

CS 320 Syllabus Supplement

Catalog Description Studies the architecture of computer systems from four-bit machines to supercomputers. Memory systems, I/O processors, and multi-computer systems are studied in detail. RISC, CISC and Neural Nets are introduced. Establishes the relationship of hardware and software. Includes hands-on projects. Spring

Credit Hour Policy This course meets the federal requirements of 15 in-class hours plus an expected 30 hours of out-of-class work per credit hour over a semester. (At least 135 hours total; 9 per week)

Time & Place CS 320 meets Monday, Wednesday, and Friday at 11:00 AM in Koch Center 267

Learning Objectives

The objective of this course is to teach students the logical structure of a modern computer system including the control unit, internal and external memory, and I/O.

Course outcomes by program outcome

1b. Students will understand the fundamentals of their major field of study.

- All students will participate in discussions of the following topics:
 - Von Neuman architecture
 - memory systems
 - bus structures
 - interrupt and I/O systems
 - microprogramming
 - RISC and CISC machine architecture
 - CPU structure
 - ARM Cortex and Pentium architectures
 - VLIW Architecture

2c. *Students will be able to communicate effectively both orally and in writing.*

- Students will write complete explanations of computer architecture concepts in a clear and effective manner.
- Students will complete a formal term paper on a computer architecture topic.
- All students will demonstrate an ability to orally explain topics in computer architecture in a clear and effective manner.

3b. *Graduates will be cognizant of contemporary issues.*

- Students will be introduced to contemporary professional issues.
- Students will complete a term paper on a contemporary professional issue related to computer architecture.

Homework Problems will be assigned daily. Assignments are posted on the website.

Attendance Policy You are expected to attend all class sessions. Absences may adversely affect your grade.

Office Hours Dr. Blandford's office is Koch Center 266, Campus phone is 2201. He will usually be in his office from 7:00 to 8:00 AM and 2:00-3:00 PM on MWF and from 7:00 to 10:00AM on TT.

Disability Policy It is the policy and practice of the University of Evansville to make reasonable accommodations for students with properly documented disabilities. Students should contact the Office of Counseling and Health Education at 488-2663 to seek services or accommodations for disabilities. Written notification to faculty from the Office of Counseling and Health Education is required for academic accommodations.

Honor code This course will be governed by the University of Evansville Honor Code, which is

I will neither give nor receive unauthorized aid, nor will I tolerate an environment that condones the use of unauthorized aid

This code has two fundamental expectations:

- Students will submit as their own work only those items that are indeed their own work
- Students will hold each other responsible for adhering to the Code