

# Capital University of Economics and Business

## Overseas Chinese College

### Course Syllabus

<b>Year and Semester</b>	2024 Spring					
<b>Course Name</b>	Operations Research					
<b>Course Code</b>	MIS113					
<b>Course Type</b>	<input type="checkbox"/> General Education (Required)		<input type="checkbox"/> General Education (Elective)			
	<input checked="" type="checkbox"/> Basic Disciplinary Course		<input type="checkbox"/> Professional Course (Required)			
	<input type="checkbox"/> Professional Course (Elective)		<input type="checkbox"/> Professional Course (Expanded)			
	<input type="checkbox"/> Professional Course (Advanced)					
<b>Course Credits</b>	3					
<b>Course Hours</b>	Total Class Hours	54	Lecture Hours	54	Experiment (Computer) Hours	0
<b>Applicable object</b>	√ Freshman <input type="checkbox"/> Sophomore <input type="checkbox"/> Junior <input type="checkbox"/> Senior					
	<input type="checkbox"/> Business Administration (Accounting)					
	√ Information Management and Information Systems (Finance)					
<b>Prerequisites</b>	Fundamental of Computer Science					
<b>Instructor</b>	Jessie Tian					
<b>Contact Information</b>	Office: C217					
	Tele: (010)83951082					
	Email: tianjiangxue@cueb.edu.cn					
<b>Office Hour</b>	T: 13:30-17:00; W: 15:25-17:00;					
<b>Learning Centre</b>	T: 18:00-20:00(online); TH: 13:30-15:05;					
<b>Grade/Section</b>	2023IT					
<b>Course Time/Place</b>	F: 09:55-12:20/ A201					
<b>Textbook</b>	Management Information Systems: Managing the Digital Firm, Global Edition (14th Edition)					

#### Reference Book

Database Systems Concept, Sixth Edition by Abraham Silberschatz , Henry F Korth and S, Sudarshan

#### Course Description

This course is for students to acquire a basic understanding about information system and the interrelationships between information system and business. In nowadays, information system has become a very decisive instrument for both enterprise and government. A well-developed and well-diffused information system could help organization to achieve a better operation, to promote R&D, and to optimize the decisions therefore to increase the competitive advantages. Basically, this course is a multi-disciplinary module which encloses management, business as well as computer science. Through studying this course, students can understand how to combine computer knowledge with business, apply the knowledge to real life, and have the ability to effectively manage enterprises and better operate companies.

## Student Learning Outcomes

On successful completion of this course, candidates should be able to:

Knowledge	<ul style="list-style-type: none"> <li>explain the basic concept of management information system</li> <li>describe the management information system and the methodology used to collate, record, organize and summarize the information</li> <li>identify the information technologies that can be applied into business processes</li> <li>illustrate how management information system can improve decision making</li> </ul>
Capability	<ul style="list-style-type: none"> <li>use the techniques and tools to design and implement information system</li> <li>analyze the management issues related with information system</li> <li>apply management system to optimize daily work</li> </ul>
Mindset	<ul style="list-style-type: none"> <li>establish the integrity and objectivity in workplace</li> <li>be logical, ethical, methodical, consistent and accurate</li> <li>apply critical thinking in the process of decision making</li> </ul>

## Teaching Methods

This course contains lectures, case studies, discussions, homework, quizzes, presentation and exams. Exercises and practice questions will be delivered to students as a way to test their understanding of the knowledge. This will require individual or group assignment before, in or after class.

## Grade Criterion

Component	Weight	Description
Final Exam	20%	A cumulative final examination will be given based on all of the contents of the class. The exam paper may be composed of computer operation questions and case analysis questions. Students should rely primarily on homework assignments to give them a sense of what they may see for material on exams.
Mid-Term Test	20%	A cumulative midterm test will be given based on all of the contents that have been taught in class. The test paper may be mainly composed of multiple-choice questions and it should be completed in class.
Homework	15%	Most of the assigned homework is taken from the Exercises in the textbook. Assignments will be collected at the clearly stated date. Late assignments will not be accepted. The graded assignments may be kept by the tutor for reference and won't be returned to students.
Quizzes	15%	There will be at least 2 quizzes during the semester. Quizzes may or may not be announced in advance. It may also be used as a way to check the attendance. Quizzes will test your knowledge of both concepts and the application of those concepts.
Presentation	10%	The students will be divided into several groups to prepare a presentation. Each student is required to be involved in the presentation. The topics can be selected from the textbook or lectures. Each group need to finish a PPT related to the topic which is given and hand in the related resources to the teacher before the presentation.

