هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Applied Statistics**
Course Code:	**294MATH**
Program:	**MMET, EPET, CHET**
Department:	**Basic Sciences and Supporting studies**
College:	**College of Applied Industrial Technology**
Institution:	**Jazan University**
Version:	**T-104-2022**
Last Revision Date:	**2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	2				
2. Course type					
a.	University ☐	College ☒	Department☐	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Five/Second					
4. Course general Description This course of Applied Statistics covers the following topics: Frequency distributions and their graphs, Mean, Median, Mode, Range, Deviation, variance, Correlation and regression, Probability and Probability distribution. The course is introduced through one hour lecture and one hour tutorial weekly.					
5. Pre-requirements for this course (if any): Mathematics I					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The course aims to teach the students the basic and fundamental statistical concepts required for technical courses. Perform operations on data and construct frequency distributions. Draw the graphs of data distributions. Evaluation of mean, median, mode, deviation, standard deviations. Construction of scatter plots, correlation, regression. To find probability, conditional probability, dependent events. Explain the concepts of probability distributions.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	3	100
2.	E-learning	--	--
3.	Hybrid • Traditional classroom • E-learning	--	--
4.	Distance learning	--	--

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	12
2.	Laboratory/Studio	--
3.	Field	--
4.	Tutorial	24
5.	Others (specify)	--
	Total	36

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	Show knowledge of Data handling, Measure of central tendency, Correlation and Regression, Probability and Probability distribution.	K1	Lecture, tutorial, active learning	Quizzes, Assignments, exams
1.2	Show knowledge of Data handling, qualitative and quantitative data, frequency distribution and graphs.	K1	Lecture, tutorial, active learning	Quizzes, Assignments, exams
2.0	Skills			
2.1	Identify the difference between grouped data and ungrouped data, measure of central tendency.	S1	Lecture, tutorial, active learning	Quizzes, Assignments, exams
2.2	Carry out analysis of correlation and regression, correlation coefficient and its properties.	S2	Lecture, tutorial, active learning	Quizzes, Assignments, exams
2.3	Carry out analysis of probability and probability distributions, Sample space, complement of an event.	S2	Lecture, tutorial, active learning	Quizzes, Assignments, exams
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate the ability to work independently and meet deadlines.	V1	Assignments	Participation in classroom

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Statistics	09
2.	Measure of central tendency and dispersion	09
3.	Correlation and Regression	09
4.	Probability and Probability distribution	09

Total	36

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz 1	Week 3	10%
2.	Quiz 2	Week 8	10%
3.	Assignments, homework and participation in classroom	All weeks	15%
4.	Midterm	Week 6	15%
5.	Final Term Exam	As scheduled	50%

*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	• **Elementary Statistics,** a step by step Approach**:** Bluman, A.G. 6th Edition, McGraw Hill
Supportive References	• Classroom policy • Lecture notes and hardcopies of assignments **Elementary Statistics,** a step by step Approach**:** Bluman, A.G. 6th Edition, McGraw Hill
Electronic Materials	Not utilized
Other Learning Materials	Not utilized

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms should be furnished for 25 students with • White board • Appropriate Chairs
Technology equipment (projector, smart board, software)	
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching		
Effectiveness of students assessment	Institution	Online Direct Survey
Quality of learning resources		
The extent to which CLOs have been achieved	Course Coordinator	Direct Survey
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Electrical Engineering Technology (EET)
REFERENCE NO.	CAITEET23031
DATE	3 09 2003