UNSW Course Outline

INFS2609 Coding for Business - 2024

Published on the 28 Jan 2024

General Course Information

Course Code : INFS2609
Year : 2024
Term : Term 1
Teaching Period : T1
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 : Undergraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This is a Level 2 Information Systems (IS) course that introduces you to the foundations of coding skills in business. It will involve both a theoretical component (e.g. learning about basic programming concepts like loops, arrays and functions) as well as a practical component (e.g.

implementing simple algorithms in a computer laboratory and designing a user-friendly interface). The course also provides a first step towards learning the principles of object-oriented design and programming through the use of the Java programming language.

The course is suitable for students with no prior coding experience. It is particularly targeted at business students as it relates to a number of core concepts that are essential in understanding the technologies behind information systems in business without getting into low-level technical details. This course serves as a prerequisite for INFS3634 (Mobile Ecosystems and Application Development).

Course Aims

This course covers material that is significant to the discipline of Information Systems. A central aim of this course is to build students' coding skills in preparation for INFS3634 (Mobile Ecosystems and Application Development). This course also aims to develop students' ability to work individually in solving problems through the application of coding concepts to design. Overall, this course aims to provide students with various concepts and skills that are essential in technology careers including project management, business analysis, systems analysis, and software development.

Relationship to Other Courses

- This course serves as a prerequisite for INFS3634 (Mobile Ecosystems and Application Development).

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Demonstrate ability to interpret and write reliable, well-structured, and well-documented software programs.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
CLO2 : Describe and apply the principles of object-oriented programming.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
CLO3 : Design, write and evaluate programming solutions for small to medium scale problems.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO7 : Leadership Development
CLO4 : Interpret, review, debug and share software code.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO7 : Leadership Development
CLO5 : Describe and apply MVC architecture in developing software.	• PLO1 : Business Knowledge • PLO2 : Problem Solving

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate ability to interpret and write reliable, well-structured, and well-documented software programs.	• Tutorial Preparation and Participation • Individual Assignments • Group Assignment
CLO2 : Describe and apply the principles of object-oriented programming.	• Tutorial Preparation and Participation • Individual Assignments • Group Assignment
CLO3 : Design, write and evaluate programming solutions for small to medium scale problems.	• Individual Assignments • Group Assignment
CLO4 : Interpret, review, debug and share software code.	• Group Assignment
CLO5 : Describe and apply MVC architecture in developing software.	• Tutorial Preparation and Participation • Individual Assignments • Group Assignment

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams | EdStem | GitHub (Classroom and Desktop) and NetBeans

Learning and Teaching in this course

This course introduces you to the foundations of the programming discipline, which underlies most technical subjects such as software and mobile applications design, data management, and algorithms. The course provides a first step towards learning the principles of object-oriented design and programming using Java programming language. In addition to developing programming skills, the focus of this course is also on self-directed learning and problem solving. Lectures, tutorials, textbooks, assignments, exams and other resources are all provided to help this process.

We will cover a lot of material in INFS2609, so it is vital that you study from Week 1. Essentially, this means that you should read and complete the course materials and prepare for your tutorials. The course team will facilitate your learning by providing the guidance as to what you need to study, and working with you on problems you may encounter. It is, however, your responsibility to make a concerted and timely effort to study. If you make this effort, you will find the material interesting, the course worthwhile and the interaction with your fellow students stimulating. You should also do well.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Tutorial Preparation and Participation Assessment Format: Individual	25%	Start Date: Weekly Due Date: Weekly	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
Individual Assignments Assessment Format: Individual	45%	Start Date: Please see schedule. Due Date: Please see schedule.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
Group Assignment Assessment Format: Group	30%	Start Date: Please see schedule. Due Date: Please see schedule.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork

Assessment Details

Tutorial Preparation and Participation

Assessment Overview

Tutorials will be run as weekly programming labs. A programming lab provides a practical, hands-on environment where students will learn by doing. The role of the programming lab is to help build your understanding and problem solving skills through the first-hand application of what you have learned to solve simulated problems. In this course, tutorial preparation and participation has a weighting of 25% in total.

Please note: All students are expected to adhere to their allocated workshop times. If you are unable to attend your allocated workshop due to illness or misadventure, you must contact your LIC as soon as possible. Students are required to prepare for each workshop and the workshop will require your full participation. Marks will be given for students who have prepared (i.e., completed any necessary self-study and preparation work), are on-time for the workshops and actively participate in the sandboxing activities. Active participation includes but is not limited to: providing programming solutions for exercises; engaging in discussions; asking and answering questions. Students who are not prepared for a workshop, are late for the workshop, and/or are not fully engaged during the workshop itself (e.g. occupied with social networking, surfing the web, checking mail, etc.) may not be awarded an assessment mark.

