



UNSW

UNSW Course Outline

INFS3603 Introduction to Business Analytics - 2024

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General Course Information

Course Code : INFS3603

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

Business organisations acknowledge the importance of utilizing high-quality information about their capabilities and those of their competitors for effective decision making to be competitive and generate value. This course will provide you with the fundamentals of implementing and

managing business analytics in organisations. You will dive into data visualisation by introducing key concepts in data visualisation and visual analytics. You will develop the ability in applying various data visualisation techniques and tools, such as Power BI, to produce effective data-driven visual reports in different context. It also develops student's ability to effectively communicate insights derived from the visualisations to inform business decision.

Course Aims

This course aims to expose students to Business Analytics technologies, data analytical skills, and management practices that organizations are applying to make better evidence-based decisions in order to succeed in a hyper-competitive business environment. Emphasis is placed on learning foundational data analytical skills, as well as the practical application of visual analytics to derive value from large datasets. This course will also help students refine their communication skills, critical thinking skills, as well as assist them in the development of research skills.

Relationship to Other Courses

This subject equips students with the foundational knowledge and tools needed for a career in business analytics.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Formulate strategies using data to support managerial decisions and securing competitive advantage.	<ul style="list-style-type: none">• PLO1 : Business Knowledge• PLO2 : Problem Solving• PLO3 : Business Communication
CLO2 : Apply Business Analytics frameworks, techniques, and tools to optimise data collection, analysis, and management for improved decision-making.	<ul style="list-style-type: none">• PLO1 : Business Knowledge• PLO2 : Problem Solving
CLO3 : Generate insightful visual analytics to interpret datasets, creating dashboards and data-driven visual reports for effective communication.	<ul style="list-style-type: none">• PLO2 : Problem Solving• PLO3 : Business Communication• PLO4 : Teamwork
CLO4 : Synthesise the complexities, crucial elements, and organisational consequences of cultivating a business analytics proficiency.	<ul style="list-style-type: none">• PLO1 : Business Knowledge• PLO2 : Problem Solving• PLO4 : Teamwork• PLO6 : Global and Cultural Competence
CLO5 : Evaluate the ethical ramifications of big data and analytics on responsible business conduct, ensuring integrity and accountability.	<ul style="list-style-type: none">• PLO4 : Teamwork• PLO5 : Responsible Business Practice

Course Learning Outcomes	Assessment Item
CLO1 : Formulate strategies using data to support managerial decisions and securing competitive advantage.	<ul style="list-style-type: none"> • Class Preparation and Activities • Team Assignment
CLO2 : Apply Business Analytics frameworks, techniques, and tools to optimise data collection, analysis, and management for improved decision-making.	<ul style="list-style-type: none"> • Final Exam • Class Preparation and Activities • Team Assignment
CLO3 : Generate insightful visual analytics to interpret datasets, creating dashboards and data-driven visual reports for effective communication.	<ul style="list-style-type: none"> • Class Preparation and Activities • Team Assignment
CLO4 : Synthesise the complexities, crucial elements, and organisational consequences of cultivating a business analytics proficiency.	<ul style="list-style-type: none"> • Final Exam • Class Preparation and Activities • Team Assignment
CLO5 : Evaluate the ethical ramifications of big data and analytics on responsible business conduct, ensuring integrity and accountability.	<ul style="list-style-type: none"> • Final Exam • Class Preparation and Activities • Team Assignment

Learning and Teaching Technologies

Moodle - Learning Management System | Power BI

Learning and Teaching in this course

This course is delivered in a mixed format of lectures and tutorials. Each lecture will focus on different topics regarding business analytics by explaining relevant concepts, theoretical frameworks, and keys issues. To facilitate knowledge and skill development, tutorials are conducted to provide students with the opportunity to perform hands-on exercises and to discuss pressing issues on data analytics through knowledge sharing and case study.

The role of the lecturer and tutor in this environment is to establish a framework and put together a set of materials for discussion, and to create the conditions suitable for learning. The underlying assumption is that we are all co-producers in learning and can work together in a collaborative fashion. It is essential in this course that both students and learning facilitators to participate equally in the discussion. It is assumed that students will have read and thought about the assigned materials before class and come prepared to contribute to the class discussion.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Class Preparation and Activities Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Not Applicable	<ul style="list-style-type: none">PLO1 : Business KnowledgePLO2 : Problem SolvingPLO3 : Business CommunicationPLO5 : Responsible Business PracticePLO6 : Global and Cultural Competence
Team Assignment Assessment Format: Group	30%	Start Date: Not Applicable Due Date: TBA	<ul style="list-style-type: none">PLO1 : Business KnowledgePLO2 : Problem SolvingPLO3 : Business CommunicationPLO4 : TeamworkPLO5 : Responsible Business PracticePLO6 : Global and Cultural Competence
Final Exam Assessment Format: Individual	40%	Due Date: Examination Period	<ul style="list-style-type: none">PLO1 : Business KnowledgePLO2 : Problem SolvingPLO3 : Business CommunicationPLO5 : Responsible Business PracticePLO6 : Global and Cultural Competence

