UNSW Course Outline

COMM5007 Coding for Business - 2024

Published on the 12 May 2024

General Course Information

Course Code : COMM5007
Year : 2024
Term : Term 2
Teaching Period : T2
Is a multi-term course? : No
Faculty : UNSW Business School
Academic Unit : School of Information Systems and Technology Management
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

Coding for Business is an introductory course tailored for beginners, offering a foundational understanding of coding using Python. This foundational course equips you with essential skills for future business decision-making.

In this course, you will gain skills in using key programming software to solve real-world problems, collaborate with your peers in seeking these solutions, and confidently communicate their solutions to a professional audience.

Course Aims

The course aims to develop students' expertise in a fundamental/technical programming language, equippping them to be adept programmers who can address real-world challenges. It also extends beyond foundational concepts introduced in Data literacy, cultivating collaboration skills in coding projects through platforms like Edstem.

Relationship to Other Courses

This course is the prerequisite for INFS5720.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Demonstrate proficiency in Python fundamentals and key concepts.	• PLO2 : Problem Solving
CLO2 : Use analytical, creative, and collaborative approaches to solve real-world problems effectively.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO4 : Teamwork • PLO5 : Responsible Business Practice
CLO3 : Design and implement robust Python solutions to generate data insights from real-world data.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
CLO4 : Effectively document, communicate, and manage collaborative programming projects and findings.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate proficiency in Python fundamentals and key concepts.	• Skills Challenges: Individual Assessment • Group Assignment • Final Exam
CLO2 : Use analytical, creative, and collaborative approaches to solve real-world problems effectively.	• Skills Challenges: Individual Assessment • Group Assignment • Final Exam
CLO3 : Design and implement robust Python solutions to generate data insights from real-world data.	• Skills Challenges: Individual Assessment • Group Assignment • Final Exam
CLO4 : Effectively document, communicate, and manage collaborative programming projects and findings.	• Group Assignment

Learning and Teaching Technologies

Moodle - Learning Management System | Zoom | EdStem | Anaconda - Jupyter Notebook

Learning and Teaching in this course

Communications: Students can expect to receive weekly communications from the teaching team (via EdStem). EdStem forum is the best place to ask questions about the course, whether curricular or administrative. **You can post on the discussion forum anonymously.** You will get faster answers here from the teaching team and peers than through email. Students are welcome to answer other students' questions too, so we can learn together as a cohort. The

teaching team will reply to a post in EdStem or your email within 2 working days. Note: You can expect to enroll into EdStem automatically or manually with a link by Week 0.

For inquiries related to your individual circumstances (e.g., inquiries about your marks), please contact your lecturer or tutor via email. Please note that **only your UNSW email account** should be used for formal notices and correspondence regarding the course. Always sign your email with your name and student number (i.e., your zID). To protect student privacy, correspondence originating from non-UNSW email accounts will not elicit a response. Due to the high volume of emails received by course instructors, students should follow the protocol below:

- The subject of your e-mail should begin with the course code (i.e., COMM5007) and should be signed with your name and zID. For example, "COMM5007 - Questions about lecture1/lab1".
- Before you send an email, please first check if your question has been answered previously in the Ed system, Moodle, course outlines, or lecture/lab slides.
- For inquiries related to course material overall, please post on the course forum on the Ed system (edstem.org). This helps us attend to your inquiry more expediently and also enables us to help more students effectively.
- Use office hours whenever possible. This is a dedicated time when we are online/offline to answer your questions. In addition, some questions can be better addressed in a live setting with the ability to share screens.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Skills Challenges: Individual Assessment Assessment Format: Individual	25%	Start Date: Please refer to Moodle for more information. Due Date: Please refer to Moodle for more information.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO5 : Responsible Business Practice
Group Assignment Assessment Format: Group	30%	Start Date: Please refer to Moodle for more information. Due Date: Please refer to Moodle for more information.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork • PLO5 : Responsible Business Practice • PLO6 : Global and Cultural Competence • PLO7 : Leadership Development
Final Exam Assessment Format: Individual	45%	Start Date: University exams period Due Date: University exams period	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication

Assessment Details

Skills Challenges: Individual Assessment

Assessment Overview

Individual skill challenges are designed to challenge students to perform a variety of tasks using Python.

Course Learning Outcomes

- CLO1 : Demonstrate proficiency in Python fundamentals and key concepts.
- CLO2 : Use analytical, creative, and collaborative approaches to solve real-world problems effectively.
- CLO3 : Design and implement robust Python solutions to generate data insights from real-world data.

Detailed Assessment Description

This assessment will be evaluated based on students' efforts on this course. This assessment

consists of code-related homework assignments and quizzes.

Details will be available on Week 1 lecture and Moodle.

