

STAT 2625 - Statistical Literacy and Critical Reasoning

Fall 2026 Syllabus, Section 16, CRN 43410,

Credit hours: 4

Instructor

Faiza Jalees

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Public Instructor Information

Instructor Title: Ms. Faiza Jalees

Instructor Professional Qualifications:

- M.S., Data Science and Statistics, Youngstown State University, Anticipated 2027
- B.S., Computer Science and Mathematics, Youngstown State University, 2025

Instructor Office Location:

Cafaro Hall 614

1 Tressel Way

Youngstown State University

Youngstown, OH 44555

Instructor Office Phone: 330-941-3302

Course Description

2625. Statistical Literacy and Critical Reasoning. An introduction to statistics and its applications. Topics include descriptive statistics, experimental design, probability sampling distribution, statistical inference, correlation and regression. Emphasis on applications, critical reasoning, and data analysis using statistical software. Credit will not be given for both STAT 2601 and STAT 2625. Prereq.: At least Mathematics Placement Level 15. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Elementary Statistics-Brief, with ALEKS access	Allan Bluman	9781260487510

- Inclusive Access

This course is part of the Inclusive Access program; you should NOT purchase any course materials as they are part of your course registration. In the event you drop this course from your schedule on or prior to the last day of DROP/ADD period, your account will be fully refunded automatically.

- Opt-out

By default, students are opted into the content. If the student decides at that time, they do not want their required course materials to be delivered in this program at the low cost offered, they have the option to OPT-OUT. We highly encourage students not to opt-out. If you choose to opt-out, you will be responsible for obtaining the appropriate course materials/textbook/connect at the full price.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	1.1-1.5 2.1-2.4	The Nature of Probability and Statistics Frequency Distributions and Graphs	
8/31	3.1-3.4	Data Description	
9/7	3.1-3.4	Data Description	
9/14	4.1-4.5	Probability and Counting Rules	
9/21	4.1-4.5	Probability and Counting Rules	
9/28	5.1-5.3	Discrete Probability Distributions	
10/5	6.1-6.3	The Normal Distribution	
10/12	7.1-7.3	Confidence Intervals and Sample Size	
10/19	7.1-7.3	Confidence Intervals and Sample Size	
10/26	8.1-8.4	Hypothesis Testing	
11/2	8.1-8.4 (9.1-9.3 optional)	Hypothesis Testing	
11/9	10.1-10.2	Correlation and Regression	
11/16	11.1-11.2	Chi-Square and Analysis of Variance	
11/23	11.1-11.2	Chi-Square and Analysis of Variance	
11/30	Final Exam	Final Exam: Dec 11, Friday, 8-10 am	

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.