UNSW Course Outline

MARK5827 Customer Analytics - 2024

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General Course Information

Course Code : MARK5827
Year : 2024
Term : Term 3
Teaching Period : T3
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 : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

The constantly increasing availability of customer data offers great opportunities to gain managerial insights for attracting new customers and developing and maintaining relationships with existing customers. This course will equip you with the knowledge required to use data to

inform customer relationship management (CRM) practices in order to increase their effectiveness and efficiency. You will learn how to apply state-of-the-art analytics to manage customers throughout different stages of the customer life cycle. You will also learn how to identify customer segments, forecast customer demand, target customers with marketing initiatives and adopt a value-based CRM approach. Instead of standard two hour lectures, the course uses a combination of short lecturing videos and accompanying materials and short interactive sessions. Through short online videos and accompanying materials you will be able to adapt the learning experience to your needs so that you gain general understanding of typical CRM problems and suitable methods to solve them. During short interactive sessions you will deepen this understanding through case studies, discussions, and quizzes. During lab-based tutorials, you'll tackle real-world CRM problems exercising hands-on data analytics using R. No prior knowledge of R is needed because this course will go through R step-by-step.

Course Aims

This course is offered as part of the Marketing stream in the MCom degree. MARK5827 introduces customer data analytics to sharpen customer relationship management practices. The aim is to equip students with the customer analytics background required to become a capable customer relationship manager or marketing analyst.

Relationship to Other Courses

This course is offered as part of the Marketing stream in the MCom degree. This course introduces customer data analytics to sharpen customer relationship management practices. The aim is to equip students with the customer analytics background required to become a capable customer relationship manager or marketing analyst.

While MARK 5822 (Marketing Analytics) covers overall marketing analytics, MARK 5827 focuses on customer data analytics for customer relationship management.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Translate management problems in customer relationship management (CRM) into analytical problems
CLO2 : Develop data-driven solutions to CRM problems
CLO3 : Collaborate with individuals from different backgrounds (e.g. business, computer science, statistics) to achieve a common goal
CLO4 : Clearly and effectively communicate the business value of customer data analytics in oral and written format

Course Learning Outcomes	Assessment Item
CLO1 : Translate management problems in customer relationship management (CRM) into analytical problems	• Assessment 1 • Assessment 2 • Group Term Project
CLO2 : Develop data-driven solutions to CRM problems	• Assessment 1 • Assessment 2 • Group Term Project
CLO3 : Collaborate with individuals from different backgrounds (e.g. business, computer science, statistics) to achieve a common goal	• Peer Evaluation • Group Term Project
CLO4 : Clearly and effectively communicate the business value of customer data analytics in oral and written format	• Group Term Project

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

The course is designed to enable students to leverage data in order to effectively and efficiently implement customer relationship management (CRM) strategies and tactics.

Students will gain fundamental knowledge about CRM problems and will be introduced to advanced analytical methods that allow to solve them through the use of data. They will then be assisted in developing the skills necessary to apply these methods in practice.

Emphasis will be laid on the fact that the same methods can be useful for addressing different CRM problems. The course will teach different methods step-by-step using typical CRM problems. It is vital that students follow up, study the underlying problems and practice the methods. Eventually students will develop the analytical thinking necessary to flexibly apply the methods studied in this course to other CRM problems as well.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Assessment 1 Assessment Format: Individual	20%	Start Date: Not Applicable Due Date: 30/09/2024 07:10 PM
Assessment 2 Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: 20/10/2024 11:59 PM
Group Term Project Assessment Format: Group	30%	
Peer Evaluation Assessment Format: Individual	10%	

Assessment Details

Assessment 1

Assessment Overview

This task requires students to demonstrate their understanding of the key readings and concepts studied throughout the course and their ability to apply those concepts.

Course Learning Outcomes

- CLO1 : Translate management problems in customer relationship management (CRM) into analytical problems
- CLO2 : Develop data-driven solutions to CRM problems

Detailed Assessment Description

The assessment is an open book assessment done online (30 minutes duration within a 1 hour time window).There will be a combination of multiple choice and open-ended, essay-style questions.

All content in the first three weeks is relevant and examinable (videos, live lectures, and tutorials).

You have 30 minutes to finish the assessment upon starting/opening it. The assessment will be automatically submitted after 30 minutes or at the end of the 1 hour time window, whichever is earlier.

There is one attempt only

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

Assessment 2

Assessment Overview

This task requires students to demonstrate their understanding of the key readings and concepts studied throughout the course and their ability to apply those concepts.

Course Learning Outcomes

- CLO1 : Translate management problems in customer relationship management (CRM) into analytical problems
- CLO2 : Develop data-driven solutions to CRM problems

Detailed Assessment Description

The assessment involves students providing responses (multiple choice/short answer/ calculations) to a given case study.

The assessment is an open book assessment done online.

All content in the first five weeks is relevant and examinable (videos, live lectures, and tutorials).