Assessment Length

TBA

Submission notes

Please refer to Moodle for more information.

Assignment submission Turnitin type

This is not a Turnitin assignment

Group Assignment

Assessment Overview

Students will work collaboratively with team members to apply programming techniques to create practical, relevant, and comprehensive solutions that address the real-world problems.

Course Learning Outcomes

- CLO1 : Demonstrate proficiency in Python fundamentals and key concepts.
- CLO2 : Use analytical, creative, and collaborative approaches to solve real-world problems effectively.
- CLO3 : Design and implement robust Python solutions to generate data insights from real-world data.
- CLO4 : Effectively document, communicate, and manage collaborative programming projects and findings.

Detailed Assessment Description

Successfully completing the group assignments requires students to effectively apply the knowledge learned from lectures and tutorials, perform independent research, and work effectively in a group to create practical, relevant and comprehensive solutions that demonstrate potentials to address the real-world problems.

Students are required to work in teams on a group project. The students individual participation and contribution will be incorporated in their grades. More information will be available on Moodle.

Assessment Length

TBA

Submission notes

Please refer to Moodle for more information.

Assessment information

Students teams are expected to plan ahead and to be able to balance out a missing member without an extension. An extension will not be granted for team projects/assignments.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Final Exam

Assessment Overview

Students will take an invigilated exam during the University Exam Period. Students should be prepared to take the exam.

Course Learning Outcomes

- CLO1 : Demonstrate proficiency in Python fundamentals and key concepts.
- CLO2 : Use analytical, creative, and collaborative approaches to solve real-world problems effectively.
- CLO3 : Design and implement robust Python solutions to generate data insights from real-world data.

Detailed Assessment Description

Details will be available on Moodle.

Assessment Length

TBA

Submission notes

To be confirmed

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

Assessment Summary

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic

integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

You are expected to complete all assessment tasks for your courses in the School of Information Systems and Technology Management. Where group assignments are used, team members are expected to work in a harmonious and professional fashion, which includes adequate management of non-performing members. You should inform your tutor as soon as possible if you experience problems within a project team. You may be required to evaluate the contribution of each team member (including yourself) in group work and marks for individual students may be adjusted based on peer assessment.

Late Submission Penalties

For assessments other than examinations, late submission will incur a penalty of 5% per day or part thereof (including weekends) from the due date and time. An assessment will not be accepted after 5 days (120 hours) of the original deadline unless special consideration has been approved. An assignment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the 'wrong' assignment has been submitted.

For assessments which account for 10% or less of the overall course grade, and where answers are immediately discussed or debriefed, the LIC may stipulate a different penalty. Details of such late penalties will be available on the course Moodle page.

In general, your best strategy is to turn in whatever you have finished when the assignment is due.

Attendence

Attendance in all class sessions is expected. However, unforeseen conflicts due occasionally arise. Students are expected to give adequate advance notice of an excused absence, make up the missed work and make every effort to avoid a class conflict.

Quality Assurance

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential.

Grading Basis

Standard

Requirements to pass course

In order to pass this course, you must:

- achieve a composite mark of at least 50 out of 100;
- meet any additional requirements described in the Assessment Summary section.

You are expected to attempt all assessment requirements in the course.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Lecture	Introductory Housekeeping; Python Fundamentals Part I
	Laboratory	Lab exercises based on lecture topics
	Group Activity	Getting to know each other and looking for teammates in your lab
Week 2 : 3 June - 9 June	Lecture	Python Fundamentals Part II
	Laboratory	Lab exercises based on lecture topics
	Group Activity	Getting to know each other and looking for teammates in your lab
Week 3 : 10 June - 16 June	Lecture	Python Fundamentals Part III
	Laboratory	Lab exercises based on lecture topics
	Group Activity	Group formation
Week 4 : 17 June - 23 June	Lecture	Python Fundamentals Part IV
	Laboratory	Lab exercises based on lecture topics
Week 5 : 24 June - 30 June	Lecture	Data Exploration and Manipulation
	Laboratory	Lab exercises based on lecture topics
Week 6 : 1 July - 7 July	Lecture	No lecture in the Recharge Week
	Laboratory	Revision of selected topics in the previous five weeks
Week 7 : 8 July - 14 July	Lecture	Data Insights
	Laboratory	Lab exercises based on lecture topics
Week 8 : 15 July - 21 July	Lecture	File Operations
	Laboratory	Lab exercises based on lecture topics
Week 9 : 22 July - 28 July	Lecture	Machine Learning Basics with Python
	Laboratory	Lab exercises based on lecture topics
Week 10 : 29 July - 4 August	Lecture	Advanced Topics; Course Review
	Laboratory	Group project presentation (i.e., attendance is mandatory)