A tutorial preparation and participation grading guide will be uploaded on Moodle website to help you understand the grading criteria. It is strongly recommended that you understand the grading rubric as this will help you in your preparation for, and participation in, tutorials each week. Expectations for workshop preparation and participation will also be discussed in your first lecture. Students will also be required to sign an attendance sheet each week. It is your responsibility to ensure that you arrive on time and sign the attendance sheet.

Please note that 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. The subject of your e-mail should begin with the course code (i.e. INFS2609).

Assesses: PLO1, PLO2, PLO3, PLO4, PLO5, PLO6

Course Learning Outcomes

- CLO1 : Demonstrate ability to interpret and write reliable, well-structured, and well-documented software programs.
- CLO2 : Describe and apply the principles of object-oriented programming.
- CLO5 : Describe and apply MVC architecture in developing software.

Detailed Assessment Description

Week 01 to 04: 2.50% per lab

Week 05, 07 to 10: 3.00% per lab

Assignment submission Turnitin type

Not Applicable

Individual Assignments

Assessment Overview

Through each assignment, students will demonstrate their ability to understand and implement a range of technical skills relevant to the course. The assignments will be in line with the topics covered in the lectures, tutorials, and study material. However, students will need to engage in their own study in order to complete these assignments.

Weekly assessments will comprise of in class assessments (quizzes and short questions) on the material covered in the previous weeks. These will be held during the lecture time as indicated in the weekly schedule for this course. Therefore, it is critical that students engage with the lecture, tutorial and homework exercises to prepare for these regular assessments.

Assesses: PLO1, PLO2, PLO3, PLO5, PLO6

Course Learning Outcomes

- CLO1 : Demonstrate ability to interpret and write reliable, well-structured, and well-documented software programs.
- CLO2 : Describe and apply the principles of object-oriented programming.
- CLO3 : Design, write and evaluate programming solutions for small to medium scale problems.
- CLO5 : Describe and apply MVC architecture in developing software.

Detailed Assessment Description

This will involve students creating an interactive portfolio that will include evidence of their weekly learning and application.

Assignment submission Turnitin type

This is not a Turnitin assignment

Group Assignment

Assessment Overview

Through each assignment, students will demonstrate their ability to understand and implement a range of technical skills relevant to the course. The assignments will be in line with the topics covered in the lectures, tutorials, and study material. However, students will need to engage in their own study in order to complete these assignments.

Assesses: PLO1, PLO2, PLO3, PLO4, PLO5, PLO6

Course Learning Outcomes

- CLO1 : Demonstrate ability to interpret and write reliable, well-structured, and well-documented software programs.
- CLO2 : Describe and apply the principles of object-oriented programming.
- CLO3 : Design, write and evaluate programming solutions for small to medium scale problems.
- CLO4 : Interpret, review, debug and share software code.
- CLO5 : Describe and apply MVC architecture in developing software.

Detailed Assessment Description

This will involve students engaging in a design sprint where they will be required to solve a programming problem under time restricted settings.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

General Assessment Information

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. Classes are highly practical and relevant to your assessments, so you are expected to attend at least 80% of all scheduled classes.

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.

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 : 12 February - 18 February	Lecture	Java Fundamentals
	Tut-Lab	Java Fundamentals 2.5% Preparation and Participation
Week 2 : 19 February - 25 February	Lecture	Selections and Loops
	Tut-Lab	Selections and Loops 2.5% Preparation and Participation
Week 3 : 26 February - 3 March	Lecture	Methods and Arrays
	Tut-Lab	Methods and Arrays 2.5% Preparation and Participation
Week 4 : 4 March - 10 March	Lecture	Object Oriented Programming and Encapsulation
	Tut-Lab	Object Oriented Programming and Encapsulation 2.5% Preparation and Participation
Week 5 : 11 March - 17 March	Lecture	Inheritance and Polymorphism
	Tut-Lab	Inheritance and Polymorphism 3% Preparation and Participation
Week 6 : 18 March - 24 March	Other	Flexibility Week
	Tut-Lab	Flexibility Week
Week 7 : 25 March - 31 March	Lecture	Abstract Classes and Interfaces
	Tut-Lab	Abstract Classes and Interfaces 3% Preparation and Participation
	Assessment	Release Group Assignment
Week 8 : 1 April - 7 April	Lecture	Exception Handling and Databases
	Tut-Lab	Exception Handling and Databases 3% Preparation and Participation
Week 9 : 8 April - 14 April	Lecture	MVC Architecture, Views and UI Design
	Tut-Lab	MVC Architecture, Views and UI Design 3% Preparation and Participation
Week 10 : 15 April - 21 April	Lecture	Concurrent Processing
	Tutorial	Concurrent Processing 3% Preparation and Participation
	Assessment	Group Assignment due on Week 11, Thursday. 10 August 2023, 4pm

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

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. For example, the self and peer-learning assessment component was introduced as a result of feedback highlighting the individual nature of assessment tasks.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Pranit Anand		Quad 2076	+61 2 9348 1369	TBA	Yes	Yes
Lecturer	Wilbert Wu		TBA	TBA		Yes	No

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.