

ISOM 2020 – Coding for Business
Fall Semester, 2020 (Sept. 7th ~ Oct. 23rd)

Lecture

Section	Date	Time	Venue
L1	Monday	13:00 ~ 14:50	Zoom ID (942 7459 5333)
L2	Tuesday	10:30 ~ 12:20	Zoom ID (942 7459 5333)
L3	Monday	15:00 ~ 16:50	Zoom ID (942 7459 5333)
L4	Tuesday	13:30 ~ 15:20	Zoom ID (942 7459 5333)

Lab

Section	Date	Time	Venue
LA1	Tuesday	16:00 ~ 17:50	Zoom (980 9173 2891)
LA2	Friday	17:00 ~ 18:50	Zoom (998 0808 8678)
LA3	Friday	15:00 ~ 16:50	Zoom (913 3965 5740)
LA4	Wednesday	13:30 ~ 15:20	Zoom (991 0360 9586)
LA5	Wednesday	16:30 ~ 18:20	Zoom (931 9852 3945)
LA6	Friday	13:00 ~ 14:50	Zoom (950 3842 3299)
LA7	Monday	17:30 ~ 19:20	Zoom (920 5591 8950)
LA8	Thursday	16:00 ~ 17:50	Zoom (910 6854 1618)

Instructor: Weiyin HONG, Ph.D. (whong@ust.hk)
Tel: 2358-7645
Office: LSK 5046
Office Hours: Thursday 12:30~13:30pm or by appointment.

Teaching Assistant: Tommy NG/Hilary CHEUNG (Mr.) (isom2020@ust.hk)
Tel: 2358-7638/2358-7653
Office: LSK 4065
Office Hours: Wednesday 10:30~11:30am or by appointment.

Course Website: <https://canvas.ust.hk>

COURSE DESCRIPTION

With the proliferation of business data and the need to analyze data for business insights, it becomes increasingly important for business students to have a basic understanding of coding that can help them to accomplish business goals. This course intends to introduce students to basic programming concepts and skills for business data coding and business problem-solving. Using Python as an illustrative programming language, this course provides students with a basic understanding of programming concepts and syntaxes, including data types, associated methods and functions, and control flow statements. Through the process of learning a programming language, students will also develop logical and critical thinking skills and be able to tackle simple business problems with coding.

LEARNING OUTCOMES

By the end of this course, students will be able to:

- (1) Acquire general programming knowledge with Python
- (2) Model business data with Python data types
- (3) Process business data with Python supported operations and methods
- (4) Illustrate business problem solving with coding skills
- (5) Improve logical and critical thinking ability with coding skills

TEACHING APPROACH

In general, the teaching approach of this course is based on the notion of sustained, deep learning by applying knowledge through programming, hands-on practices, and individual assignments and project.

Teaching & Learning Activities	Roles in the Course	Learning Outcomes addressed
Lecture	Explain key concepts to students using an active learning approach. In-class exercises will be provided to facilitate learning.	1, 2, 3, 4, 5
Laboratory	Apply concepts presented in lectures to hands-on programming exercises.	1, 2, 3, 4, 5
Individual Assignment & Project	Require students to practice programming skills, as well as apply such skills and knowledge to solving business analytics problems.	1, 2, 3, 4, 5

EVALUATION

Components	Percentage of the grade
A. Class Participation	20%
B. Assignments	40%
C. Individual Project	40%
TOTAL:	100%

A. Class Participation (20%)

Class participation is a critical component of the learning experience. Students are expected to attend all real-time interactive online lectures and labs (via Zoom) as much as possible. Students who have difficulty attending real-time sessions regularly (e.g., due to time differences) shall contact the TA before Sept 14th via email for alternative arrangements.

In order to obtain the score for Class Participation, you need to **attend the real-time lectures and labs** (via Zoom) with **more than 90% of the class time each (i.e. $110 * 0.9 = 99$ minutes each)**. There will be a total of **six weeks** of attendance that will be counted towards your final participation score. You are allowed to miss one week of attendance out of the six without any penalty. For any additional week, you will lose 10% of your class participation grade if you missed either a lecture or a lab or didn't meet the above-mentioned time requirement; and you will lose 20% of your class participation grade if you missed both the lecture and the lab in a week or didn't meet the above-mentioned time requirement.

For the purpose of attendance recording and security protection, you are highly recommended to **join the class via Canvas → Zoom Meeting tab** and/or you **MUST login Zoom with the Single Sign-on (SSO) function with your UST account**. Attending the Zoom meetings without your SSO authentication will cause failure in attendance recording, and will NOT be credited.

Students shall take full responsibility for losing the Class Participation score for not obeying the above instructions.

B. Assignment (40%)

There will be TWO individual assignments (15% and 25% respectively). Details of each assignment will be provided later in the semester. The late submission policy below will be applied.

C. Individual Project (40%)

There will be ONE individual project (40%) due towards the end of the course. Details of the project requirement will be provided later in the semester. Students are expected to apply the programming and analytical skills learned in the class to an interesting and useful application. The late submission policy below will be applied.

