—who described this device earlier, and when?)

- First computer designed (by Babbage)

- First written description of programming (by Lovelace)

State (within the correct decade) when each of the following advances in computer science was made:

- First transistor

- First integrated circuit

- Initial planning of ARPAnet (the first phase of the Internet)

- First network connection

- First e-mail

- Launching of the World-Wide Web

- GUI (Graphical User Interface) Operating Systems gain popularity

Describe the requirements for the CS, SSC and MM concentrations, and explain the purposes for the required courses. Given a career description, state which (if any) CSMM concentration would be good preparation for that career.

Refer to Quizzes to get an idea how multiple-choice questions might work.

Recognize terms that are relevant to computer science and software development. Familiarity with the language and culture of a discipline is part of success in it.