Assessment Details

Class Preparation and Activities

Assessment Overview

This assessment comprises in-class activity participation and quizzes that are designed to promote active learning by students. Further details on this assessment will be provided on Moodle.

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

BCom students: myBCom course points for PLO6

Course Learning Outcomes

- CLO1 : Formulate strategies using data to support managerial decisions and securing competitive advantage.
- CLO2 : Apply Business Analytics frameworks, techniques, and tools to optimise data

collection, analysis, and management for improved decision-making.

- CLO3 : Generate insightful visual analytics to interpret datasets, creating dashboards and data-driven visual reports for effective communication.
- CLO4 : Synthesise the complexities, crucial elements, and organisational consequences of cultivating a business analytics proficiency.
- CLO5 : Evaluate the ethical ramifications of big data and analytics on responsible business conduct, ensuring integrity and accountability.

Assignment submission Turnitin type

Not Applicable

Team Assignment

Assessment Overview

For this assignment you will work in a team (TBA members) on a report. The assignment will incorporate a presentation of findings of your investigation.☒

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

BCom students: myBCom course points for PLO5

Course Learning Outcomes

- CLO1 : Formulate strategies using data to support managerial decisions and securing competitive advantage.
- CLO2 : Apply Business Analytics frameworks, techniques, and tools to optimise data collection, analysis, and management for improved decision-making.
- CLO3 : Generate insightful visual analytics to interpret datasets, creating dashboards and data-driven visual reports for effective communication.
- CLO4 : Synthesise the complexities, crucial elements, and organisational consequences of cultivating a business analytics proficiency.
- CLO5 : Evaluate the ethical ramifications of big data and analytics on responsible business conduct, ensuring integrity and accountability.

Final Exam

Assessment Overview

The final exam will be held in the formal examination period. All exams are conducted in accordance with the UNSW Rules for the Conduct of Examinations and it is your responsibility to be familiar with these rules. Information about exams is available from myUNSW. Further details about the final exam will be available on Moodle by Week 10.

Assesses: PLO1, PLO2, PLO3, PLO5, PLO6

Course Learning Outcomes

- CLO2 : Apply Business Analytics frameworks, techniques, and tools to optimise data collection, analysis, and management for improved decision-making.
- CLO4 : Synthesise the complexities, crucial elements, and organisational consequences of cultivating a business analytics proficiency.
- CLO5 : Evaluate the ethical ramifications of big data and analytics on responsible business conduct, ensuring integrity and accountability.

Assignment submission Turnitin type

Not Applicable

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

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Business Analytics in Context
	Tutorial	Business Analytics in Context
Week 2 : 19 February - 25 February	Lecture	Introduction to Power BI
	Tutorial	Power BI Demo Workshop
Week 3 : 26 February - 3 March	Lecture	Data Cleaning
	Tutorial	Power Query Editor Workshop 1
Week 4 : 4 March - 10 March	Lecture	Data Modelling
	Tutorial	Power Query Editor Workshop 2
Week 5 : 11 March - 17 March	Lecture	Data Visualisation
	Tutorial	Visualisation Workshop
Week 6 : 18 March - 24 March	Project	Flexibility Week No lecture and tutorial
Week 7 : 25 March - 31 March	Lecture	Power BI - DAX and Dashboard
	Tutorial	DAX Workshop
Week 8 : 1 April - 7 April	Lecture	Systems and User Acceptance Testing
	Tutorial	Test Case Creation and Testing Workshop
Week 9 : 8 April - 14 April	Lecture	Data Visualization in Practice: An Industry Perspective
	Tutorial	Data Storytelling & Strategy Road Mapping Workshop
Week 10 : 15 April - 21 April	Lecture	Course Review and Exam Preparation
	Tutorial	Team Project Presentation

Attendance Requirements

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

Course Resources

Prescribed Resources

Course resources will be provided on Moodle as needed to support the topic(s) covered each week.

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.

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.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Jacky Mo		Quad 2119	+61 9385 5623	TBA	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 Plagiarism

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.