# Capital University of Economics and Business Overseas Chinese College Course Syllabus

Year and Semester 2020 Fall (August 31, 2020 - January 10, 2021)

<u>Course Name</u> Introduction to Computer Technology

Course Code MIS111

Course Type 
☐ General Education (Required) ☐ General Education (Elective)

☐ Professional Course (Required) ☐ Professional Course (Elective)

☐ Basic Disciplinary Course

Course Credits3Course Hours48PrerequisitesNoneInstructorXin ZhangContact InformationOffice: C217

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Office Hour T: 15:30—17:30; W: 10:00—11:00; W: 14:30—15:30;

TH: 9:00—10:00; F: 10:00—11:00

**Learning Centre** T: 18:00—20:00; W: 14:30—16:30

**Grade/Section** 2020BA1

<u>Course Time/Place</u> M: 13:30—15:20/ A101

W: 11:10—12:00/A101

#### **Textbook**

Timothy J., Linda I., Daniel A. O'Leary. *Computing Essentials 2017*. McGraw-Hill Education Press, New York, ISBN: 978-1-259-56365-2.

#### **Course Description**

This course is an introductory course in computational knowledge. It mainly introduces the 6 components of information system: People, Procedures, Software, Hardware, Data and Internet. Learning this course allows student to have a basic and complete knowledge of computers and information systems, and to fully integrate knowledge with real life. This course lays a solid foundation for students to further studying in IT area.

## **Student Learning Objectives**

After completing this course, students will be able to:

- Understand the structure of information system (IT), including the role of 6 components and 12 related career.
- Understand the basic architecture and application of network, and be able to communicate effectively by using network.
- Understand the functions of 2 major types of software, application software and system software, and be able to use some of them for special area.
- Understand the main types of hardware in information system, and be able to identify and configure them. Such as Input and Output device, System Unit and Storage devices.



- Understanding people's privacy, security and ethics in society is to ensure the security of information system by regulations.
- Understand the storage structure of data and the type of database, and be able to use some popular database.
- Understanding 6 steps of system analysis and design, 6 steps of project development, and basic concept of information system will lay a solid foundation for future learning and social practice.
  - Demonstrate the ability to communicate effectively, orally and in writing, individually and in teams.

#### **Teaching Methods**

This course contains online lectures, group discussions, homework, quizzes, presentation and final exam. Textbook content will be introduced first. Then real case 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 in or after class.

## **Grade Criterion**

Component	Weight	Description
		A cumulative final examination will be given based on all of the contents
		of the class. The exam paper may be composed of multiple-choice
Final Exam	20%	questions, short answer questions, essay questions. Students should rely
		primarily on homework assignments and class exercise as reference for
		exams.
		A cumulative midterm test will be given based on all of the contents that
Mid-term Test	10%	have been taught in class. The test paper may be mainly composed of
Wild-term Test	10%	multiple-choice questions and short answer questions. It should be
		completed within 30 minutes in class.
		Most of the assigned homework is taken from the Exercises in the
Homework & Quiz	20%	textbook. Assignments will be collected at the clearly stated date. Late
		assignments will not be accepted. In general, each assignment should be
Holliework & Quiz		prepared in Office software as appropriate. Hand-written assignments
		will not be accepted. The graded assignments will be kept by instructor
		for reference and won't be returned to students.
		The students will be individual prepare a presentation. The topics can be
Presentation	10%	selected from the textbook or lectures. Each student need to finish a PPT
1 resentation		related to the topic which is given and hand in the related resources to the
		teacher before the presentation.
		Individuals will be asked to participate individually in a question and
Participation	20%	answer at least 5 times during the semester. The performances should be
		counted in their participation.
Attendance	20%	Refer to attendance policy listed below
Total	100%	

## **Detailed Grade Computation**

	Before Midterm	After Midterm
Attendance	10%	10%



Participation	10%	10%
Homework & Quiz	10%	10%
Presentation		10%
Mid-term Test	10%	
Final exam		20%
Total	40%	60%

