



General Information

1. **Course code and course title**
English: ICMK 352 Marketing Intelligence – A Quantitative Approach
2. **Number of credits** 4 (4-0-8) (Lecture 4 hours – Lab 0 hours – Self-study 8 hrs/week)
3. **Program and type of subject**
3.1 Program Undergraduate Degree (International Program)
3.2 Type of Subject Major Required
4. **Course Responsible Lecturer and Course Lecturer**
Assoc. Prof. Dr. Viriya Taecharungroj
(BA Division, MUIC, tel: 02-700-5000 ext 4454, email: viriya.tae@mahidol.edu)
5. **Trimester / Year of Study**
All trimesters / for all students in all MUIC Undergraduate Programs
6. **Pre-requisite** ICMB201: Business Statistics, ICMB222: Principle of Marketing
7. **Co-requisites** N/A
8. **Venue of Study** Mahidol University International College, Salaya campus
9. **Date of Latest Revision** August 2024
10. **Course Goals**

This course builds on the concepts learnt in basic marketing and research courses, providing hands-on approaches to the handling of quantitative data. Currently, data becomes available more frequent and more detail. The goal of this course is to provide hand-on approaches to the handling of quantitative data for marketing decision making. As a result, students could work in a current business environment, which is data-intensive, and come up with insightful marketing solutions for organizations.

11. **Course Objectives**

By the end of this course, students are expected to be able to analyze marketing problems of a firm and to design appropriate marketing research project using quantitative approaches. Students should be able to collect relevant data and to use quantitative research techniques to analyze the data to come up with suggestions that improve the business outcomes. The specific purposes of analyzing and interpreting quantitative data for decision making include those for conducting segmentation, targeting and positioning; estimating demand forecasts; designing and developing new products, and; allocating marketing mix resources.

12. **Course Description**

Marketing research tools; impacts of data, insights, and marketing decisions; research process; defining research problem, designing research approach; data collection; descriptive statistics; inferential statistics; data collection from social media; market response model; marketing forecast from research; reporting quantitative research.

13. **Course-level Learning Outcomes:**

By the end of the course, students will be able to:

1. CLO1 Identify quantitative research approaches that are applicable to various marketing problems.
2. CLO2 Develop an appropriate quantitative research design
3. CLO3 Conduct data collection and analysis

Teaching and Evaluation Plans

1. Teaching plan

Wk	Topic	Lecture hours	Teaching Activities/ Media	CLO
1	Sep 16 – Introduction to Marketing Intelligence Sep 18 – Marketing research and intelligence	4	- Lecture - Group work	
2	Sep 23 – Research design Sep 25 – Introduction to RStudio	4	- Lecture - Group work	1
3	Sep 30 – Descriptive & inferential analyses (RStudio) Oct 2 – Data visualisation (RStudio)	4	- Lecture - Group work	1
4	Oct 7 – Difference analysis (RStudio) Oct 9 – <i>Consultation</i>	4	- Lecture - Group work	1, 3
5	Oct 14 – Survey Analysis Presentation 1 Oct 16 – Multiple linear regression analysis (RStudio)	4	- Lecture - Group work	3
6	Oct 21 – Logistic regression (RStudio) Oct 23 – <i>Consultation</i>	4	- Lecture - Group work	3
7	Oct 28 – Survey Analysis Presentation 2 Oct 30 – Cancelled	4	- Group work	3
8	Nov 4 – Measurement and questionnaire design Nov 6 – Sampling	4	- Lecture - Group work	2
9	Nov 11 – Cluster analysis (RStudio) Nov 13 – Cross-tabulation analysis (RStudio)	4	- Lecture - Group work	1, 3
10	Nov 18 – <i>Consultation</i> Nov 20 – Progress presentation 1	4	- Group work	1, 2, 3
11	Nov 25 – <i>Consultation</i> Nov 27 – <i>Consultation</i>	4	- Group work	1, 2, 3
12	Dec 2 – Progress presentation 2 Dec 4 – Project presentation	4	- Group presentation	1, 2, 3
	Dec 11 (16:00 - 17:50) – Final examination deadline			1, 2, 3

2. Evaluation plan

Evaluation Methods	Expected Learning Outcomes (CLO)	Week	Percentage
Final examination	CLO 3	12	30%
Survey analysis presentation	CLO 1,2,3	5,8	30%
Project presentation	CLO 1,2,3	12	30%
Attendance		1-12	10%
Total			100%

2.1 Grading System

Grade	Score	Achievement	GPA
A	90-100	Excellent	4.0
B+	85-89	Very Good	3.5
B	80-84	Good	3.0
C+	75-79	Fairly Good	2.5
C	70-74	Fair	2.0
D+	65-69	Poor	1.5
D	60-64	Very Poor	1.0
F	<60	Fail	0.0

Student should earn “D” grade and above to pass the course.

2.2 Re-examination N/A

2.3 Student Appeals

Students can seek for academic advices, and contents and evaluation clarifications from instructors and Program Directors during office hours or by appointments. In addition, MUIC provides students the opportunity to formally appeal on academic-related matters through an appellant letter submitted to the college.

