

ISOM 2020 – Coding for Business
Spring Semester, 2020 (Feb 19th ~ Apr 6th)

Updated

Lecture

Section	Date	Time	Venue
L1	Wednesday	14:00 ~ 15:50	LTF
L2	Tuesday	16:00 ~ 17:50	LTG
L3	Thursday	15:00 ~ 16:50	2306 (Lift 17~18)
L4	Tuesday	13:30 ~ 15:20	2465 (Lift 25~26)
L5	Monday	15:00 ~ 16:50	2306 (Lift 17~18)

Lab

Section	Date	Time	Venue
LA1	Monday	10:00 ~ 11:50	LSK G021
LA2	Wednesday	11:30 ~ 13:20	LSK G021
LA3	Friday	09:00 ~ 10:50	LSK G021
LA4	Monday	18:30 ~ 20:20	LSK G005
LA5	Wednesday	16:30 ~ 18:20	LSK G005
LA6	Friday	12:00 ~ 13:50	LSK G005
LA7	Thursday	10:30 ~ 12:20	LSK G005
LA8	Tuesday	10:30 ~ 12:20	LSK G005

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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.

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
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. Lab Exercise (best 5 out of 6)	15%
B. Assignment	20%
C. Mid-term Quiz	25%
D. Final Exam	40%
TOTAL:	100%

A. Lab Exercise (15%)

Unless unforeseeable circumstances arise, there will be 6 lab exercises throughout the semester. Students are expected to apply the programming skills and knowledge to practice Python programming and solve business problems in the lab exercises. Students may score between 0% and 3% (max) per exercise. Each student will eventually have 6 lab exercise scores, but only the BEST FIVE scores will be counted toward the final grade. Each lab exercise is **due at the end of the lab session, but a 24-hour grace period** is granted after the corresponding due date and time without penalty. Late submission **beyond 24 hours** will **NOT** be accepted! **There will be NO makeup lab exercises for whatever reasons.**

B. Assignment (20%)

There are ONE individual assignment (20%), the details of which will be provided later in the semester. Late submission **within 24 hours after the due date and time will receive 30% of penalty**. Late submission **beyond 24 hours** will **NOT** be accepted!

C. Mid-term Quiz (25%)

The mid-term quiz covers corresponding lecture and lab materials, unless otherwise specified by the instructor. The mid-term quiz will be conducted online through Zoom. There will be **NO make-up quiz** except due to extraordinary circumstances beyond your control such as medical emergencies. Students must submit appropriate documentation issued by a registered medical practitioner to be considered for a make-up quiz.

D. Final Exam (40%)

The final exam covers all lecture and lab materials, unless otherwise specified by the instructor. There will be **NO make-up exam** except due to extraordinary circumstances beyond your control such as medical emergencies. Students must submit appropriate documentation issued by a registered medical practitioner to be considered for a make-up exam.

****Warning:** Students who are allowed to take a make-up quiz or a make-up final exam need to take a different exam, **within 48 hours** after the original quiz/exam date and time. There is **NO SECOND CHANCE** for make-up quiz or final exam for whatever reasons provided by the students.**

Grade appeal

All scores will be uploaded to Canvas when ready. It is always the student's responsibility to check their scores and make sure they are correct. Any appeal to score must be filed through email to imcharles@ust.hk **within 24 hours after its release.**

Final Course Score Calculation

Based on students' voting result in week 6, a new grading scheme is adopted as following, which provides flexibility to the original grading scheme. According to the new grading scheme, a student's final course score will be the higher score between Score 1 and Score 2 as described below:

Score1 = 40%(Final exam score) +25%(midterm score)+20%(Assignment score)+15%(lab score)

Score2 = 65%(Final exam score) +20%(Assignment score)+15%(lab score)

Final course score = Max (Score1, Score2)

MATERIALS

1. MAIN READING

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

2. SOFTWARE

- Zoom(Required)
- Anaconda (Recommended)
 - Jupyter notebook
- Google Colab (Not recommended)

OTHERS

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 however minor the offence, 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 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 from the Web you **MUST** cite the source. This is true 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 LECTURE SCHEDULE

WEEK	TOPICS	ASSIGNMENT/EXAM
1 (Feb 19~25)	Introduction to Syllabus Introduction to Python Python Basics 1	
2 (Feb 26~Mar 3)	Python Basics 2 String	
3 (Mar 4~10)	List, Tuple, and Set	
4 (Mar 11~17)	Dictionary Conditional Flow Statements	Release of Assignment March 17
5 (Mar 18~24)	Loops Statements	March 21(Sat Aft.) Mid-term quiz
6 (Mar 25~31)	Pandas	Assignment Due April 1
7 (Apr 1~7)	<i>Final Exam (TBD)</i>	April 3 (Fri Night.)

** Note that these schedules are tentative and subject to change.*

TENTATIVE LAB SCHEDULE

WEEK	TOPICS
1 (Feb 19~25)	Software installation and programming environment
2 (Feb 26~Mar 3)	Python Basics 1
3 (Mar 4~10)	Python Basics 2 String
4 (Mar 11~17)	List, Tuple, and Set
5 (Mar 18~24)	Dictionary Conditional Flow Statements
6 (Mar 25~31)	Loops Statements
7 (Apr 1~7)	N/A