Participation	10%	Individuals will be asked to participate individually in a question and answer at least 5 times during the semester. The performances should be counted in their participation.
Attendance	10%	Refer to attendance policy listed below
<b>Total</b>	<b>100%</b>	

### Detailed Grade Computation

	Before Midterm	After Midterm
Attendance	5%	5%
Participation	5%	5%
Homework	5%	10%
Quizzes	5%	10%
Presentation		10%
Midterm test	20%	
Final exam		20%
Total	40%	60%

### Assessment of Student Performance

Week	Date	Topics	Homework
1		<ul style="list-style-type: none"> <li>● Course Introduction and Syllabus</li> <li>● Introduce the textbook and how to read it</li> <li>● Review IS family tree from last semester MIS111</li> </ul>	- Read Chapter 1
		<ul style="list-style-type: none"> <li>● Introduce MIS from IS</li> <li>● Show up MIS examples</li> <li>● Summary MIS's goodness and weakness</li> <li>● Show up data → information → knowledge → AI (BI)</li> <li>● Summary: IT is important, and IT's future</li> </ul> (Chapter 1: Organizations, Management and the Networked enterprises)	- Ask student to look for MIS examples, and show up on paper - Read Chapter 1 and Chapter 2
2		<ul style="list-style-type: none"> <li>● Check students' textbook for Chapter 1</li> <li>● Show up Chapter 1 Mind Map: IS → What is IS? → IS purpose (6) → IS demensions (3) → MIS courses (6) → MIS new changes (5)</li> <li>● Review data → information → knowledge → AI</li> <li>● Check students' MIS examples</li> </ul> (Chapter 1: Organizations, Management and the Networked enterprises)	
		<ul style="list-style-type: none"> <li>● Check Chapter 1 test answers from students</li> <li>● Pick up some students' good case, and ask to show up</li> </ul>	- Chapter 1 test - Review Chapter 1 - Preview Chapter 2
3		<ul style="list-style-type: none"> <li>● List Chapter 2 main points (4)</li> <li>● Introduce business process using library case</li> <li>● Introduce firm's 3 level jobs, positions and systems from IS</li> <li>● Talk about students' business process cases</li> </ul> (Chapter 2: Global E-business and Collaboration)	- Analysis group case on business process
		<ul style="list-style-type: none"> <li>● Show up more business process cases</li> <li>● Summary firm's departments depending on business process</li> <li>● Introduce the relationship between IT and social/behaviour/organization</li> </ul>	- Look for system's pictures from the business process cases

