Course Specification
(Postgraduate)

Course Title:	Data Analysis
Course Code:	27153 DAR
Program:	Master of Business Administration (MBA)
Department:	Business Administration
College:	Business College
Institution:	Bisha University
Version:	2
Last Revision Date:	07/02/1445

Table of Contents

A. General information about the course:

1. Course identification:

1. Credit hours:				
2 credit hours				
2. Course type				
A.	☐University	☐College	☐Department	☒ Track
B.	☒ Required		☐Elective	
3. Level/year at which this course is offered: (Second level/ First year)				
4. Course general Description:				
Data analysis course syllabus is designed in such a way that it provides the aspirants with holistic training to understand, study, extract, analyze, manipulate, and comprehend data to make conclusions and achieve specified data goals with the help of different software or specialized systems, more particularly in the field of business management. The course prepares students to conduct empirical research in an academic or business setting. R package will be used for the class.				
5. Pre-requirements for this course (if any)**:**				
None				
6. Co-requirements for this course (if any)**:**				
None				
7. Course Main Objective(s):				
This course provides student with a better understanding of how data-driven models can improve his ability to make decisions in a fast-paced and uncertain world, and the ability to use modeling to predict outcomes. future trends. It teaches student skills in Tableau data visualization and reporting, with which to clearly communicate his findings and business needs. A synthesis project as proof of his ability to analyze, summarize, visualize and report information extracted from a set of data.				

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	16	53.3%
2	E-learning	14	46.7%
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		
	Total		100%

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	25
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (Self learning)**	50
	Total	75

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Understand the basic theory of probability and its some application in Business administration			K1
1.2	Understand the Mathematical Background of modelling problems in Business			K1
...				
2.0	**Skills**			
2.1	Conduct parametric hypothesis testing			S1
2.2	Conduct empirical analysis in the domain of business administration with R package			S3
3.0	**Values, autonomy, and responsibility**			
3.1	Contribute in creative and innovative ways to solving complex interdisciplinary problems and apply their knowledge of statistics through an in-depth senior project/research experience			V3
3.2	Develop expertise in using the tools of mathematical and statistical modeling			V3

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
...				

C. Course Content:

No	List of Topics	Contact Hours
1.	Theme1: Introduction and Review of Statistical tools, Descriptive Statistics and Inferential Statistics	9
2.	Theme2: Hypothesis Testing and Variance Analysis – Parametric Statistics	9
3.	Theme3: Linear Regression,Model: Theory: OLS & Inference, Application in Business Administration	9
4.	Theme4: Non Linear Regression,Model: Theory: GMM estimation & Inference, Application in Business Administration	9
5.	Theme5: Panel Regression: Theory: Estimation, Dynamic Model, Application in Business Administration	9
Total		45

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Individual Written Assignments	weekly	10%
2.	Homeworks	Periodic	15%
3.	First periodic Exam.	7/9	15%
4.	In class performance	Each Class	20%
4.	Final Paper	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities:

1. References and Learning Resources:

Essential References	-Christian Heumann, Michael Schomaker, Shalabh (2016), Introduction to Statistics and Data Analysis With Exercises, Solutions and Applications in R -Jay L. Devore (2020) , Introduction to Statistics and Data Analysis
Supportive References	Rstudio and R package
Electronic Materials	**R package free download** https://CRAN.R-project.org/package=AER
Other Learning Materials	

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom that can accommodate 15 students at a time Small group discussion rooms accommodating 8 students
Technology equipment (Projector, smart board, software)	data show & round tables, Rstudio and Rats software
Other equipment (Depending on the nature of the specialty)	

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Course instructor - department head	analyzing performance and results
Effectiveness of students assessment	Students- faculties- department head	analyzing performance and results
Quality of learning resources	Course instructor- advisory committee	intellectual discussions Seminar, reports and working papers
The extent to which CLOs have been achieved	Course instructor- advisory committee- program policy makers	discussion and development resolutions
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	**Department of Business Administration**
REFERENCE NO.	**2**
DATE	**07/02/1945**