

## Shanghai University of Finance & Economics

## 2020 Summer Program

# **CMS 200 Information System**

# **Course Outline**

Term: June 1 - June 26, 2020

Class Hours: 10:00-11:50 (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.

The grade distribution (90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D; and below 60% = F)

#### **Course Schedule (tentative):**

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

<u>Week 1: Basic Information System Concepts and Techniques</u> <u>Session 1: Principles of Computing Hardware and Application Software</u> <u>Session 2: Information Exchange</u> <u>Session 3: Introduction to Networking</u> <u>Session 4: Introduction to Operating Systems</u>

<u>Week 2: The Design of Information Systems</u> <u>Session 1:</u> Introduction to Object-Oriented Programming and JAVA <u>Session 2:</u> Basic Concepts in JAVA <u>Session 3:</u> Conditions and Loops Concepts <u>Session 4:</u> Midterm Exam

<u>Week 3: The Implement of Information Systems</u> <u>Session 1:</u> Control flows <u>Session 2:</u> Advanced Topics in Information System Implementation <u>Session 3:</u> Case Study on Medical System <u>Session 4:</u> Case Study on Industrial Automation System

<u>Week 4: Real-World Information Systems Case Study</u> <u>Session 1: Case Study on Structure Health Monitoring</u>





<u>Session 2:</u> Case Study on Energy Management System <u>Session 3:</u> Student Project Presentation <u>Session 4:</u> Final Exam