		<ul style="list-style-type: none"> <li>● Introduce the relationship among pos machine, China unionpay and bank (Chapter 2: Global E-business and Collaboration)</li> </ul>	
4		<ul style="list-style-type: none"> <li>● Review IS and MIS (3 parts)</li> <li>● Review business process using KFC case (includes business process, system, bank and so on)</li> <li>● Summary firm's departments depending on business process</li> <li>● Introduce the firm's system, such as TPS, MIS, DSS, ESS, SCM, CRM</li> <li>● Introduce social business (Figure 2.8), and give some examples</li> <li>● Show up IT's relationship with organization/Social behavior (Chapter 2: Global E-business and Collaboration)</li> </ul>	
		<ul style="list-style-type: none"> <li>● Use student's case to show up the business process</li> <li>● Depending on the case, show up the database's tables and relationship</li> <li>● Show up database tables and relationship based on a business process (Chapter 2: Global E-business and Collaboration)</li> </ul>	<ul style="list-style-type: none"> <li>- Draw the database tables and relationship</li> <li>- Chapter 2 test</li> <li>- Preview Chapter 3</li> </ul>
5		<ul style="list-style-type: none"> <li>● Check Chapter 2 test answers from students (online)</li> <li>● Chapter 3: make 18 groups to do the presentation (depending on the Chapter 3's knowledge points to make groups) (Chapter 3: Information systems, Organizations and Strategy)</li> </ul>	<ul style="list-style-type: none"> <li>- Group presentation on Chapter 3 (marks for Quiz 1)</li> <li>- Start to write report: show up the firm's background, business process with systems, simple business process with database's E-R diagram and tables</li> </ul>
		<ul style="list-style-type: none"> <li>● Presentation on Chapter 3 in groups – Part 1 (Chapter 3: Information systems, Organizations and Strategy)</li> </ul>	<ul style="list-style-type: none"> <li>- Continue writing the report for submit</li> <li>- Chapter 3 test</li> </ul>
6		<ul style="list-style-type: none"> <li>● Presentation on Chapter 3 in groups – Part 2 (Chapter 3: Information systems, Organizations and Strategy)</li> <li>● Summary Chapter 3 knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- Revise the report</li> </ul>
		<ul style="list-style-type: none"> <li>● Check Chapter 3 test answers from students (Chapter 3: Information systems, Organizations and Strategy)</li> </ul>	
7		<ul style="list-style-type: none"> <li>● Start Chapter 4</li> <li>● Show up the Chapter 4's main points (Chapter 4: Ethical and Social Issues in Information Systems)</li> </ul>	
		<ul style="list-style-type: none"> <li>● Ask students to make groups depending on APP (蓝墨云班课)</li> <li>● Draw Chapter 4's mind map</li> <li>● Upload the mind map to the APP (homework function)</li> <li>● Comment students' mind map by teacher &amp; other groups (Chapter 4: Ethical and Social Issues in Information Systems)</li> </ul>	<ul style="list-style-type: none"> <li>- Start to use 蓝墨云班课 APP</li> <li>- Comment on the report using the APP in groups</li> </ul>
		<ul style="list-style-type: none"> <li>● Answer Chapter 4 test in groups</li> <li>● Show up the answers of Chapter 4 (Chapter 4: Ethical and Social Issues in Information Systems)</li> </ul>	<ul style="list-style-type: none"> <li>- Continue revising the report</li> </ul>

			- Preview Chapter 5
8		<ul style="list-style-type: none"> <li>● Introduce Chapter 5 – Part 1 (Chapter 5: IT Infrastructure and Emerging Technologies)</li> </ul>	- Continue revising the report
		<ul style="list-style-type: none"> <li>● Show up the E-R diagram for case</li> <li>● Show up the database's tables and relationship for case</li> </ul>	- Continue revising the report
9		<ul style="list-style-type: none"> <li>● Introduce Chapter 5 – Part 2 (Chapter 5: IT Infrastructure and Emerging Technologies)</li> </ul>	- Continue revising the report
10		<ul style="list-style-type: none"> <li>● Answer Chapter 5 test in groups</li> <li>● Show up the answers of Chapter 5 (Chapter 5: IT Infrastructure and Emerging Technologies)</li> </ul>	- Submit the report (hard copy) - Preview Chapter 6
		<ul style="list-style-type: none"> <li>● Introduce Chapter 6 – Part 1 (Chapter 6: Foundations of Business Intelligence: Database and Information Management)</li> <li>● Introduce MS Access</li> <li>● Create database and tables depending on borrowing books from the library</li> </ul>	- Create the report case's database and tables
11		<ul style="list-style-type: none"> <li>● Introduce Chapter 6 – Part 2 (Chapter 6: Foundations of Business Intelligence: Database and Information Management)</li> <li>● Introduce XML and XSL (with HTML) using examples and ppt</li> </ul>	- Continue creating the report case's database and tables - Report 2 for quiz 2 start - Start to prepare presentation in groups
		<ul style="list-style-type: none"> <li>● Answer Chapter 6 test in groups</li> <li>● Show up the answers of Chapter 6 (Chapter 6: Foundations of Business Intelligence: Database and Information Management)</li> </ul>	- Preview Chapter 7
12		<ul style="list-style-type: none"> <li>● Introduce Chapter 7 – Part 1 (Chapter 7: Telecommunications, The Internet, and Wireless Technology)</li> </ul>	
		<ul style="list-style-type: none"> <li>● Insert records into the tables using MS Access</li> <li>● Create the tables' relationship</li> <li>● Start to design the GUI interface</li> </ul>	- Create the report case's GUI interface and insert records
13		<ul style="list-style-type: none"> <li>● Introduce Chapter 7 – Part 2 (Chapter 7: Telecommunications, The Internet, and Wireless Technology)</li> </ul>	- Continue creating the report case's GUI interface and insert records
		<ul style="list-style-type: none"> <li>● Answer Chapter 7 test in groups</li> <li>● Show up the answers of Chapter 7 (Chapter 7: Telecommunications, The Internet, and Wireless Technology)</li> </ul>	- Preview Chapter 8
14		<ul style="list-style-type: none"> <li>● Introduce Chapter 8 – Part 1 (Chapter 8: Securing Information Systems)</li> </ul>	