**** Late Submission Policy on Assignments and Individual Project***

Late submission **within 24 hours after the corresponding due date and time will receive a 30% penalty**, while late submission **beyond 24 hours will NOT** be accepted (i.e. zero points)! Any outstanding requests regarding the assignments and the individual project shall be made duly **BEFORE** the deadline, not after. All requests made after the deadline will be dismissed automatically. It is the **responsibility of the students** to ensure the submissions made on Canvas are accurate. In any case, if the instructor and/or TAs are unable to open the file, you will receive a score of zero.

**** Grade appeal***

All scores will be uploaded to Canvas when ready. It is always the responsibility of the students to check their scores and make sure they are correct. Any appeal to score must be filed through email to isom2020@ust.hk, with detailed grounds, **within 24 hours after its release**. Once the 24 hours are passed, **no further handling** will be made. Your final grade will depend on the score on Canvas.

MATERIALS

1. MAIN READING

There is no textbook for this course. PowerPoint slides and Jupyter notebook notes are the major reading materials.

2. SOFTWARE

- Zoom (Required)
- Anaconda (Recommended)
 - Jupyter notebook
- Google Colab (Optional)

OTHERS

Zoom Etiquette

- You are highly recommended to join the class via Canvas → Zoom Meeting tab.
- **Turning on your camera** would be most appreciated. Your facial expressions and gestures are important sources of cues that could help me know what you have learned or what you have trouble with, so I could adjust my teaching accordingly. Using the virtual background is discouraged as it significantly slows down the connection speed for the entire class.
- Please rename your display name to the name you want the instructors and TAs to address you. You do not need to put your SID as your display name.
- Using the chat function for course-related discussion is encouraged.
- Please contribute as actively as you could during lectures and labs. Maintaining good interaction between you and me is the key to the success of online teaching and learning.
- **As a matter of respect, you should find a quiet place to take the class, instead of, but not limited to, on a bus, in a restaurant, places which are distracting.**

Email Policy

Since this is a big class, with about 500 students in total, it would be difficult for the instructors and the TAs to address your email effectively without a guideline. You need to put **[ISOM2020 LX LAX]** (X being the session number, e.g., ISOM2020 L2, LA5) **at the beginning of the subject line of your email along with your email subject**. Failure to do so may result in a longer response time.

As expected, there will be numerous emails when it is closer to the due dates. If you need any assistance, raise them **as early as possible**, and/or take advantage of the office hours of the instructor and the TAs. Note that neither the instructor nor the TAs will provide direct answers to the assignments or the project.

Academic Integrity

Academic integrity is a critical value of the university community. Integrity violations destroy the fabric of a learning community and the spirit of inquiry that is vital to the effectiveness of the University. Anyone caught cheating, plagiarizing, and any other form of academic dishonesty will have their course grade lowered by at least one letter grade. Please remember the current university rule: "If a student is discovered cheating, regardless of how minor it is, the course grade will appear on the student's record with an X, to show that the grade resulted from cheating. This X grade stays on the record until graduation. If the student cheats again and "earns" another X grade, the student will be dismissed from the University."

Plagiarism is copying anything (text or ideas) from another source without citing that source. If you use another person's idea you must cite it, even if you rewrite the idea in your own words. Extreme care must be taken to avoid the passing of other's work as one's own. You are required to provide appropriate citations when you use ideas and arguments or otherwise draw on others' work. If you use research from another source or the Web you **MUST** cite the source. This is required even if you use only the general idea and not the exact words.

Learning environment

Prof. Hong welcomes feedbacks on her teaching throughout the semester. You are encouraged to contact her at any time when you have any questions, suggestions, concerns, or would like to ask for advice. Please remember, she is here to help you learn. So please do **NOT** hesitate to contact her at any time, so she can do her job better!

TENTATIVE SCHEDULE

WEEK	LECTURE	LAB
1 (Sept 7~11)	Introduction to Syllabus Introduction to Python	0: Software installation and programming environment
	Print, Variable, Type, Conversion	
2 (Sept 14 ~ Sept 18)	if..elif..else input()	1: Print; Arithmetic operators/rules; Math functions
3 (Sept 21~Sept 25)	List, Dictionary	2: if..elif..else input()
4 (Sept 28 ~ Oct 2)	for .. in... break	3: List, String, Dictionary
5 (Oct 5 ~ Oct 9)	Relational and Boolean operators while loop	4: for .. in... break
6 (Oct 12 ~ Oct 16)	Pandas	5: Relational and Boolean operators while loop
7 (Oct 19 ~ Oct 23)	<i>Individual Project Due (TBD)</i>	N/A

** Oct 1st and Oct 2nd are public holidays. A makeup lab will be offered on Sept 30th from 7:00 pm - 8:50 pm (HKT). Students may also choose other labs to attend that week. A further announcement will be made on Canvas when the time comes.*