

## Course Outline

<b>Course Name:</b> Basic Statistics		
<b>Course Code:</b> Stat 100	<b>Course Type:</b> Elective	<b>Course Credits:</b> 3
<b>Class Timings:</b> 11:00-11:50 a.m.	<b>Section:</b> D	<b>Student Meeting Hours/ Office Hours:</b> MW: 10.00 a.m.-10.50a.m. S-423
<b>Instructor Name:</b> Dr. Itrat Batool Naqvi, Associate Professor, Department of Statistics		
<p><b>A Note from the Instructor:</b></p> <ul style="list-style-type: none"> <li>• Lectures will be delivered in class face to face</li> <li>• Lecture and reading Material will be uploaded on Moodle</li> <li>• Quizzes will be performed during class time.</li> <li>• Assignment documents will be uploaded on Moodle and their submissions will be considered as in hard copy during class timings</li> <li>• For all assessments, dates will be announced in classes.</li> </ul>		
<p><b>Instructor Contact Details</b>  <i>Email:</i> itratnaqvi@fccollege.edu.pk  <i>Office:</i> S-423  <i>Office Hours:</i> 10.00 a.m.-10:50a.m.  <i>Guidelines for contacting instructor:</i> Students can contact me during office hours or make an appointment via email during weekdays and wait until I respond.</p>		
<p><b>Course Description:</b>            Pre-requisites if any: N/A            Mode of Instruction: In-class Lecture            [If applicable] Mode of peer-to-peer contact among students: online discussion forums</p>		
<p><b>Technology Requirements:</b></p> <ul style="list-style-type: none"> <li>• Students are required to have a computer/laptop/smartphone and calculator.</li> <li>• During exams scientific calculator is mandatory and smartphones are not allowed.</li> </ul> <p><i>Main Mode of Instruction:</i> In-class lectures, reading material, assignment documents will be uploaded on Moodle</p>		
<p><b>Course Objectives:</b> This course has been designed to give students:</p> <ul style="list-style-type: none"> <li>• a conceptual introduction to the field of statistics and its divisions'</li> <li>• introduction to basic terminologies involved in statistics.</li> <li>• introduction to data, its types, collection, and appropriate representations.</li> <li>• introduction to descriptive measures and their application in various situations</li> <li>• application of statistical methods in various fields and their usefulness.</li> </ul>		

**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**

<b>Week #</b>	<b>Topic/ Title</b>	<b>Instructional Material</b>	<b>Assessment</b>
1.	Introduction to basic concepts and terminology. Variables, data collection, and data presentation	PowerPoint Presentations, worksheet, activities and Reading Material	
2.	Classification and tabulation.		Quiz #1 (variables, data, data collection, prestation, 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: Arithmetic mean, median, Mode )
7.	Introduction to measures of dispersion Absolute and relative measures of dispersion.		

	(Range, and its coefficients)	PowerPoint Presentations, worksheet, activities and Reading Material	
8.	Quartile Deviation and its coefficients		
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9.	Mean deviation and its coefficient (with mean and median)	PowerPoint Presentations, worksheet, 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		
<b>Final Exam</b>			

### **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, data collection, prestaton, classification

**Quiz 2 (marks 10):** Measures of central tendency: Arithmetic mean, median, Mode

**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):

<b>Class Participation</b>	5%
<b>Assignments:</b>	10%
<b>Quizzes:</b>	10%
<b>Midterm exam:</b>	25%
<b>Final term exam:</b>	40%
<b>Final Project</b>	10%
<b>TOTAL</b>	<b>100%</b>

#### **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](mailto: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*