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

General Schedule Information

Note: For more information on the UNSW academic calendar and key dates including study period, exam, supplementary exam and result release, please visit: https://student.unsw.edu.au/new-calendar-dates

Course Resources

Recommended Resources

Students are advised that the recommended system requirements for this course are:

- Computer system: any Apple MacOS computer system currently supported by Apple; OR any Microsoft Windows computer system currently supported by Microsoft that runs an x86_64-compatible processor. Alternatives such as Apple iPad, Android Tablet, and Snapdragon devices (e.g. Microsoft Surface X tablet, Samsung Book S) are not fully supported by the teaching team at this stage.
- At least 8GB of RAM and at least 30GB of the device storage.
- Administrator access, to be able to install required course software without permission errors.

If you have any doubts or if you have a device that only partially fulfills the above requirements, please contact the lecturer.

Additional information regarding course resources will be provided on Moodle.

Student Suport and Resources:

The University and the Business School provide a wide range of support services and resources for students, including:

Business School Learning Support Tools

Business School provides support a wide range of free resources and services to help students in-class and out-of-class, as well as online. These include:

- Academic Communication Essentials – A range of academic communication workshops, modules and resources to assist you in developing your academic communication skills.
- Learning consultations – Meet learning consultants who have expertise in business studies,

literacy, numeracy and statistics, writing, referencing, and researching at university level.
- PASS classes – Study sessions facilitated by students who have previously and successfully completed the course.
- Educational Resource Access Scheme – To support the inclusion and success of students from equity groups enrolled at UNSW Sydney in first year undergraduate Business programs.

The Nucleus - Business School Student Services team

The Nucleus Student Services team provides advice and direction on all aspects of enrolment and graduation. Level 2, Main Library, Kensington 02 8936 7005 / https://nucleus.unsw.edu.au/en/contact-us

Business School Equity, Diversity and Inclusion

The Business School Equity, Diversity and Inclusion Committee strives to ensure that every student is empowered to have equal access to education. The Business School provides a vibrant, safe, and equitable environment for education, research, and engagement that embraces diversity and treats all people with dignity and respect. BUSEDI@unsw.edu.au

UNSW Academic Skills

Resources and support – including workshops, individual consultations and a range of online resources – to help you develop and refine your academic skills. See their website for details.
academicskills@unsw.edu.au

Student Support Advisors

Student Support Advisors work with all students to promote the development of skills needed to succeed at university, whilst also providing personal support throughout the process.
John Goodsell Building, Ground Floor.
advisors@unsw.edu.au
02 9385 4734

International Student Support

The International Student Experience Unit (ISEU) is the first point of contact for international students. ISEU staff are always here to help with personalised advice and information about all aspects of university life and life in Australia.
Advisors can support you with your student visa, health and wellbeing, making friends, accommodation and academic performance.
International.student@unsw.edu.au
02 9385 4734

Equitable Learning Services

Equitable Learning Services (formerly Disability Support Services) is a free and confidential service that provides practical support to ensure that your health condition doesn't adversely affect your studies. Register with the service to receive educational adjustments.
Ground Floor, John Goodsell Building.
els@unsw.edu.au
02 9385 4734

UNSW Counselling and Psychological Services

Provides support and services if you need help with your personal life, getting your academic life back on track or just want to know how to stay safe, including free, confidential counselling.
Level 2, East Wing, Quadrangle Building.
counselling@unsw.edu.au
02 9385 5418

Library services and facilities for students

The UNSW Library offers a range of collections, services and facilities both on-campus and online.
Main Library, F21.
02 9065 9444

Moodle eLearning Support

Moodle is the University's learning management system. You should ensure that you log into Moodle regularly.
externalteltsupport@unsw.edu.au
02 9385 3331

UNSW IT

UNSW IT provides support and services for students such as password access, email services, wireless services and technical support.
UNSW Library Annexe (Ground floor).
02 9385 1333

Course Evaluation and Development

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students

and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

In this course, we will seek your feedback through end-of-term myExperience responses. Feedback will also be encouraged throughout the term via collaborative platforms and in-class discussions. This feedback will be taken into consideration and applied where appropriate.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Kam-Fung (Henry) Cheung				Wednesdays 10 am – 11 am Sydney Time (email for appointments)	No	Yes

Other Useful Information

Academic Information

COURSE POLICIES AND SUPPORT

The Business School expects that you are familiar with the contents of this course outline and the UNSW and Business School learning expectations, rules, policies and support services as listed below:

- Program Learning Outcomes
- Academic Integrity and Plagiarism
- Student Responsibilities and Conduct
- Special Consideration
- Protocol for Viewing Final Exam Scripts
- Student Learning Support Services

Further information is provided on the key policies and support page.

