VISION 2О3О
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

اعتماد
NCAAA

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications

Course Title:	**Quantitative Analysis**
Course Code:	**16011705**
Program:	**Business Administration**
Department:	**Business Administration**
College:	**Business Administration**
Institution:	**Albaha University**

Table of Contents

A. Course Identification

1. Credit hours:

2. Course type

a. University ☐ College ☐ Department ☑ Others ☐

b. Required ☑ Elective ☐

3. Level/year at which this course is offered: 2nd level / 3rd year

4. Pre-requisites for this course (if any)**: None**

5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	43	95%
2	Blended	2	5%
3	E-learning	-	-
4	Correspondence	-	-
5	Other	-	-

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	Lecture	45
2	Laboratory/Studio	-
3	Tutorial	-
4	Others (specify)	-
	Total	**45**
Other Learning Hours*		
1	Study	45
2	Assignments	30
3	Library	30
4	Projects/Research Essays/Theses	-
5	Others (specify) *Online research*	15
	Total	**120**

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

In this course, we will discuss many different topics in quantitative analysis for solving the administrative problems and supporting decision making by using linear algebra, statistical inference, Markov chains and decision theory (Decisions and game)

2. Course Main Objective

The main purpose of this course is to equip students with the ability to analyze and solve managerial decisions quantitatively.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge:**	
1.1	**State** the relevance and need for quantitative analysis in order to make business decisions.	**K.2**
1.2	**Describe** the operational techniques used for data analysis in solving complex problems of the business.	**K.2**
2	**Skills:**	
2.1	**Apply** various quantitative techniques to solve a variety of business problems in contemporary scenarios	**S.1**
2.2	**Implement** the statistical values and data in identifying, analyzing and resolving the contemporary operational problems.	**S.1**
2.3	**Evaluate** appropriate strategies for solving complex managerial and operations problem the related to decision making.	**S.3**
2.4	**Use** of quantitative techniques in forecasting and formulating solution for the business problem	**S.4**
3	**Competence:**	
3.1	**Develop** analytical thinking in using appropriate statistical techniques and interpreting the data for managerial decision making.	**C.3**

C. Course Content

No	List of Topics	Contact Hours
1	Introduction About Q A	3
2	Linear Algebra (Matrix & systems)	12
3	Statistical inference	12
4	Markov chains	9
5	Decision Theory (Decisions and game)	9
Total		

D. Teaching and Assessment
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1	**Knowledge:**		
1.1	**State** the relevance and need for quantitative analysis in order to make business decisions.	• Lecture • Illustrative examples	• Exams • Exercise • Assignment

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.2	**Describe** the operational techniques used for data analysis in solving complex problems of the business.	• Lecture • Problem solving	• Exams • Exercise • Assignment
2	**Skills:**		
2.1	**Apply** various quantitative techniques to solve a variety of business problems in contemporary scenarios	• Lecture • Illustrative Examples • Problem solving	• Exams. • Exercise • Assignment
2.2	**Implement** the statistical values and data in identifying, analyzing and resolving the contemporary operational problems.	• Lecture • Reading • Problem solving	• Exams. • Homework
2.3	**Evaluate** appropriate strategies for solving complex managerial and operations problem the related to decision making.	• Lecture • Discussion • Problem solving	• Exams. • Direct Questions • Homework
2.4	**Use** of quantitative techniques in forecasting and formulating solution for the business problem	• Lecture • Brain Storming • Problem solving	• Exams. • Exercises • Direct Questions • Homework
3	**Competence:**		
3.1	**Develop** analytical thinking in using appropriate statistical techniques and interpreting the data for managerial decision making.	• Self-learning • Problem solving	• Homework • Assignment

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Discussion	Weekly	10%
3	Midterm Exam	7	30%
5	Homework/ Assignment	Weekly	10%
6	Final exam	17	50%

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Instructor will be available for student consultation and academic advice on weekdays during their office hours. Additional assistance by appointment only. (9 hours per week).

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	• Haeussler, E.F., Paul, R.S., and Wood, R.J. (2007). Introductory mathematical analysis for business, economics, and the life and social sciences, (12th ed.) Prentice Hall, Upper Saddle River, NJ, • Elementary Statistics, A step by step Approach, 9 th edition, Allan G. • Bluman Taha, Hamdy, Operations Research, 9th edition, (USA: Pearson Education, inc., publishing as prenntce Hall), 2011.
Essential References Materials	• Pronson, Ricard: Operations Research: Shaum's outlines, 2nd edition. • Linear Programming and Network Flows, Bazaraa & Gravis Sherali.
Electronic Materials	Websites on the internet that are relevant to the topics of the course Examples: http://fisher.osu.edu/~croxton_4/tutorial/
Other Learning Materials	• STORM software. • TORA software. • SPSS program. • Excel software.

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Class rooms are well equipped with: -Air conditioned with at least 20 adequate seats. -Interactive/smart Board. -Up-to-date projector. An Auditorium is well equipped with: -Air conditioned with at least 100 adequate seats. -Interactive/smart Board /Up-to-date projector.
Technology Resources (AV, data show, Smart Board, software, etc.)	-Personal computer with necessary up-to-date software. -Interactive Board. -Laptop
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	1. Wall Boards (are essentially needed.). 2. Internet inside the classroom (missed.). 3. Library: Up to date scientific books, in the library. Wi-Fi and internet connections are available inside the teaching staff rooms, and the seminar room.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Strategies for Obtaining Student Feedback on Effectiveness of Teaching	- Instructor - HOD	- Course Evaluation Surveys - Students-Faculty Meetings - Students Assessment of Faculty Members Survey

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Other Strategies for Evaluation of Teaching by the Instructor or by the Department	- Instructor - HOD	- Discussions between staff members teaching the course - Internal review of the course at a departmental level - External reviewers
Processes for Improvement of Teaching	- Instructor - HOD	- Course evaluation reports - Student assessment of faculty reports - Faculty's on-going training through self/department/faculty and/or University initiated workshops and development programs
Processes for Verifying Standards of Student Achievement Conducting and attending workshops given by experts on the teaching and learning methodologies.	- Instructor - HOD	Marking of assignments and exam submissions are revised by independent teaching staff from within the department and/or other departments within the college.
Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.	- Instructor - HOD	- A course report is developed and reviewed periodically at the end of the semester. The report includes exam results, assignments results and surveys feedback from students, which will reflect course and teaching effectiveness. - In addition, an internal review at the end of the semester, conducted by teaching staff will help generate ideas and plans for the development of the course, teaching strategies and learning outcomes. - This is further reinforced through ongoing review of developments in the field conducted by the course instructor in addition to training and workshops provided to the course instructor.
5.Quality review	• **Program** Quality Committee - **CBA** Academic Accreditation Unit	- Course Files Review

H. Specification Approval Data

Program Coordinator	Dr. Abdella Kormie Dinga
Program Chair	Dr. Saleh Abdullah Alghamdi
Council / Committee	Business Administration Department Board Meeting
Reference No.	2nd Board Meeting 1441-1442
Date	24/12/2020