

## ISOM 2020 – Coding for Business Fall 2023 (Sept. 4 ~ Oct. 21)

### Lecture

Section	Days	Time	Venue
L1	Monday	3:30pm – 5:20pm	LT-K
L2	Monday	1:30pm – 3:20pm	LT-K
L3	Tuesday	9:00am – 10:50am	LT-F
L4	Tuesday	4:00pm – 5:50pm	LT-G
L5	Tuesday	11:00am – 12:50pm	LT-F

### Lab

Section	Days	Time	Venue
LA01	Wednesday	3:00pm – 4:50pm	LSK G005 (Samuel)
LA02	Friday	12:30pm – 2:20pm	LSK G005 (Samuel)
LA03	Tuesday	4:30pm – 6:20pm	LSK G005 (Oliver)
LA04	Tuesday	9:00am – 10:50am	LSK G005 (Ray)
LA05	Friday	2:30pm – 4:20pm	LSK G005 (Samuel)
LA06	Monday	3:00pm – 4:50pm	LSK G005 (Ray)
LA07	Thursday	3:00pm – 4:50pm	LSK G021 (Chris)
LA08	Thursday	5:00pm – 6:50pm	LSK G021 (Chris)
LA09	Monday	5:00pm – 6:50pm	LSK G005 (Jiaxin)
LA10	Wednesday	9:00am – 10:50am	LSK G021 (Bruce)
LA11	Tuesday	1:30pm – 3:20pm	LSK G021 (Aaron)
LA12	Tuesday	11:30am – 1:20pm	LSK G005 (Aaron)

### Instructor and TAs

<b>Instructor:</b>	Weiyin HONG, Ph.D. ( <a href="mailto:whong@ust.hk">whong@ust.hk</a> )		
<b>Tel:</b>	2358-7645		
<b>Office:</b>	LSK 5046		
<b>Office Hours:</b>	By appointment		
<b>Teaching Assistants:</b>			
[LA01, LA02 and LA05]	Samuel LAI	( <a href="mailto:imsamuel@ust.hk">imsamuel@ust.hk</a> )	2358-7638 / LSK 4066
[LA04 and LA06]	Ray PANG	( <a href="mailto:imncpang@ust.hk">imncpang@ust.hk</a> )	2358-7653 / LSK 4066
[LA07 and LA08]	Chris TSE	( <a href="mailto:imchris@ust.hk">imchris@ust.hk</a> )	2358-7638 / LSK 4066
[LA11 and LA12]	Aaron LEE	( <a href="mailto:imaaron@ust.hk">imaaron@ust.hk</a> )	2358-7638 / LSK 4066
[LA03]	Oliver WEI	( <a href="mailto:rweiaf@connect.ust.hk">rweiaf@connect.ust.hk</a> )	-
[LA09]	Jiaxin LEI	( <a href="mailto:jleiad@connect.ust.hk">jleiad@connect.ust.hk</a> )	-
[LA10]	Bruce JIN	( <a href="mailto:sjinaj@connect.ust.hk">sjinaj@connect.ust.hk</a> )	-
* For enquiry about course logistics, please email to <a href="mailto:isom2020@ust.hk">isom2020@ust.hk</a>			

## 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. Even with the advanced AI programming capability, it's still important for students to be able to read code and understand the logic behind the code. 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

Teaching & Learning Activities	Roles in the Course	Learning Outcomes addressed
Pre-class videos & Weekly Quizzes	Pre-class videos explaining key concepts and programming syntaxes; weekly quizzes to be completed before each lecture	1, 2, 3, 4, 5
Lecture	Lectures offering more details of the key concepts and syntaxes through hands-on approaches; take-home exercises facilitating learning by practice.	1, 2, 3, 4, 5
Laboratory	Review of take-home exercises; practices and applications of lecture contents.	1, 2, 3, 4, 5
Practice Question Set	Provide students with plenty of opportunities to practice and apply coding skills.	1, 2, 3, 4, 5

## EVALUATION

Components	Percentage of the grade
A. Weekly Quiz	10%
B. Lab Submissions	20%
C. Final Exam	70%
<b>TOTAL:</b>	<b>100%</b>

### *A. Pre-class Videos and Weekly Quizzes (10%)*

There are 5 pre-class videos and 5 weekly quizzes (best 4 will be counted with 2.5 points each). Students are expected to watch pre-class videos **BEFORE each lecture**. Each set of videos cover important concepts and programming skills that will be covered in the corresponding lecture. They aim at helping students better follow the pace of the lectures and get the most out of the in-class learning experience.

