اعتماد
NCAAA
T4
2020

Course Specifications

Course Title:	Biostatistics
Course Code:	CAMS 233
Program:	All Program
Department:	CAMS
College:	College of Applied Medical Sciences
Institution:	Majmah 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: 3rd, 2nd Year (Academic Year 1444 S1)	
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**	30	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	30
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	30

B. Course Objectives and Learning Outcomes

1. Course Description

This course includes the following topics:

Introduction to Biostatistics - important topics in bio statistical concepts and reasoning. This course focuses on definition, scope, and limitation of biostatistics, Sampling Methods, Collection of Data, Classification and Tabulation, Frequency Distribution, Diagrammatic and Graphical Representation, Measure of Central Tendency, Introduction to Probability, Measure of Dispersion, Skewness and Kurtois, Correlation and Regression.

2. Course Main Objective

The main objective of this course are-
1. Basic Knowledge in Biostatistics
2. Interpret differences in data distributions via visual displays
3. Calculate standard normal scores and resulting probabilities

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
K2.1	The student will be able to **recognize** the use of biostatics when needed.	K2
2	**Skills :**	
S3.1	The student will be able to **analyze** and solve problems of Measure of Central Tendency, Probability, and Measure of Dispersion.	S3
S3.2	The student will be able to **analyze** and solve problems of Skewness and Kurtois, Correlation and Regression.	S3

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Biostatistics	4
2	Introduction of Sampling Methods	2
3	Collection of Data, Classification and Tabulation	2
4	Frequency Distribution	2
5	Diagrammatic and Graphical Representation	2
6	Measure of Central Tendency	4
7	Measure of Dispersion	4
8	Introduction to Probability	4
9	Measure of Skewness and Kurtois	2
10	Correlation and Regression	4
Total		30

D. Teaching and Assessment

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

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
K2.1	The student will be able to **recognize** the use of biostatics when needed.	All required concepts are taught with examples. Lectures	Theory Exams
2.0	**Skills :**		
S3.1	The student will be able to **analyze** and solve problems of Measure of Central Tendency, Probability, and Measure of Dispersion.	Provide Random topic of course to discuss about it. Lectures	Theory Exams
S3.2	The student will be able to **analyze** and solve problems of Skewness and Kurtois, Correlation and Regression.	Solving problems based on topics. Lectures	Theory Exams

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	First Midterm Exam	5th	30%
2	Quiz1	4th	15%
3	Quiz2	8th	15%
4	Final Exam	12th	40%

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :
The student shall avail the consultancy during the displayed office hours

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Statistics by Tmt. V.Varalakshmi Tmt. N.Suseela. Biostatistics: Basic Concepts and Methodology for the Health Sciences Wayne W. Daniel
Essential References Materials	Introductory Statistics, Hassett, Weiss, LondonAddison – Publishing company.
Electronic Materials	**National Program on Technology** http://sdl.edu.sa/SDLPortal/EN/Publishers.aspx **Blackboard** https://lms.mu.edu.sa/webapps/login/
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture room equipped with personal computer and data display device suitable for at least 30 students.
Technology Resources (AV, data show, Smart Board, software, etc.)	One personal computer in class room. One E-Podium and smart board in each class.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Faculty	CLO Mapping with teaching & assessment. Course Blueprinting. Grade Analysis.
	Students	Course Evaluation Survey Quality of Exam Survey
	Peers	Grade Verification
Extent of achievement of course learning outcomes	Faculty member / Quality assurance committee	Course Learning Outcome Assessment. Course report preparation.
Quality of learning resources, etc	Students /Faculty	Course Evaluation Survey Course Improvement Plan

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	Meeting No.----
Date	21/8/2022