



Shanghai University of Finance & Economics

2019 Summer Program

CMS 200 Information System

Course Outline

Term: June 3 - June 28, 2019

Class Hours: 14:00-15:50PM (Monday through Friday)

Course Code: CMS 200

Instructor: Mo Sha

Home Institution: State University of New York at Binghamton

Office Hours: TBA and by appointment

Email: msha@binghamton.edu

Credit: 4

Class Hours: This course will have 52 class hours, including 32 lecture hours, professor 8 office hours, 8-hour TA discussion sessions, 4-hour review sessions.

Course Description:

This course provides an overview of information systems. Topics include hardware and software fundamentals, use of software packages, effective use of networks, Internet, and other communication tools, the design and implement of information systems with JAVA programming language.

Course Objectives:

This course is designed to provide a solid foundation and background in information system techniques and concepts, as well as the design and implement of information systems with JAVA programming language:

- review basic information system concepts and techniques



- using networks, world-wide web, and other communication tools in a variety of settings
- overview of basic system software and application software
- implement information system efficiently and correctly

Required Textbooks

John Lewis, William Loftus, *Java Software Solutions*, 8 Edition, Pearson, ISBN 10: 0-13-359495-5.

Grading & Evaluation:

There will be one midterm exam and one final exam, 30 points each. Exams test basic programming concepts. Student Project accounts 40 points. Student Project tests the skill of information system design and implementation. There is 15 extra points for attendance.

Course Schedule (tentative):

The course outline is tentative and I will modify accordingly depending on the pace of the class.

Week 1: Basic Information System Concepts and Techniques

Session 1: Principles of Computing Hardware and Application Software

Session 2: Information Exchange

Session 3: Introduction to Networking

Session 4: Introduction to Operating Systems

Week 2: The Design of Information Systems

Session 1: Introduction to Object-Oriented Programming and JAVA

Session 2: Basic Concepts in JAVA

Session 3: Conditions and Loops Concepts

Session 4: Midterm Exam

Week 3: The Implement of Information Systems

Session 1: Control flows

Session 2: Advanced Topics in Information System Implementation

Session 3: Case Study on Medical System

Session 4: Case Study on Industrial Automation System

Week 4: Real-World Information Systems Case Study

Session 1: Case Study on Structure Health Monitoring

Session 2: Case Study on Energy Management System

Session 3: Student Project Presentation

Session 4: Final Exam