JINDAL GLOBAL BUSINESS SCHOOL
INDIA'S FIRST MULTI-DISCIPLINARY GLOBAL BUSINESS SCHOOL

O.P. Jindal Global University
A Private University Promoting Public Service
NAAC Accreditation - 'A' Grade

Jindal Global Business School
Course Outline

Course Title	**Marketing Analytics**
Core or Elective	Elective
Program and Batch	MBA 2, IBM 4, IBM 5
Semester & Academic Year	Fall 2026
Credits	1.5
Discipline/Area	Marketing
Provide details, if this course is a Prerequisite for any course/specialization	NIL
Name of the Faculty Member/Course Instructor	Dr. Deepak Sangroya
Contact Details of the Faculty Member	dsangroya@jgu.edu.in
Contact Details of Support Staff	Jgbs-eo@jgu.edu.in
Faculty Member's Open Office Day/s & Time	TBA

Introduction to the Course

Marketing analytics course aims at training marketing students to identify marketing problems and to design effective analytical model. This course will be a practical, structured and comprehensive guide to marketing analytics. The course will cover various strategic models and metrics to aids marketers in quantifying and monitoring marketing performance.

Course Learning Objectives

By the end of the course participants would be able to:

CLO1: Understand the conceptual foundations of relevant marketing analytics methodologies.

CLO2: Provide the necessary skills for identifying marketing problems and develop research design.

CLO3: Understand the application of these analytical tools to assist business decisions

CLO4: Translate insights into a language that is understandable to marketing managers, and produce evidence-based marketing decisions

Program Competency Goals – MBA

MBA Programme Competency Goals (PCGs)		MBA Programme Learning Objectives (PLOs)
		Students will be able to
1	**Technological Agility:** Ability to adopt relevant techniques and tools for better business decision making.	1. Understand relevant business technologies
		2. Understand future technologies in business domain
2	**Responsible Global Citizenship:** Ability to understand the interplay between local and global issues and to act with sensitivity towards ethical and social issues	3 Understand the interplay between local and global business issues
		4. Demonstrate sensitivity towards ethical issues
		5. Demonstrate sensitivity towards social issues
		6. Address societal issues
3	**Effective communication:** Ability to effectively exchange ideas and information	7. Present their ideas with clarity
		8. Prepare an organized and logical business document
		9. Use technology for effective communication
4	**Critical Thinking:** Ability to identify, analyze business problems and propose effective solutions	10. Identify main issues of business problems
		11. Examine information from different sources
		12. Draw inferences from analysis
		13. Evaluate alternatives
		14. Summarize and conclude
5	**Leadership:** Ability to take initiative, inspire and collaborate with others	15. Take initiative
		16. Contribute effectively in groups

PLO-PCG Assessments Mapping Matrix

Program Learning Objectives (PLOs)	**Program Competency Goals (PCGs)**	**Course Assessment Item**
This course helps you to develop the following Program Learning Outcomes:	*This course helps you to develop the following Program Competency Goals:*	*This learning outcome will be assessed in the following items:*
PLO1	**PCG1**	**A1, A2, A3, A4**
PLO10	**PCG2, PCG4**	**A3, A4**
PLO1, PLO10, PLO11, PLO12, PLO13, PLO14	**PCG1, PCG3, PCG4**	**A1, A2, A3, A4**
PLO7, PLO8, PLO10, PLO11, PLO12, PLO13, PLO14	**PCG3, PCG4**	**A1, A2, A3, A4**

Evaluation Schema

The course grade will be determined on the basis of

Assessment Task	**Weightage**	**Nature**	**Week of Assessment**	**PLOs to be Assessed**
A1. Written Assignment	30% (15% +15%)	Individual	Continuous	PLO1, PLO7, PLO8, PLO11, PLO12
A2. Quiz	30% (15% +15%)	Individual	Week 3 & Week 6	PLO1, PLO10, PLO13, PLO11
A3. Project	30%	Group	Week 7	PLO11, PLO12, PLO13, PLO14
A4. Class Participation	10%	Individual	Continuous	PLO1, PLO7, PLO10, PLO12, PLO13

Description of Assessments:

Evaluation Item	Description
A1. Written Assignment	Students have to submit two assignments on the problem sets/ cases given to students. Students are expected to understand the decision problem, use appropriate methodology to analyze the data, interpret the results and come up with recommendations. The students who do not appear for this assessment will be awarded zero marks unless prior approval is taken.
A2. Quiz	UMS or pen and paper-based quizzes on the topics covered in the course.
A3. Project	This component encompasses 30 percent of total evaluation. This is a project where students can apply the data analysis techniques in making sound marketing decisions. The objective of this research project detailed understanding of the application of various models and metrics of marketing analytics. For detailed information about the project refer to the annexure A-1
A4 Class Participation	This covers the ongoing class discussion. This assessment will continue throughout the semester. General conduct in the classroom and the amount of contribution in class proceedings and class exercise.

