Department:	MIS

Course Name:	Business Statistics and Quantitative analysis	Course No.:	QUNT 601
Prerequisite:	None	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 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.kolobkreations.com/index.php?title=Plugins

Measurement & Assessment Tools:

Objectives			Knowledge	Effective Comm. (oral) (writing)		Critical & Strategic Thinking	Team working Skills
Assessment tools	Grade	Week (Time period)	1	2	3	4	5
Case analysis	15	whole semester				✖	
Project report	25	13th			✖		
Project presentation	10	12th		✖			✖
Mid-term exam	15	8th	✖				
Final exam	35	As Dated	✖				
Total	100						

Course Outline:

Week	Hours	Topics
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	Linear programming
9	3	Uncertainty and probabilities
10	3	Probability distributions
11	3	Using samples
12	3	Testing hypotheses

13	3	Making decisions
14	3	Quality management
15	3	Inventory management

Approved by Dept. **Chair:**	**Date of Approval:**

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Extra Information:*(Updated every semester and filled by course instructor)*

Course
Instructor: --
Office No: --
Extension: --
Email: --
Office Hours: --