ISOM 2020 – Coding for Business
Spring 2022 (Feb. 7th ~ March. 26th)

[Course delivery mode, i.e., either online or in person, may change during the semester. Please pay close attention to CANVAS announcements for latest updates!]

Lecture

Section	Days	Time	Venue
L1	Thursday	4:00pm~5:50pm	LTE
L2	Friday	4:00pm~5:50pm	LTB
L3	Friday	9:00am~10:50am	LTF
L4	Friday	2:00pm~3:50pm	LTB
L5	Thursday	1:30pm~3:20pm	LTK

Lab

Section	Days	Time	Venue	
LA1	Monday	10:30am~12:20pm	LSK G005	(Samuel)
LA2	Wednesday	11:00am~12:50pm	LSK G021	(Aaron)
LA3	Monday	3:00pm~4:50pm	LSK G005	(Ray)
LA4	Wednesday	9:00am~10:50am	LSK G021	(Aaron)
LA5	Monday	1:00pm~2:50pm	LSK G005	(Samuel)
LA6	Tuesday	9:00am~10:50am	LSK G005	(Ray)
LA7	Monday	5:00pm~6:50pm	LSK G005	(Samuel)
LA8	Tuesday	11:00am~12:50pm	LSK G005	(Ray)

Instructor:	Weiyin HONG, Ph.D. (whong@ust.hk)
Tel:	2358-7645
Office:	LSK 5046
Office Hours:	By appointment

Teaching Assistant:			**Tel**	**Office**
[LA1, LA5, and LA7]	Samuel LAI	(imsamuel@ust.hk)	2358-7638	LSK 4066
[LA3, LA6, and LA8]	Ray PANG	(imncpang@ust.hk)	2358-7653	LSK 4066
[LA2 and LA4]	Aaron LEE	(imaaron@ust.hk)	2358-7644	LSK 4049C

* For enquiry about course logistics, please email to **isom2020@ust.hk**

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

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
Individual Assignment	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. Weekly Quiz	5%
B. Lab Submissions	10%
C. Individual Assignment	20%
D. Final Exam	65%
TOTAL:	**100%**

A. Pre-class Videos and Weekly Quizzes (5%)

Students are expected to watch pre-class videos **BEFORE each lecture** from week 1 to week 5. 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.

After watching the videos, students MUST complete a short quiz on Canvas **BEFORE each lecture** (**due at 8:00am on Thursdays, i.e., Feb 10, Feb 17, Feb 24, Mar 3, and Mar 10**). 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 (10%)

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) from week 1 to week 5. Details of the requirement for the session will be provided during lab. **NO late submission** will be accepted and there will **NO MAKEUP** arrangement for whatever reason.

C. Individual Assignment (20%)

There will be **ONE individual** assignment. Details of the assignment will be provided later in class. Late submission **within 24 hours after the due date and time will receive a 30% penalty**; while late submission **beyond 24 hours** will **NOT** be accepted (i.e. zero points)!

D. Final Exam (65%)

There will be ONE final exam scheduled on **March 26th (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, 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.

2. **SOFTWARE**

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

OTHERS

Zoom Etiquette

- You are highly recommended to join the class via Canvas → Zoom Meeting tab.
- **Your CAMERA must be turned ON during the ENTIRE lecture**. Your facial expressions and gestures are important sources of cues that could help the instructor know what you have learned or what you have trouble with, so real-time adjustments could be made accordingly.
- You may rename your display name to the name you want the instructors and TA to address you. There is no need to put your SID as your display name.
- **Using the chat function** to communicate with the instructor and actively participate in course-related discussion are encouraged.
- Please contribute as actively as you could during lectures and labs. Maintaining good interaction between you and your instructor and the TAs is the key to the success of online teaching and learning.
- **As a matter of respect and for better learning outcome, please find a quiet place to take the class, instead of on a bus, in a restaurant, or at any distracting places.**

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 [ISOM LA?]** (? being the session number, e.g., [ISOM2020 L2] or [ISOM LA5] 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 Spring 2022 semester.** In such a case, you need to apply to your major department and ARO for approval.

CLASS SCHEDULE (TENTATIVE)

TOPIC	LECTURE		LAB	
0	-	-	[Feb 7-9]	Lab 0: ▪ Introduction to Syllabus ▪ Software installation and programming environment
1	[Feb 10,11]	Python Basics	[Feb 14-16]	Lab exercise topic 1
2	[Feb 17,18]	Collective Variable (list)	[Feb 21-23]	Lab exercise topic 2
3	[Feb 24,25]	Conditional statement (if…elif…else)	[Feb 28-Mar 2]	Lab exercise topic 3
4	[Mar 3,4]	Loop (for)	[Mar 7-9]	Lab exercise topic 4
5	[Mar 10,11]	Loop (while)	[Mar14-16]	Practice & Review
6	[Mar 17-18]	Practice & Revision	-	-
7	***Exam: Saturday March 26th, 3:00pm~5:00pm*** *(please mark the date & time!)*			

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