Rubrics for Assessments

The following assessment Rubric will be used to evaluate Written Assignment

Criteria	Excellent (80-100%)	Satisfactory (50-79%)	Can be improved (0-49%)
Research Objectives	High relevance of research objectives to the research problem	Medium relevance of research objectives to the research problem	Low relevance of research objectives to the research problem
Research Design	In-depth explanation of the research design	Basic explanation of the research design	Inadequate explanation of the research design
Writing Skill	Well-structured written document	Semi-structured written documents	Unstructured written document

The following assessment Rubric will be used to evaluate the Project Work

	Excellent (80-100%)	Satisfactory (50-79%)	Can be improved (0-49%)
Application	In-depth data analysis, both descriptive and inferential.	Basic data analysis, both descriptive and inferential	Inadequate data analysis
	In-depth analysis of the findings	Basic analysis of the findings	Inadequate analysis of the findings

Presentation skills	Appropriate font size and background of the slides	Small font size or jarring backgrounds	Small or inconsistent font size or fonts and backgrounds which make reading difficult
	Logical linkage between the written and the spoken word	Some basic linkage between the content of the slide and what is being spoken	Very little or no logical link between what is on the slide and what is being spoken
	Adherence to time, up to 10 Minutes of presenting)	Up to 12 minutes of presenting	More than 12 minutes of presenting
Theoretical understanding (Judged through Q/A)	A proper understanding of the concepts and ability to confidently answer the questions correctly	A basic understanding of the concepts and inability to provide to-the-point answers to questions	Very nascent understanding of the concepts and tendency to avoid questions

Teaching Method

The course will have a judicious mix of lectures and in class problem solving, computer based methodology practices and assignments. Here the onus of learning will be with the student and the instructor will be a facilitator. Students will be asked to apply their class room learnings to real business scenarios through business cases and problem sets.

Textbook / Course Package / Other Readings

Prescribed Textbook:
Sorger, S. (2013). Marketing Analytics: Strategic Models and Metrics. Admiral Press (MA).

Chapters from this book are assigned as required readings in the class schedule below- I will assume that you have done those readings when you come to the class. The lectures will take the book material as a starting point and probe deeper into the issues- it will not regurgitate the book material. If something in the book is not clear to you, please don't hesitate to ask.
Cases and any other reading material assigned for reading will be provided to you in a course pack and will be uploaded in the e-learning platform.

Additional Readings:

- Lilien, G. L., Rangaswamy, A., & De Bruyn, A., Principles of Marketing Engineering and Analytics (3rd edition). DecisionPro.

- Winston, W. L. (2014). Marketing analytics: Data-driven techniques with Microsoft Excel. John Wiley & Sons.
- Linoff, G. S., & Berry, M. J. (2011). Data mining techniques: for marketing, sales, and customer relationship management. John Wiley & Sons.

Guest Lectures

S. No.	Faculty member(s)	Guest Speakers [Name, designation, and company]	Week # (Tentative)
1	Dr. Deepak Sangroya	Mr. Ishan Verma, Researcher, TCS	Week 5

Session Plan

Session Details		PLOs Covered
Session 1	**Introduction to Marketing Analytics & Market Insights**	PLO 1
Objective of the session	Discussion on importance of Marketing Analytics, Models & Metrics Market sizing	
Subtopics to be covered	Overview of Marketing Analytics, Models & Metrics Market sizing	
Readings	MA Chapters 1 & 2	
Pedagogy	Lecture, business caselets & class discussion	
Session 2	**Segmentation, Targeting – I**	PLO 1
Objective of the session	Discussion of segmentation techniques	
Subtopics to be covered	A Priori segmentation techniques Cross tabulation Regression based segmentation	
Readings	MA Chapters 3	
Pedagogy	Lecture, business caselets & class discussion	
Session 3&4	**Segmentation, Targeting – II**	PLO 7,10,11
Objective of the session	Discussion of segmentation and positioning techniques	
Subtopics to be covered	Post Hoc segmentation techniques – Cluster analysis (Hierarchical and K-means) Post Hoc segmentation techniques – Conjoint analysis Segment selection & marketing to multiple segments	
Readings	MA Chapters 3	