### Weekly Quizzes:

- After watching the videos, students **MUST** complete a short quiz on Canvas **BEFORE** each lecture (due at 8:00am on Mondays, i.e., Sep 4, 11, 18, 25, Oct 9).
- The best 4 scores out of the 5 quizzes will be counted.
- Quizzes can be taken as many times as desired, but **NO late submission** of the quizzes for **whatever reason** will be accepted.
- Students shall take full responsibility for losing any part of this score for not obeying the above instructions. Emailing the TA or the instructor will **NOT** change this part of the grade as all grades will automatically be calculated and posted on Canvas.

### ***B. Lab Submissions (20%)***

Students are expected to attend ALL lab sessions, contribute class activities, and submit tasks **during** the lab time (according to the official enrolled lab section). Details of the requirement for the session is provided below. **NO late submission** will be accepted and there will **NO MAKEUP** arrangement for whatever reason.

- 20 points for completing 5+ lab submissions (missed at most 1)
- 15 points for completing 4 only (missed 2 out of 6)
- 10 points for completing 3 only (missed 3 out of 6)
- 5 point for completing 2 only (missed 4 out of 6)
- No points for completing none or 1 only (missed 5 or 6)

### ***C. Final Exam (70%)***

There will be ONE final exam scheduled on **21 October 2023 (Saturday) afternoon**. Details of the exam protocol will be provided later in the semester. There will be **NO make-up exams** except due to extraordinary circumstances beyond your control such as severe medical conditions (e.g. hospitalization). In such a case, students must submit appropriate documentation with strong supporting evidence issued by a hospital or a certified medical professional **within 24 hours after the scheduled exam time** to be considered for a make-up exam. Such proof must be in Chinese or English, or you need to do a notarized translation.

### ***\* 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](mailto:isom2020@ust.hk), with detailed grounds, **within 24 hours after its release**.

## **MATERIALS**

### **1. MAIN READING**

There will not be any textbook for this course. PowerPoint slides and Jupyter notebook notes are the major reading materials, which will be provided on CANVAS.

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

### **2. SOFTWARE**

- Google Colab (<https://colab.research.google.com/>)
- Anaconda (Optional) (Installation guide is provided on Canvas)
  - Jupyter notebook

## OTHERS

### *Email Policy*

Since this is a big class, with about 500 students in total, it would be difficult for the instructors and the TA to address your email effectively without a guideline. Please always put **[ISOM2020 L?] or [ISOM2020 LA??]** (“?” being the session number, e.g., [ISOM2020 L2] or [ISOM2020 LA05] depending on whether you have questions about the lecture or the lab) **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.** Note that neither the instructor nor the TA will provide direct answers to the assignment.

### *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. 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 may stay on the record even after 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!

### *Dropping/Late dropping this course*

As you are pre-enrolled into this course by the School of Business Management, neither the instructors nor the TAs have the authority to handle requests of dropping or late dropping of this course. But you are allowed to swap between sections within the add-drop period on SIS. Change of sections will not be available after the add-drop period. If you have severe medical conditions that prevent you from participating in the course, you **MUST** apply for a **Study Leave** officially to ARO **covering the first half of the Fall 2023 semester.** In such a case, you need to apply to your major department and ARO for approval.

### CLASS SCHEDULE (TENTATIVE)

TOPIC	LECTURE	LAB	
		[Sep 1]	No lab
1	[Sep 4-5] Introduction to Python Arithmetic operators, Print, Variable, and Data type	[Sep 4-8]	Software installation and programming environment
2	[Sep 11-12] Input, Conversion, Collective Variables	[Sep 11-15]	Lab exercise on Python basics
3	[Sep 18-19] Conditional statement (if...else)	[Sep 18-22]	Lab exercise on input, conversion, and collective variables
4	[Sep 25-26] Loops (for)	[Sep 25-29]	Lab exercise on conditional statement
5	[Oct 2, 3] Holiday / No lecture	[Oct 2]	Holiday / No lab
	[Oct 9, 10] More about Loops (while/break)	[Oct 3-9]	Lab exercise on loops (for)
6	[Oct 16, 17] Practice & Revision	[Oct 10-16]	Review of common mistakes and Q&A
7	<b><i>Exam: Saturday October 21, 3:00pm~5:00pm (please mark the date &amp; time!)</i></b>		

*\* The above schedule is tentative and subject to change. Please always follow CANVAS announcements for latest schedule.*