Appendix

A1 Learning outcomes

Learning Outcomes	Assessment Methods	Assessment Ratio (%)
CLO1 Identify quantitative research approaches that are applicable to various marketing problems.	Final examination	10
CLO2 Develop an appropriate quantitative research design	Presentations	20
CLO3 Conduct data collection and analysis processes	Presentations & Final examination	60
Total		90

A2 Survey analysis 1 — instruction and rubrics

Students in groups of 6-7 are required to analyse actual datasets of real phenomena. They must select appropriate techniques for analysis, reporting, and visualisation of data in an insightful manner. Additionally, the group is tasked with developing practical and creative recommendations for firms in the industry.

Criteria	<6	6-8	9-10
Statistical reporting and visualisation	Demonstrates limited statistical reporting with basic and unclear visuals, accompanied by inaccuracies	Provides clear statistical reporting and uses effective visuals; demonstrates a good understanding of data presentation.	Offers exceptional, detailed statistical analysis with sophisticated, accurate visuals; showcases innovative and insightful reporting techniques.
Data analysis and insights	Displays basic data analysis with minimal insights not significantly relevant for marketing purposes.	The data analysis reveals meaningful insights and uncovers information useful for marketing strategies.	The data analysis discovers deep, crucial insights and provides innovative and highly relevant information for innovative marketing strategies.
Practicality of the recommendations	Recommendations are not practical or feasible.	Recommendations are practical and feasible.	Recommendations are practical, feasible, and provide valuable insights for the brand.
Creativity of the recommendations	Recommendations are not creative or original.	Recommendations are creative and original.	Recommendations are highly creative and original, offering unique insights and ideas.
Presentation	Presentation is poorly organized and difficult to understand.	Presentation is well-organized and clear.	Presentation is well-organized, clear, and effectively communicates the key findings and implications of the analysis and recommendations.

A3 Survey analysis 2 — instruction and rubrics

Students in groups of 6-7 are required to analyse actual datasets of real phenomena. They must select appropriate techniques for analysis, reporting, and visualisation of data in an insightful manner. Additionally, the group is tasked with developing practical and creative recommendations for firms in the industry.

Criteria	<6	6-8	9-10
Modelling of the data	Utilizes basic modelling techniques with errors; demonstrates limited understanding of cluster, crosstab, and regression analysis. Reports are incomplete or inaccurate.	Applies cluster, crosstab, and regression analysis correctly; models data with a sound approach. Reporting is clear and follows the correct process.	Excellent employs advanced techniques in cluster, crosstab, and regression analysis; models are exceptionally sound and insightful. Reporting is thorough, accurate, and demonstrates an advanced understanding of data modelling.
Data analysis and insights	Displays basic data analysis with minimal insights not significantly relevant for marketing purposes.	The data analysis reveals meaningful insights and uncovers information useful for marketing strategies.	The data analysis discovers deep, crucial insights and provides innovative and highly relevant information for innovative marketing strategies.
Practicality of the recommendations	Recommendations are not practical or feasible.	Recommendations are practical and feasible.	Recommendations are practical, feasible, and provide valuable insights for the brand.
Creativity of the recommendations	Recommendations are not creative or original.	Recommendations are creative and original.	Recommendations are highly creative and original, offering unique insights and ideas.
Presentation	Presentation is poorly organized and difficult to understand.	Presentation is well-organized and clear.	Presentation is well-organized, clear, and effectively communicates the key findings and implications of the analysis and recommendations.

A4 Final presentation instruction and rubrics

Students in groups of 6-7 will choose a brand and identify a significant research problem. They need to develop 3-5 impactful research questions, blending exploratory, descriptive, and causal types, backed by extensive background research. An appropriate questionnaire must be designed to gather answers to these questions. Also, a sampling plan specifying an adequate sample size is required, ensuring data reliability.

Using RStudio, students will analyse the data with R programming, performing statistical analysis and interpreting the results accurately. These findings should address the research questions, be well-reported, and communicated clearly. Additionally, students should present practical, innovative recommendations for the brand based on their analysis. Their work must be well-organised, clear, and accurately represent the collected data.

Criteria	<6	6-8	9-10
Background research	Background research is minimal or not relevant to the research problem.	Background research is adequate and relevant to the research problem.	Background research is thorough and includes a wide range of sources, providing a comprehensive understanding of the research problem and context.
Formulation of the research questions	Research questions are not well-defined or lack impact.	Research questions are clearly defined and have some impact.	Research questions are well-defined, impactful, and have a combination of exploratory, descriptive, and causal elements.
Questionnaire design and organisation	Questionnaire is poorly designed and does not flow logically.	Questionnaire is well designed and flows logically.	Questionnaire flows smoothly and is carefully designed to elicit relevant and useful information.
Analytical methods	Analytical methods are not selected and used appropriately.	Analytical methods are appropriate, and interpretations are accurate.	Analytical methods are carefully chosen and performed correctly to provide the most appropriate and insightful analysis of the data.
Practicality of the recommendations	Recommendations are not practical or feasible.	Recommendations are practical and feasible.	Recommendations are practical, feasible, and provide valuable insights for the brand.
Creativity of the recommendations	Recommendations are not creative or original.	Recommendations are creative and original.	Recommendations are highly creative and original, offering unique insights and ideas.
Presentation	Presentation is poorly organized and difficult to understand.	Presentation is well-organized and clear.	Presentation is well-organized, clear, and effectively communicates the key findings and implications of the analysis and recommendations.