

**DEPARTMENT OF STATISTICS**  
**FORMAN CRISTIAN COLLEGE, LAHORE**  
**(A Chartered University)**

**Fall 2021**

**Instructor Information**

**Dr.Itrat Batool Naqvi,**

**Consultation: S-423, 10:00-11:00am (Monday- Friday online)**

[itratnaqvi@fccollege.edu.pk](mailto:itratnaqvi@fccollege.edu.pk)

**Course Information:**

Title: Acceptance Sampling (**Prerequisite: STAT-305: Statistical Quality Control**)

Code: Stat-400

Credits: 3

Section: A

Class Timings: **11:00-12:15 noon** (Tuesday and Thursday)

Room #: S-421

**Course Contents:** Introduction to acceptance sampling plans, classification of sampling plans, probability and operating characteristic curves, probability functions, single, double, multiple sampling and sequential sampling by attribute.

*The practical hands on practice through R-software*

**Recommended Books:**

- D.C. Montgomery, Introduction to Statistical Quality Control, 5th ed., Wiley, New York, 2004
- R.J. Muirhead, Aspects of Multivariate Statistical Theory, Springer, Wiley, New York, c1982.

**Course Objective:** This course covers topics in acceptance sampling that have been widely used in many industries. Specifically, the goal is for students to understand the concepts, operation, and role of the introduced analytic techniques.

**Learning Outcomes:** After successfully completing the course, students will be able to: Understand the philosophy and basic concepts of quality improvement and acceptance sampling. Demonstrate the ability to design, use, and interpret sampling plans.

**Course Evaluation:**

Course grading is based on the following criteria:

- At least 2 Quizzes (worth 10% of the final grade)
- At least 2 Assignments (worth 20% of the final grade), **from published research papers**

- Project (worth 10% of the final grade), **from published research papers**
- Midterm exam (worth 25% of the final grade)
- Final exam (worth 30% of the final grade)
- Class Participation (worth 5% of the final grade)

Note:

- Late submission of the assignments will result in deduction of marks.
- Students are expected to do their own work on all assignments.
- Academic **dishonesty and / or plagiarism** will result in the assignment of 'F' for the course grade and other university sanctions as they may apply.

### **Class Attendance and missed-exam. policy:**

Students are required to attend all the class sessions in the course. Irregular are far likely to meet the requirements of the course. Frequent absentees from classes may cause zero credit from class participation marks. Student shall not be permitted to sit in the final examination in case of attendance below 67%. Students are advised strictly to not to miss any exam under any circumstances. A makeup exam will be allowed only under very special circumstances and subject to the approval of the head of the department.

### **The Grading Criteria**

<b><u>Grades</u></b>	<b><u>Quality Pts</u></b>	<b><u>Numerical Value</u></b>	<b><u>Meanings</u></b>
A	4	93-100	Superior
A <sup>-</sup>	3.70	90-92	
B <sup>+</sup>	3.30	87-89	
B	3.00	83-86	Good
B <sup>-</sup>	2.70	80-82	
C <sup>+</sup>	2.30	77-79	
C	2.00	73-76	Satisfactory
C <sup>-</sup>	1.70	70-72	
D <sup>+</sup>	1.30	67-69	
D	1.00	60-66	Passing
F	0.00	≤59	Failing

