UNSW Course Outline

MARK3088 Product Analytics - 2024

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General Course Information

Course Code : MARK3088
Year : 2024
Term : Term 1
Teaching Period : T1
Is a multi-term course? : No
Faculty : UNSW Business School
Academic Unit : School of Marketing
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

Today's data-rich environment and advances in data mining techniques have enabled product idea generation from the crowd. Many innovative data-based products or services development and effective marketing of new product ideas are being born in crowdfunding platforms. Today,

"data” itself may form part of the “core material” of new products or services. This course integrates the principles of product development with marketing technology tools by covering product metrics, customer journey, A/B testing, and data product or service development such as recommendation algorithms. Students will exercise hands-on data analytics and marketing technology tools to conduct exploratory product data analysis and visualisation.

Course Aims

This course is offered as part of the Marketing stream and the Marketing Analytics stream in the BCom degree.

MARK3088 integrates the principal of product development and modern marketing technology tools. The aim is to produce Marketing, Product and Brand Managers, Entrepreneurs, or Business Analyst.

Relationship to Other Courses

MARK3088 Product Analytics is one of the core Marketing Analytics courses.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Develop new product idea generation employing relevant product and customer data analytics.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO2 : Create model-based, data-driven product/service decisions using advanced data analytics to provide effective solutions to meet customers' needs.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO3 : Combine information and skills to effectively communicate the value of new business data products in oral and written formats in individual and group settings.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO4 : Operate collaboratively in a culturally diverse team and contribute towards achieving desired results.	• PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork

Course Learning Outcomes	Assessment Item
CLO1 : Develop new product idea generation employing relevant product and customer data analytics.	• Case study analysis • Participation and/or Quizzes
CLO2 : Create model-based, data-driven product/service decisions using advanced data analytics to provide effective solutions to meet customers' needs.	• Group project • Case study analysis
CLO3 : Combine information and skills to effectively communicate the value of new business data products in oral and written formats in individual and group settings.	• Group project • Participation and/or Quizzes • Case study analysis
CLO4 : Operate collaboratively in a culturally diverse team and contribute towards achieving desired results.	• Group project

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

NA

Other Professional Outcomes

NAA

Additional Course Information

NA

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Group project Assessment Format: Group	30%	Start Date: Not Applicable Due Date: 03/04/2024 03:00 PM Post Date: 23/02/2024 12:00 AM	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication • PLO4 : Teamwork
Case study analysis Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: 24/04/2024 03:00 PM Post Date: 23/02/2024 12:00 AM	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
Participation and/or Quizzes Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Not Applicable Post Date: 16/02/2024 12:00 AM	• PLO1 : Business Knowledge • PLO2 : Problem Solving

Assessment Details

Group project

Assessment Overview

You will develop a new data product with your group members. This project provides you with an opportunity to take your knowledge and skills of the product analytics learned in the course and apply them to a real-world problem.

Assesses: PLO1, PLO2, PLO3, PLO4

(BCom students: myBcom course points for PLO4)

Course Learning Outcomes

- CLO2 : Create model-based, data-driven product/service decisions using advanced data analytics to provide effective solutions to meet customers' needs.

- CLO3 : Combine information and skills to effectively communicate the value of new business data products in oral and written formats in individual and group settings.
- CLO4 : Operate collaboratively in a culturally diverse team and contribute towards achieving desired results.

Detailed Assessment Description

This assessment provides you with the opportunity to apply the concepts learned in class to develop and communicate new data products. Using a design-thinking process, your group will identify customers' pain points and unmet needs in each stage of the customer journey and suggest potential solutions. Then, your group will plan a new product roadmap, develop a new data product (e.g., chatbot), and test your product. Finally, your group will communicate your work using video recording. In classes, all of us will watch the recorded videos and then discuss them together.

Assessment Length

15 minutes

Submission notes

NA

Assessment information

NA

Assignment submission Turnitin type

This is not a Turnitin assignment

Case study analysis

Assessment Overview

Each student will write a report to investigate a business problem about new product development in the digital space. The case will enhance students' analytical, qualitative, and strategic decision-making skills as well as their knowledge of multidisciplinary marketing approaches.

