Course Goals: In depth understanding of modern computer architecture, fundamental issues, and engineering tradeoffs. How to design a computer system. Understanding how a computer system works and why it performs as it does.

Course Prereq: Digital Design
Computer Programming and Problem Solving

Instructor: Shuai Wang (swang@nju.edu.cn)
http://cs.nju.edu.cn/swang
Office: 406 CS Department Building

Class Meeting: Tuesday, 8:00AM – 9:50AM, Yi-B 307
Thursday, 10:10AM – 12:00PM, Yi-B 303

URL: http://cs.nju.edu.cn/swang/CompArchOrg_12F


Slides: Posted on course webpage after the lecture

Grading Policy: Class Participation ~10%
Homework Assignments ~15%
Labs and Projects ~20%
Mid-term Exam ~20%
Final Exam ~35%

Course Structure: (Tentative)
Computer System Overview
Data Representation
Arithmetic Logic Unit (ALU)
Memory Hierarchy
Instruction Set Architecture (ISA)
Central Processing Unit (CPU)
Pipeline
Bus & I/O

Honor code: Any cheating or plagiarism will be brought to the immediate attention of the Dean of Student Study.