Pedagogy	Lecture, business caselets & class discussion	
Session 5	**Positioning**	
Objective of the session	Discussion on various analytics techniques used for positioning	
Subtopics to be covered	Different positioning tools, such as positioning maps Developing positioning maps	PLO 10,11,12,13
Readings	MA Chapter 4	
Pedagogy	Lecture, business caselets & class discussion	
Session 6 & 7	**Customer Lifetime Value**	
Objective of the session	Importance of valculating customer lifetime value	
Subtopics to be covered	CLV Calculation RFM Analysis	PLO 10,11,12
Readings	MA Chapter 5	
Pedagogy	Lecture, business caselets & class discussion	
Session 8 & 9	**Product and Service Analytics**	
Objective of the session	Discussion on conjoint analysis	
Subtopics to be covered	Applications of Conjoint Analysis in part-worth calculation, attributes selection & segmentation	PLO 10,11,12
Readings	MA Chapter 7	
Pedagogy	Lecture, business caselets & class discussion	
Session 10	**Guest Lecture**	
Objective of the session	Guest lecture on classification	
Subtopics to be covered	Application of cluster analysis in the real world scenerio	PLO 10
Readings		
Pedagogy	Business caselets, in-class exercise & class discussion	
Session 11	**Pricing Analytics**	
Objective of the session	Discussion on conjoint analysis	
Subtopics to be covered	Creating Linear & Power Demand Curves Estimating Demand Curves Without Price Elasticity Optimizing Price Price Skimming	PLO 10,11,12

Readings	MA Chapter 8	
Pedagogy	Lecture, business caselets & class discussion	
Session 12	**Distribution Analytics**	PLO 10,11,12
Objective of the session	Discussion on selecting best distribution channel	
Subtopics to be covered	Retail location selection Gravity Model Selecting best retail channel	
Readings	MA Chapters 9	
Pedagogy	Business caselets, in-class exercise & class discussion	
Session 13	**Retail Analytics**	PLO 10,11,12,13
Objective of the session	Discussion on Market basket analysis	
Subtopic to be convered	Market basket analysis Measuring support, confidence and lift Optimizing product placement	
Readings		
Pedagogy	Business caselets, in-class exercise & class discussion	
Session 14	Reading & Revision Week/ Examination Week*	
Objective of the session	NA	
Subtopics to be covered	NA	
Readings	NA	
Pedagogy	NA	
Session 15	Reading & Revision Week/ Examination Week*	
Objective of the session	NA	
Subtopics to be covered	NA	
Readings	NA	
Pedagogy	NA	

Disability Support

JGU endeavours to make all its courses accessible to students. The Disability Support Committee (DSC) has identified conditions that could hinder a student's overall well-being. These include physical and

mobility related difficulties, visual impairment, hearing impairment, mental health conditions and intellectual/learning difficulties e.g., dyslexia and dyscalculia. Students with any known disability needing academic and other support are required to register with the Disability Support Committee (DSC) by following the procedure specified at https://jgu.edu.in/disability-support-committee/

Students who need support may register any time during the semester up until a month before the end semester exam begins. Those students who wish to continue receiving support from the previous semester, must re-register within the first month of a semester. Last minute registrations and support might not be possible as sufficient time is required to make the arrangements for support.

The DSC maintains strict confidentiality about the identity of the student and the nature of their disability and the same is requested from faculty members and staff as well. The DSC takes a strong stance against in-class and out-of-class references made about a student's disability without their consent and disrespectful comments referring to a student's disability.

All general queries are to be addressed to disabilitysupportcommittee@jgu.edu.in

Annexure A-1

Research Project

The research project provides a detailed understanding of the application of various models and metrics of marketing analytics. This research project will involve the investigation and analysis of a marketing research problem chosen by the students. In this project, students will get the opportunity to put into practice various marketing analytics models covered during this course and will get first-hand experience of real-world marketing problem.

Some possible area of research project:

I. Market Segmentation: Segment company's overall market to find a new niche
   Process: Collect preference data from respondents, along with classification data. Use Post Hoc segmentation techniques to break general market into clusters.
   Refer clustering analysis.

II. Competitive Analysis: Identify areas of market opportunity not already dominated by competitors. Process: Identify principal competitors. Conduct PESTLE and Porter analyses to assess trends in market. Construct perceptual map. Perform SWOT analysis. Recommend offensive/ defensive strategy. Refer competitive analysis

III. Conjoint Analysis: Identify the options and features of your product that consumers value most Process: Calculate total utility and part utilities. Apply conjoint results to estimate market share.

IV. Perceptual Map: Determining a positioning strategy for an existing or new product or service. Process: Search existing literature for background on market. Conduct market research survey to determine most important evaluation criteria. Conduct another survey to assess how competitors perform against those criteria. Build perceptual map and interpret it.

Although, research problem and their solution vary considerably, but this research project will cover all the major steps of research process and contains the following elements.

1. ***Problem Statement:*** Complete description of the problem.
2. ***Model Selection:*** Select a model and approach to solve the problem, and indicate why
3. ***Solution Process:*** Show the step-by-step process to solve the problem; include diagrams.
4. ***Research Methods:*** Explain how data was gathered and the data sources used.
5. ***Research analysis:*** Structure the data in a logical way, such as by market segment
6. ***Model validation:*** In case possible, test your model on different datasets.
7. ***Model Results:*** Detailed results of model
8. ***Result Interpretation:*** Interpret the findings in context of market situations
9. ***Conclusion:*** Brief on how the problem was solved and identify possible future research areas