Students may not circulate or post online any course materials such as handouts, exams, syllabi or similar resources from their courses without the written permission of their instructor.

STUDENT LEARNING OUTCOMES

The Course Learning Outcomes (CLOs) – under the Outcomes tab – are what you should be able to demonstrate by the end of this course, if you participate fully in learning activities and

successfully complete the assessment items.

CLOs also contribute to your achievement of the Program Learning Outcomes (PLOs), which are developed across the duration of a program. PLOs are, in turn, directly linked to UNSW graduate capabilities. More information on Coursework PLOs is available on the key policies and support page. For PG Research PLOs, including MPDBS, please refer to the UNSW HDR Learning Outcomes.

Academic Honesty and Plagarism

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Submission of Assessment Tasks

SPECIAL CONSIDERATION

You can apply for special consideration when illness or other circumstances beyond your control interfere with your performance in a specific assessment task or tasks, including online exams. Students studying remotely who have exams scheduled between 10pm and 7am local time, are also able to apply for special consideration to sit a supplementary exam at a time outside of these hours.

Special consideration is primarily intended to provide you with an extra opportunity to demonstrate the level of performance of which you are capable. To apply, and for further information, see Special Consideration on the UNSW Current Students page.

Special consideration applications will be assessed centrally by the Case Review Team, who will update the online application with the outcome and add any relevant comments. The change to the status of the application immediately sends an email to the student and to the assessor with

the outcome of the application.

Please note the following:

1. Applications can only be made through Online Services in myUNSW (see the UNSW Current Students page). Applications will not be accepted by teaching staff. The lecturer-in-charge/ course coordinator will be automatically notified when your application is processed.
2. Applying for special consideration does not automatically mean that you will be granted a supplementary exam or other concession.
3. If you experience illness or misadventure in the lead up to an exam or assessment, you must submit an application for special consideration, either prior to the examination taking place, or prior to the assessment submission deadline, except where illness or misadventure prevent you from doing so.
4. If your circumstances stop you from applying before your exam or assessment due date, you must apply within 3 working days of the assessment or the period covered by your supporting documentation.
5. Under the UNSW Fit To Sit/Submit rule, if you sit the exam/submit an assignment, you are declaring yourself well enough to do so and are cannot subsequently apply for special consideration.
6. If you become unwell on the day of – or during – an exam, you must stop working on your exam, advise your course coordinator or tutor and provide a medical certificate dated within 24 hours of the exam, with your special consideration application. For online exams, you must contact your course coordinator or tutor immediately via email, Moodle or chat and advise them you are unwell and submit screenshots of your conversation along with your medical certificate and application.
7. Special consideration requests do not allow the awarding of additional marks to students.

Further information on Business School policy and procedure can be found under “Special Consideration” on the key policies and support page.

LATE SUBMISSION PENALTIES

For assessments other than examinations, late submission will incur a penalty of 5% per day or part thereof (including weekends) from the due date and time. An assessment will not be accepted after 5 days (120 hours) of the original deadline unless special consideration has been approved. An assignment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the ‘wrong’ assignment has been submitted.

For assessments which account for 10% or less of the overall course grade, and where answers are immediately discussed or debriefed, the LIC may stipulate a different penalty. Details of such

late penalties will be available on the course Moodle page.

FEEDBACK ON YOUR ASSESSMENT TASK PERFORMANCE

Feedback on student performance from formative and summative assessment tasks will be provided to students in a timely manner. Assessment tasks completed within the teaching period of a course, other than a final assessment, will be assessed and students provided with feedback, with or without a provisional result, within 10 working days of submission, under normal circumstances. Feedback on continuous assessment tasks (e.g. laboratory and studio-based, workplace-based, weekly quizzes) will be provided prior to the midpoint of the course.

Faculty-specific Information

PROTOCOL FOR VIEWING FINAL EXAM SCRIPTS

UNSW students have the right to view their final exam scripts, subject to a small number of very specific exemptions. The UNSW Business School has set a protocol under which students may view their final exam script. Individual schools within the Faculty may also set up additional local processes for viewing final exam scripts, so it is important that you check with your School.

If you are completing courses from the following schools, please note the additional school-specific information:

- Students in the **School of Accounting, Auditing & Taxation** who wish to view their final examination script should also refer to this page.
- Students in the **School of Banking & Finance** should also refer to this page.
- Students in the **School of Information Systems & Technology Management** should also refer to this page.

COURSE EVALUATION AND DEVELOPMENT

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

QUALITY ASSURANCE

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential.

TEACHING TIMES AND LOCATIONS

Please note that teaching times and locations are subject to change. Students are strongly advised to refer to the Class Timetable website for the most up-to-date teaching times and locations.