	<ul style="list-style-type: none"> <li>● Using the GUI interface to insert records into the database</li> <li>● Using the GUI interface to update records into the database</li> <li>● Using the GUI interface to delete records into the database</li> <li>● Using the GUI interface to view records into the database</li> </ul>	- Make sure the GUI interface can do insert, update, delete and view records functions
	<ul style="list-style-type: none"> <li>● Introduce Chapter 8 – Part 2 (Chapter 8: Securing Information Systems)</li> <li>● Answer Chapter 8 test in groups</li> <li>● Show up the answers of Chapter 8 (Chapter 8: Securing Information Systems)</li> </ul>	<ul style="list-style-type: none"> <li>- Continue making sure the GUI interface can do insert, update, delete and view records functions</li> <li>- Submit the database system online</li> </ul>
15	Presentation I	
	Presentation II	
16	Presentation III	
	Presentation IV	

#### *☞ Self-Study and Reading ability Practice*

Instructor will give out the chapters or the reference books to read and use class hours to have discussion; students should be able to show a proactive attitude and ability for self-study and reading. Knowledge and oral English will be elements of homework or presentation score.

#### *☞ Homework*

Students should finish their homework by themselves. Copying from others will be treated as cheating and the homework scores will be lowered. Students should hand in all assignments on time. Late assignments will be accepted at the discretion of the instructor (i.e., when the student was ill or had an excused absence). Late assignments without reasonable proof will be reduced in score by 50%.

#### *☞ Attendance*

Because the course covers a great deal of material, attending every class session is very important for performing well.

- ◆ Being late for 15 minutes or more is considered an absence.
- ◆ Five hours or above of unexcused absences will result in the lower level of the final grade by one grade band (e.g. from C – to D +). Any excused absence must be discussed directly with the teacher.
- ◆ Absence which is more than 1/3 of the total teaching hours will cause an F (a failing grade) directly. but students are welcome to continue attending classes.
- ◆ An incomplete grade (I) will be considered in case of medical or family emergencies.

#### *☞ Participation*

- ◆ Students should participate in classes actively. Half of participation grade is determined by their presentation in class. They are encouraged to ask questions relevant to the subject and express their own opinions. Every student should respect the ideas, opinions, and questions of their classmates.
- ◆ Students should also use office hours to ask questions or talk with the instructor for good communication and effective learning.
- ◆ Frequent visiting the instructor and chatting in English during office hours is highly recommended.

- ♦ Any misbehavior and non-class related activities in class will result in the lower level of the participation grade, including ringing cell phones.
- ♦ All above behaviors will be solely evaluated by the instructor for scoring.

### **Textbook**

Students must bring the textbook to class.

### **Topic Course Outline (original)**

*Note: Some chapters or sections may leave for self-study, this is the students' duty to learn and understand, they may also be included in the quizzes or exams. A review in Chinese may be held during L.C. and O.H. in the semester.*

### **Teacher's Office Hour**

- ♦ The instructor's office hour is shown in the front of the office door.
- ♦ Students are suggested to use the instructor's office hour and learning center to ask questions or talk with the instructor once at least per week for good communication and effective learning, which is recorded in the students' participation.
- ♦ The time can be scheduled by instructors or students, or both.

### **Cheating and Plagiarism**

Cheating is not tolerated. Any student caught cheating on a quiz; test or exam will be given a mark of zero (0) for the particular work. At the beginning of the semester the definition of plagiarism will be carefully explained, when any thoughts or writings of another person are used, they must be clearly identified (usually one uses quotation marks) and the source notes. **If any student is caught cheating on any homework assignment, the highest score the student can earn in that course is a "C".**

### **Important Dates**

<b>Midterm Test</b>	<b>Week 9 or 10</b>
<b>Final Exam</b>	<b>Week 17 (Refer to the notice of the Academic Affairs Office)</b>

*Note: This syllabus is tentative and may be changed or modified throughout the semester. All students will be notified and a new syllabus will be given.*

**Instructor: Jiangxue Tian**

**Department Head: Jingning Li**

