

## **MKT355e Multivariate Analysis**

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JAN

**E-Learning:** BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

### **Synopsis:**

Multivariate Analysis provides a firm understanding of the statistical and managerial principles underlying multivariate analysis. Topics include : how to prepare your data and the use of univariate tests, analysis of variance (ANOVA & MANOVA), Factor Analysis, Discriminant Analysis, Cluster Analysis, Regression Analysis, Logistic Regression and Multidimensional techniques.

Note: The course does not require students to bring a laptop. Students can choose to bring a laptop or share laptops with classmates during class, if needed.

### **Topics:**

- Fieldwork, Data Preparation & Cross-tabulations
- Nonparametric Hypothesis Test
- Analysis of Variance & Covariance
- Regression Analysis
- Discriminant & Logit Analysis
- Factor Analysis
- Multidimensional Scaling
- Cluster Analysis
- Conjoint Analysis

### **Textbooks:**

Naresh K. Malhotra: Marketing Research: An Applied Orientation Bundle ISBN: 9789813131033 6th  
Pearson  
ISBN-13: 9780136094234

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ISBN-13: 9780136094234-AA

**Learning Outcome:**

- Discuss the statistical and managerial principles underlying multivariate analysis.
- Evaluate, undertake and interpret results of empirical studies using multivariate statistical techniques.
- Prepare data into proper format for statistical analysis.
- Analyze using non-parametric tests.
- Apply ANOVA to account for overall effects, main effects and interaction effects in marketing applications.
- Compute multiple regression analysis and explain the meanings of the coefficients in marketing applications.
- Compute discriminant, factor and cluster analyses on marketing applications.
- Analyze the use of logit modelling and multidimensional scaling in marketing applications.
- Apply statistical principles and practices to hypothetical situations.
- Organise information and apply them to particular marketing scenarios.
- Develop course competence through discussions.
- Demonstrate the essential knowledge and interpersonal skills to work effectively in a team.
- Show proficiency with the use of SPSS software.
- Prepare oral presentations in areas related to multivariate analysis.

**Assessment Strategies:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
PRE-COURSE QUIZ	2
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
PARTICIPATION	6
GROUP BASED ASSIGNMENT	38
<b>Sub-Total</b>	<b>50</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
ECA-REPORT	32.50
ECA-VIDEO	12.50
ECA-POWERPOINT	5
<b>Sub-Total</b>	<b>50</b>

**Weightage Total** **100**