Computer Architecture and Organization  
Fall 2011

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)  
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Office: 406 CS Department Building

Class Meeting:  
WF, 10:10AM – 12:00PM, Xian II 114

URL:  
http://cs.nju.edu.cn/swang/CompArchOrg_11F

Textbook:  
(In Chinese)  

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:  
(Academic Integrity)  
Any cheating or plagiarism will be brought to the immediate attention of the Dean of Student Study.