Assesses: PLO1, PLO2, PLO3

(BCom students: myBcom course points for PLO3)

Course Learning Outcomes

- CLO1 : Develop new product idea generation employing relevant product and customer data analytics.

- CLO2 : Create model-based, data-driven product/service decisions using advanced data analytics to provide effective solutions to meet customers' needs.
- CLO3 : Combine information and skills to effectively communicate the value of new business data products in oral and written formats in individual and group settings.

Detailed Assessment Description

This assessment provides you with the opportunity to undertake product A/B test. Before launching new products, companies test their new products many times to optimize their new product features. In the previous group assignment, your group developed the 1st MVP, your chatbot A. You will improve chatbot A by adding a new feature. This will be your Chatbot B. You will then test both Chatbot A and Chatbot B, with your classmates evaluating these two versions, and then decide which version is better. Finally, you will report the result of this product's A/B test.

Assessment Length

2,000 words

Submission notes

NA

Assessment information

NA

Assignment submission Turnitin type

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

Participation and/or Quizzes

Assessment Overview

There are participation exercises and/or quizzes each week, you will build knowledge and skills after completing the tasks.

Assesses: PLO1, PLO2

Course Learning Outcomes

- CLO1 : Develop new product idea generation employing relevant product and customer data analytics.
- CLO3 : Combine information and skills to effectively communicate the value of new business data products in oral and written formats in individual and group settings.

Detailed Assessment Description

Class participation and/or small tasks for some weeks

Assessment Length

NA

Submission notes

NA

Assessment information

NA

Assignment submission Turnitin type

Not Applicable

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Course Overview New Product Development Process New Product Idea Generation
	Tutorial	Python Intro Product Review Text Analysis for New Product Idea Generation
Week 2 : 19 February - 25 February	Lecture	New "Data" Product Development - Chatbot 1
	Tutorial	AI Chatbot Product Development using Watson Assistant 1
Week 3 : 26 February - 3 March	Lecture	New "Data" Product Development - Chatbot 2
	Tutorial	AI Chatbot Product Development 2
Week 4 : 4 March - 10 March	Lecture	Customer Journey Mapping & New Product Roadmap Planning
	Tutorial	Hands-on Design-Thinking Process for Customer Journey Mapping & New Product Roadmap Planning
Week 5 : 11 March - 17 March	Lecture	New "Data" Product Development - Chatbot 3 Market Test of a New Product
	Tutorial	AI Chatbot Development 3 - Advanced chatbot Market Test Analysis
Week 8 : 1 April - 7 April	Lecture	Product attribute optimization - A/B test for one new attribute - Conjoint Analysis for multiple attributes
	Tutorial	Presentation - 1st Generation's MVP (Minimum Viable Product)
Week 9 : 8 April - 14 April	Lecture	New "Data" Product Development - Recommendation
	Tutorial	Python for paired t-test Product A/B test for improving your new product
Week 10 : 15 April - 21 April	Lecture	Product Demand Forecasting Advertising New Product Ideas for Crowdfunding Wrap-up
	Tutorial	Reflection by updating resume Wrap-up Q&A

Attendance Requirements

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

General Schedule Information

NA

Course Resources

Prescribed Resources

NA

Recommended Resources

Virtual Assistant online course

Watson Assistant https://www.youtube.com/watch?v=CeId265HGnM

https://www.coursera.org/learn/building-ai-powered-chatbots

Design-Thinking

https://www.ibm.com/design/thinking/page/courses/Practitioner

Python Free online courses

https://www.datacamp.com/groups/education

https://courses.edx.org/courses/course-v1:Microsoft+DAT208x+2T2018/course/

https://www.datacamp.com/courses/intro-to-python-for-data-science

https://www.kaggle.com/learn/python

Recommendation online course

https://www.coursera.org/specializations/recommender-systems

https://www.coursera.org/learn/recommendation-models-gcp

https://www.udemy.com/building-recommender-systems-with-machine-learning-and-ai/

https://lagunita.stanford.edu/courses/course

Additional Costs

NA

Course Evaluation and Development

Student feedback will be used to improve course.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Lecturer	Junbum Kwon		Quad 3031B	0290652739	9-10 AM on Fridays	Yes	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.