



KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

COURSE SYLLABUS			
Course Title	Quantitative Methods I		
Course Code	BUS 3340	No. of Credits	3
Department	All Business Departments	College	College of Business
Pre-requisites Course Code	Statistics for Business MTH3325	Co-requisites Course Code	
Course Coordinator(s)	Dr. Mohammed Mustafa Ibrahim		
Email	Mohammed.mustafa@komar.edu.iq	IP No.	122
Other Course Teacher(s)/Tutor(s)	Mr. Hemin Ibrahim (Practice Analysis; practice IBM SPSS)		
Class Hours	Monday 15:30 - 17:30 Room 202 & Wednesday 16:00 -17:00 Lab 114		
Office Hours	Sunday 9am -12 pm Sunday, Tuesday & Thursday 13:30 – 16:30		
Course Type	College course		
Academic Year	Fall 2015		
COURSE DESCRIPTION			
<p>Quantitative Methods for Decision-Making is a science that provides decision-makers, managers and directors in an organization with the methodologies and techniques that enable them to assess several alternatives and choose the best one for their organization. This course is based on the scientific method and has countless successful applications. The methodology uses mathematical models, databases and computer programs to help in decision-making.</p>			
COURSE OBJECTIVES			
<p>The objective of this course is to provide the essential concepts, quantitative models, solutions and latest techniques in solving management and administration problems in complex systems, with special emphasis on decision-making.</p>			
COURSE LEARNING OUTCOMES			
On completion of this course, you should be able to:			
<ol style="list-style-type: none"> 1. Review basics of statistics that leads to its applications in Quantitative methods for Management. 2. Provide the concepts, methods, and tools for the application of logical and quantitative analysis to business decision making and problem solving. 3. Familiarize with a wide range of software and other classical and contemporary resources related to decision and problem analysis, including basics of logic and decision making, principles of optimization, break even analysis, inventory management, forecasting and simulation. 4. Point out the benefits as well as the limits of quantitative analysis in a real-world context. 			



KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

GUIDELINES ON GRADING POLICY

A	95 – 100
A-	90 - 94
B+	87 - 89
B	83 – 86
B-	80 – 82
C+	75 – 79
C	70 – 74
C-	65 – 69 (65% is the passing grade)
D+	60 – 64
D	55 – 59
D-	50 – 54
F	0 – 49
W	Withdrawal
I	Incomplete

COURSE CONTENT: Course topics include:

1. Use and role of Quantitative Technique in Business
2. Practical uses of tools of the Trade
3. Presenting management information
4. Management Statistics
5. Decision Making , Market Research, and Statically Inference
6. Quality Control and Quality Management
7. Forecasting, Stock Control, and project Management.

COURSE TEACHING AND LEARNING ACTIVITIES

Course Teaching and Learning Activities: (short description)

1. Lectures and Interactive class discussion
2. Familiarize with the use of SPSS software and its implantation
3. Homework and Assignments
4. In class brainstorming sessions
5. Quizzes and tests

Selected Text Book

David R. Anderson, D.R., Sweeney, D.J., Williams, T.A., & Ohlmann, J.W. (2013). *Quantitative Methods for Business* (12th ed.). Mason, OH : South-Western

George, D., & Mallery, P. (2012). *IBM SPSS statistics 19 step by step* (12th ed.). Boston, MA: Pearson



KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

Recommended References

Wisniewski, K. (2009). *Quantitative Methods for Decision Makers* (5th ed.). Harlow, England: Prentice Hall

Andrews, R.D. & Walters, R.P. (2008). *From questions to answers: Principles and methods of quantitative research* (4th ed.). Allen, TX: High Ground Press.

Evan, J.R. (2013) *Statistics, data analysis, and decision modeling* (5th ed.). Upper Saddle River, NJ: Pearson

COURSE ASSESSMENT TOOLS

Assessment Tool	Description	Weight
Group Projects	Group project, discussions, and activities	14%
Exercises	Exercises in Statistical Inference with SPSS implementation	20%
Quizzes	You are going to have four quizzes.	16%
Midterm exam		20%
Final Exam		30%

ESSENTIAL READINGS: (Journals, textbooks, website addresses etc.)

The students will get a handout for each topic required.

COURSE POLICY (including plagiarism, academic honesty, attendance etc)

KUST Academic Policy

<http://sar.komar.edu.iq/files/Student%20hand%20Book%202013.pdf>

Attendance:

- ❖ Students are expected to **attend all lectures** and must **attend all examinations, quizzes, and practical exercises**.
- ❖ Faculty **need not** give substitute assignments or examination to students who miss classes **without official permission**.
- ❖ Student must arrange with the faculty to **make-up** the missed class.
- ❖ Students are subject to the regulation and policies mentioned in the **KUST Student Handbook**.
- ❖ KUST guidelines for lateness are as follows: **Three occasions of lateness count as one absence**. (you can be considered in lateness from the 10th minute).

GUIDELINES FOR SUCCESS

1. Attend classes (on time) and actively participate in in-class discussions
2. Ask question any time you want. You can ask during the class, office hours, and by e-mail.
3. Do the assignment management and learn to implement an adaptive self-study technology.



KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

Course calendar: Please check the academic calendar for 2015/2016

Week	Beg/End Dates	Topics (Chapters)	Goal / Assignments
1	28/09/2015 to 01/10/2015	Course syllabus. Review basics of statistics and its applications in Quantitative methods for Management. Plus Lab Session	1, 3
2	04/10/2015 to 08/10/2015	Principles and Methods of Quantitative Research Models in Quantitative Decision Making Plus Lab Session	1, 2, 3
3	11/10/2015 to 15/10/2015	Tools of the trade Creating and editing a Data file Plus Lab Session	1, 2, 3 / Quiz #1
4	17/10/2015 to 22/10/2015	Processing Management Information Managing Data Plus Lab Session	2, 3
5	25//10/2015 to 29/10/2015	Use of Quantitative Technique in Business Role of Quantitative Technique in Business Management Statistics 1 Creating and editing graphs and charts Plus Lab Session	2, 3
6	01/11/2015 to 05/11/2015	Management Statistics 2 Frequencies, bar charts, histograms Plus Lab Session	2, 3
7	08/11/2015 To 12/11/2015	Probabilities and Probabilities Distribution Review and Discussion	2, 4 / Quiz #2 1, 2,3, & 4
15-21 Nov. 2015		Midterm Exam	



KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

8	22/11/ 2015 to 25/11/2015	Decision Making under Uncertainty Descriptive Statistics Lab Session	1,3, 4 / Group Assignment
9	29/11/2015 to 03/12/2015	Market Research and Statistical inference Hypotheses, and variables Lab Session	1, 2, 3, 4/ Quiz #3
10	06/12/2015 to 10/12/2015	Quality Control and Quality Management Measurement , Likert-Type Scale Lab Session	1, 2, 3, 4
11	13/12/2015 to 17/12/2015	Forecasting and Linear Programming General Linear Models Lab Session	2, 3, 4
12	20/12/ 2015 to 24/12/ 2015	Stock- Control Decision Material Requirements Planning (MRP) and Just –in-time (JIT) Lab Session	2, 3, 4
13	03/01/ 2016 to 07/01/ 2016	Project Management: Network Diagrams Quality Management for Decision Making Lab Session	2,3, 4
14	10/01/ 2016 To 16/01/2016	Simulation Interpret information generated form a Computer Simulation Lab Session	2,3, 4/ Quiz #4
15	17/01/2016 to 21/01/2016	Financial Decision Making Review and discuss implementation	1, 2, 3, & 4
24 to 31 January, 2016 Final Exam			