Assignment submission Turnitin type

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

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show

your Course Authority if there is any uncertainty about the originality of your work.
If your Convenor has concerns that your answer contains passages of AI-generated text or media that have not been sufficiently modified you may be asked to explain your work, but we recognise that you are permitted to use AI generated text and media as a starting point and some traces may remain. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.
For more information on Generative AI and permitted use please see here.

Group Term Project

Assessment Overview

A group of students will solve a problem inspired by the real world.

Course Learning Outcomes

- CLO1 : Translate management problems in customer relationship management (CRM) into analytical problems
- CLO2 : Develop data-driven solutions to CRM problems
- CLO3 : Collaborate with individuals from different backgrounds (e.g. business, computer science, statistics) to achieve a common goal
- CLO4 : Clearly and effectively communicate the business value of customer data analytics in oral and written format

Detailed Assessment Description

This is a group project which involves analysis of a relevant business problem. It involves two components; a presentation and a report

Presentation: This is a group presentation in class. Groups will be assessed on both content and the quality of presentation.

Report: Groups need to submit a report which outlines their methods, findings,conclusions and recommendations.

Generative AI Permission Level

Planning/Design Assistance

You are permitted to use generative AI tools, software or services to generate initial ideas, structures, or outlines. However, you must develop or edit those ideas to such a significant extent that what is submitted is your own work, i.e., what is generated by the tool, software or service should not be a part of your final submission. You should keep copies of your iterations to show

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Peer Evaluation

Assessment Overview

Students evaluate their peers on collaborative tasks.

Course Learning Outcomes

- CLO3 : Collaborate with individuals from different backgrounds (e.g. business, computer science, statistics) to achieve a common goal

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.
For more information on Generative AI and permitted use please see here.

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.

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Lecture	Introduction to Customer Analytics
	Tutorial	No Tutorials in Week 1
Week 2 : 16 September - 22 September	Lecture	The Basics of Customer Relationships
	Tutorial	A Gentle Introduction to Customer Data Mining using R
Week 3 : 23 September - 29 September	Lecture	Customer Segmentation I
	Tutorial	RFM segmentation + Cluster Analysis
Week 4 : 30 September - 6 October	Lecture	Customer Segmentation II
	Tutorial	Latent Class Analysis
Week 5 : 7 October - 13 October	Lecture	Targeting Customers for Marketing Initiatives (Lecture will be recorded as Monday, October 7th is a public holiday)
	Tutorial	Logistic Regression for Prospect Selection
Week 6 : 14 October - 20 October	Lecture	No Lecture - Flexibility Week
	Tutorial	No Tutorials - Flexibility Week
Week 7 : 21 October - 27 October	Lecture	Managing Customer Lifetime Value
	Tutorial	Customer Survival Analysis for Churn Prediction
Week 8 : 28 October - 3 November	Lecture	Visualisation
	Tutorial	Visualisation for Impact
Week 9 : 4 November - 10 November	Lecture	Combining Methods for Greater Insight
	Tutorial	Presentations for Group Report
Week 10 : 11 November - 17 November	Lecture	Summary and Q&A, Peer review
	Tutorial	No Tutorials this week

Attendance Requirements

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

Course Resources

Prescribed Resources

Course Website

Enrolled Students can find the website for this course on Moodle at: http://moodle.telt.unsw.edu.au

Required Materials

There is no prescribed textbook for this course. A list of recommended readings, lecture slides, tutorial materials, data sets,etc. will be provided on Moodle the beginning of each week.

Software

The course uses R, which can be downloaded for free under https://www.r-project.org/

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Lecturer	Con Korkofingas		Quadrangle Building (E15) 2054C		Monday 5 - 6 pm (online)	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 Policies and Guidelines 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 Policies and Guidelines page. For PG Research PLOs, including MPDBS, please refer to 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 Code of Conduct with respect to academic integrity, the University may take disciplinary action. 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 Code of Conduct, 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

SHORT EXTENSIONS

Short Extension is a new process that allows you to apply for an extended deadline on your assessment without the need to provide supporting documentation, offering immediate approval during brief, life-disrupting events. Requests are automatically approved once submitted.

Short extensions are ONLY available for some assessments. Check your course outline or Moodle to see if this is offered for your assessments. Where a short extension exists, all students enrolled in that course in that term are eligible to apply. Further details are available the UNSW Current Students page.

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. Special consideration is primarily intended to provide you with an extra opportunity to demonstrate the level of performance of which you are capable.

Applications can only be made online and will NOT be accepted by teaching staff. 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. The majority of applications will be processed within 3-5 working days.

For further information, and to apply, see Special Consideration on the UNSW Current Students page.

LATE SUBMISSION PENALTIES

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. In the case of an approved Equitable Learning Plan (ELP) provision, special consideration or short extension, the late penalty applies from the date of approved time extension. After five days from the extended deadline, the assessment cannot be submited.

An assessment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the 'wrong' assessment 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.