Syllabus/ Course Outline Stat-100

This template has been made in keeping with the HEC and FCCU policies

Course Name: Basic Statistics		
Course Code: Stat-100	**Course Type: Elective**	**Course Credits: 3**
Class Timings: 9:00-9:50am MWF	**Section: B**	**Student Meeting Hours/ Office Hours: 10:00-11:00 MWF**
Instructor Name: Dr. Muhammad Anwar Mughal		

A Note from the Instructor:

Students are required to apply themselves diligently to the course of study and to prepare class and homework assignments as given. Lecture slides/Reading Material will be uploaded on Moodle. Class tests and quizzes will be announced in the class. The assignments and Project will have to be completed on time. Regularity and punctuality in the class is essential. All deadlines will be announced in classes.

Course Description:

Pre-requisites if any: None
Mode of Instruction (Asynchronous/Synchronous): Face to Face
Mode of peer-to-peer contact among students: WhatsApp Discussion Groups

Technology Requirements:

Technology Usage in the classroom.

- Students are required to have a computer/laptop and calculator.
- During exams scientific calculator is mandatory and smartphones are not allowed.

Main Mode of Instruction: Lecture slides, reading material, assignment questions will be uploaded on Moodle

Course Objectives/By the end of the course students will be able to:

This course is intended to provide the student with an understanding of basic Statistical terminology and techniques. Upon the successful completion of the course the student should be able to translate information into data and learn how to summarize and present data and use them to solve every day statistical problems. Statistical thinking is essential. Basic mathematical skills are also helpful. Students must know the use of scientific calculator and basic computer skills.

Student Learning Outcomes:

At the end of the course the student will:

1) Perceive the data-related problems of their field in an analytical way.
2) Identify and analyze the data with the help of appropriate statistical techniques and interpret the results
3) Investigate the nature and strength of the relationship between variables
4) Understand the application and usefulness of index numbers.

Course contents, Learning Material & Activities Schedule

Week #	Topic/ Title	Instructional Material	Assessment
1.	Introduction to basic concepts and terminology. Variables, Variable types, data collection	PowerPoint Slides, worksheets, activities and Reading Material	
2.	Classification and tabulation.		Quiz #1 (variables, data, data collection, classification)
3.	Graphs and Charts		
4.	Introduction to Measures of central tendency: Arithmetic mean		Assignment #1 (data collection , tabulation, graphs and charts)
5.	Median, Mode, quantiles		
6.	Proportions, ratios. Geometric mean and Harmonic mean		Quiz #2: (Measures of central tendency:

		PowerPoint Slides, worksheets, activities and Reading Material	Arithmetic mean, median, Mode)
7.	Introduction to measures of dispersion Absolute and relative measures of dispersion. (Range, and its coefficients)		
8.	Quartile Deviation and its coefficients		
MID TERM			
9.	Mean deviation and its coefficient (with mean and median)	PowerPoint Slides, worksheets, activities and Reading Material	
10.	Standard deviation /variance and coefficient of variation		Quiz #3 (Measures of dispersion)
11.	Bivariate data and correlation		
12.	Index numbers; Unweighted index numbers		Assignment #2 (Measures of dispersion and correlation)
13.	Weighted Index numbers: Weighted aggregative method		
14.	Weighted Index numbers: Weighted average of relative's method		Quiz #4 (Correlation and Unweighted index numbers)
15.	Revision		
16.	Final Project		
Final Exam			

Note:

- Assessments can be divided into formative and summative:
    - Formative:
        - Students will learn through readings material, lesson notes, group discussions, and lecture slides, etc.
        - Students will practice through worksheets, practice questions and activities etc.
    - Summative:
        - Performance will be assessed through quiz, case study, projects, etc.

Out-of-Class Study Required:

After completion of a topic exercise questions will be provided to the class to prepare for class and/or complete weekly homework. The "best practices" for maximizing their learning is to take notes and review whole work done at the weekend. At least two hours daily study required to pass this course.

Textbooks, Materials, Supplies, and other Resources

1. Larry J. Stephens, "Theory and Problems of Beginning Statistics" Schaum's Outline Series, McGraw Hill.
2. Anderson, Sweeney and Williams, "Statistics for Business and Economics" 9e Thomson South- Western
3. Mason, Lind, and Marchal, "Statistical Techniques in Business and Economics" McGraw Hill, New York

Course Requirements:

Class Participation: Class attendance; participation in-class activities and discussions
Assignment 1: data collection , tabulation, graphs and charts
Assignment 2: Measures of dispersion and correlation
Quiz 1 (marks 10): Variables, data types, data collection, classification & tabulation
Quiz 2 (marks 10): Measures of central tendency
Quiz 3 (marks 10): Measures of dispersion
Quiz 4 (marks 10): Correlation and Unweighted index numbers
Assigned Readings
Practice Worksheets/ questions and reading documents

Grading Legend
Below is the grading legend of FCCU (published in all catalogues and available on the FCCU website) as approved by the Academic Council

Grades	Quality Points	Numerical Value	Meaning
A	4.00	93-100	Superior
A-	3.70	90-92	
B+	3.30	87-89	Good
B	3.00	83-86	
B-	2.70	80-82	

C+	2.30	77-79	Satisfactory
C	2.00	73-76	
C-	1.70	70-72	
D+	1.30	67-69	Passing
D	1.00	60-66	
F	0.00	59 or below	Failing
NS	0.00	0.00	Did not show up in class
W	-	-	Officially Withdrawn
AW	-	-	Administrative Withdrawal/Dismissal
AU	-	-	Audit/Listener Status
I	-	-	Incomplete
T	-	-	Transferred credit

The entire course is worth 100%, the breakup is as follows (for example):

Class Participation	5%
Assignments:	10%
Quizzes:	10%
Midterm exam:	25%
Final term exam:	40%
Final Project	10%
TOTAL	**100%**

Missed Assignments/Make-Ups/Extra Credit

- *NO delayed assignments. There will be 50% deduction of marks for late submission after due date.*
- *NO Make-up mid/final exam*
- *NO retake mid/final exam*

Attendance Policy:
If a student does not attend a minimum of 70% of total classes, he/she will not be permitted to take the final examination in the course.

Classroom Participation:

Students must participate in the classroom for class activities and may ask questions related to the lesson taught. Class participation is also included in your grade

Changes to the Syllabus:
This syllabus was designed to convey course information and requirements as accurately as possible. It is important to note however that it **may** be subject to change during the course depending on the needs of the class and other situational factors. Such changes would be for your benefit and you will be notified of them as soon as possible.

Student Support Services

- Students can contact the Campus Counseling Center at 0331-444-1518 or ccc@fccollege.edu.pk.
- Writing Center
- Mercy Health Center

Other Useful Links:

-Sexual Harassment Policy
-Anti-Corruption Policy
-Academic integrity
- Plagiarism Policy
-Academic Calendar

I expect that you will strictly follow the core values of FCCU and put your entire efforts to learn as per the course requirements, attend classes, read the textbook(s)/other assigned reading material and do the assignments in the stipulated time period