#### **Grading Policy**

A+ 97-100	A 93-96	A- 90–92	B+ 87-89	B 83-86	B- 80–82
C+ 75-79	C 70-74	C- 67–69	D+ 63-66	D 62-60	F 0- 59

#### **Exam Schedule**

Midterm Test: November 2-8, 2020; Final Exam: January 4-8, 2021

#### **Assessment of Student Performance**

### \* 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.

# **Topical Course Outline**

Week	Date	Topics	Homework
		— (Application and Interview for Class)	
	• Syllabus		
	G 20	Chapter 1	
	Sep. 28	Information System	
		• People	
5		• Software	
		• Chapter 1	To the I Beer 21.
		Hardware	Textbook Page 21:  Exercise 1-10
	Sep. 30	• Data	
		• Internet	Textbook Page 22:
		• Exercises for Chapter 1	Exercise all
		• Chapter 2	
		The Internet and the We	
	0-4.5	• Internet Access	
	Oct. 5	Web Utilities	
		Communication	
6		Search Tools	
		• Chapter 2	Textbook Page 55:
		Electronic Commerce	Exercise 1-10
	Oct. 7	Cloud Computing	Textbook Page 56:
		• The Internet of Things	Exercise all
		• Exercises for Chapter 2	Excluse all
		• Chapter 3	
	Oct. 12	Application Software	
	Oct. 12	General-Purpose Applications	
7		Specialized Applications	
,		• Chapter 3	Textbook Page 84:
	Oct. 14	Mobile Apps	Exercise 1-10
	Oct. 14	Software Suites	Textbook Page 85:
		• Exercises for Chapter 3	Exercise all
	Oct. 19  • Chapter 4 • System Software • Operating Systems	• Chapter 4	
Oct. 19  8  Oct. 21		System Software	
		Operating Systems	
	Mobile Operating Systems		
	• Chapter 4	Textbook Page 110:	
	Oct 21	Desktop Operating Systems	Exercise 1-10
	OCt. 21	• Utilities	Textbook Page 111:
		Exercises for Chapter 4	Exercise all
0	Oct. 26	Quiz / Presentation	
9	Oct. 28	● Midterm Review	
10	Nov. 2	<u>● Midterm Test</u>	
10	Nov. 4	<u>● Midterm Test</u>	
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	Nov. 9	<ul> <li>Chapter 5</li> <li>System Unit</li> <li>System Board</li> <li>Microprocessor</li> <li>Memory</li> </ul>	
11	11	<ul> <li>Expansion Slots and Cards</li> <li>Bus Lines</li> <li>Chapter 5</li> </ul>	
	Nov. 11	<ul> <li>Ports</li> <li>Power Supply</li> <li>Electronic Data and Instructions</li> <li>Exercises for Chapter 5</li> </ul>	Textbook Page 136: Exercise 1-10 Textbook Page 137: Exercise all
	Nov. 16	<ul> <li>Chapter 6</li> <li>What Is Input</li> <li>Keyboard Entry</li> <li>Pointing Devices</li> <li>Scanning Devices</li> <li>Image Capturing Devices</li> <li>Audio-Input Devices</li> </ul>	
12	Nov. 18	<ul> <li>Chapter 6</li> <li>What Is Output</li> <li>Monitors</li> <li>Printers</li> <li>Audio-Output Devices</li> <li>Combination Input and Output</li> <li>Devices</li> <li>Ergonomics</li> <li>Exercises for Chapter 6</li> </ul>	Textbook Page 168: Exercise 1-10 Textbook Page 169: Exercise all
	Nov. 23	<ul> <li>Chapter 7</li> <li>Storage</li> <li>Hard Disks</li> <li>Solid-State Storage</li> <li>Optical Discs</li> </ul>	
13	13 Nov. 25	<ul> <li>Chapter 7</li> <li>Cloud Storage</li> <li>Mass Storage Devices</li> <li>Exercises for Chapter 7</li> </ul>	Textbook Page 190: Exercise 1-3 Textbook Page 191: Exercise all Textbook Page 192: Exercise 1-6
	Nov. 30	<ul> <li>Chapter 8</li> <li>Communications</li> <li>Communication Channels</li> <li>Connection Devices</li> <li>Data Transmission</li> </ul>	
14 Dec. 2	Dec. 2	<ul> <li>Chapter 8</li> <li>Networks</li> <li>Network Types</li> <li>Network Architecture</li> <li>Organizational Networks</li> <li>Exercises for Chapter 8</li> </ul>	Textbook Page 218: Exercise 1-10 Textbook Page 219: Exercise all
15	Dec. 7	Chapter 9     People	



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		• Privacy	
		• Chapter 9	Textbook Page 247:
	Dec. 9	Security	Exercise 1-10
	Dec. 9	• Ethics	Textbook Page 248:
		• Exercises for Chapter 9	Exercise all
		<u>● Quiz</u>	
		● Chapter 10: Information Systems (video)	
		Organizational Information Flow	
		Computer-Based Information Systems	
		Transaction Processing Systems	
		Management Information Systems	
		Decision Support Systems	
	Dec. 14	Executive Support Systems	
	Dec. 14	Other Information Systems	
		• Chapter 11: Databases (video)	
		• Data	
		Data Organization	
		Databases	
		DBMS Structure	
		Types of Databases	
		Database Uses and Issues	
		• Chapter 12: System Analysis and Design (video)	
16		Systems Analysis and Design	
10		Phase 1: Preliminary Investigation	
		Phase 2: Systems Analysis	
		Phase 3: Systems Design	
		Phase 4: Systems Development	
		Phase 5: Systems Implementation	
		Phase 6: Systems Maintenance	
		Prototyping and Rapid Applications	
	Dec. 16	Development	
	DCC. 10	• Chapter 13: Programming and Languages (video)	
		Programs and Programming	
		Step 1: Program Specification	
		Step 2: Program Design	
		• Step 3: Program Code	
		• Step 4: Program Test	
		Step 5: Program Documentation	
		Step 6: Program Maintenance	
		CASE and OOP	
		Generations of Programming Languages	
17	Dec. 21	Presentation I (2/3 students)	
1 /	Dec. 23	Presentation II (1/3 students)	
18	Dec. 28	Final Review	
10	Dec. 30	Final Review	
19	Jan. 4	Final Exam	
19	Jan. 6	Final Exam	
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Note: All chapters and 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**

Fall Semester, 2020	August 31, 2020— January 10, 2021
Sep. 19-20	Registration
Sep. 28	Classes Begin
Nov. 2-8	Mid-term Test
Jan.1, 2021	New Year's Day Holiday (tentative)

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.

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