

Operating Systems (CS-384)



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Logistics

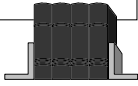
- Schedule
• Exams
• Grading
• QA
• Textbook
• Web/listserv
• Term paper
• Lab projects

Course Topics

- OS overview
• Process management
• Memory management
• Storage/file management
• I/O systems

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Course Topics



• Case studies

- UNIX
- Windows NT

• Labs

- UNIX
- Real-time embedded (68HC11)

Course Requisites

• Prerequisites

- CS-183
- CS-280
- CS-285
- EE-290
- UNIX software development skills
 - E.g., CS-321

• Corequisite

- CS-393

Prerequisites (CS-183, CS-285)

• C++ language

- Fundamentals
- Objects/classes
- Software design
 - Compilation
 - Linking
 - Program execution
 - Coding proficiency

• Data structures

- Basic structures
- Time complexity
- Hash tables
- Standard Template Library (STL)
 - Containers
 - vector, list, queue, set, map
 - Algorithms

Prerequisites (EE-290, CS-280)

- **Logic design**
 - Combinational
 - Sequential
- **Architecture**
 - Registers
 - Memory/ports
 - Addressing modes
 - Interrupts
 - Processor state
- **Embedded software**
 - 68HC11 assembly language
- **Tools**
 - AS11M / GNU asm
 - WinBug11
 - Wookie simulator
 - gcc HC11 compiler

Prerequisites (UNIX)

- **UNIX commands**
 - C shell (or ??)
 - Utilities
- **C++**
 - g++ compiler
 - Make files
 - Libraries
 - Debugger
- **Documentation**
 - man pages
 - Header files
