

Department: Management Information System	Program: MBA
Course Name: Business Statistics and Quantitative Analysis	Course Code: QUN 601
Pre-requisite: Not Applicable	Credit Hours: 3

Brief Description

This course helps students to learn the techniques of quantitative analysis, decision-making, business modelling, numerical analysis, business statistics and so on. This course starts with a broad range of quantitative tools that are widely used in other courses. The techniques of data collection and description are used to solve different types of problems, including measuring performance, finance, regression, forecasting and linear programming. Statistical methods focusing on probabilities, probability distributions, sampling and statistical inference are applied to problems involving uncertainty, including decision analysis, quality, inventory and project management, queues and simulation.

Course Objectives

After completion of this course the student will be able to:

- Discuss the importance of acquiring a solid knowledge base of quantitative methods.
- Identify problems and choose the optimal solution.
- Apply various statistical techniques of probability on business problems.
- Compare and contrast a range of methods for presenting data.
- Propose solutions to different business problems and present alternative solutions using various statistical tools.
- Critically analyze data and make meaningful interpretations.

Course Learning Outcomes

- Distinguish between concepts, principles, and theories of research
- Apply the concepts, principles, and theories of research in different business situations
- Demonstrate written communication skills
- Have oral communication skills
- Have skills of using computer applications in business administration
- Have scientific research skills in the field of business administration
- Have the skills of critical thinking and analysis in the fields of business
- Have the skills in strategic thinking and finding solutions in business administration
- Have the ability to distinguish between ethical issues in business administration

Course Topics

- Calculations and equations
- Drawing graphs
- Collecting data

- Diagrams for presenting data
- Using numbers to describe data
- Finance and performance
- Regression, curve fitting and forecasting
- Linear programming
- Uncertainty and probabilities
- Probability distributions
- Using samples
- Testing hypotheses
- Making decisions

Text Book

- Waters, D. (2011). *Quantitative Methods for Business*. 5th edition. Harlow, Essex, Pearson.

Additional References

- Buglear, J. (2012). *Quantitative Methods for Business and Management*. Nottingham, Pearson publications.

Online Resources

- <http://statwiki.kolobkcreations.com/index.php?title=Plugins>

Course Outline

Week	Hours	Topics	Remarks
1	3	Calculations and equations	
2	3	Drawing graphs	
3	3	Collecting data	
4	3	Diagrams for presenting data	
5	3	Using numbers to describe data	
6	3	Finance and performance	
7	3	Regression, curve fitting and forecasting	
8	3	Midterm Exam	
9	3	Uncertainty and probabilities, Linear programming	
10	3	Probability distributions	
11	3	Using samples	
12	3	Testing hypotheses	
13	3	Testing hypotheses	
14	3	Making decisions	
15	3	Presentations	

Measurement and Assessment Tools										
Assessment Tools	Grade	Week	Knowledge	Skills						Values
			Identify & apply	Written	Oral	IT	Research	Critical Thinking	Strategic Thinking	Ethics
Midterm Exam	25	9	X							
Project	25	15		X	X	X	X	X	X	X
Final Exam	40	16	X							
Total	100									

Approved by Department Chair	Date of Approval

Additional Information: Updated every Semester by Course Instructor	
Course Instructor	
Department	
Phone No.	
Extension No	
Email	
Office Hours	