

# Passaic County Community College Academic Year: 2023-2024 Standard Syllabus

Department Chair: Janet Delaney Program Coordinator: Kristina Fleming

<u>Course Code:</u> MA 103 <u>Course Title</u>: Basic Statistics

<u>Department</u>: Mathematics <u>Semesters Offered</u>: Fall, Spring, Summer

<u>Course Description</u>: This course covers the development and application of statistical concepts including descriptive statistics, probability, normal distribution, tests of hypothesis testing differences, sampling theory, and correlation.

Prerequisites: MA 022 or MA 025 or MA 025A or MA025B or TEST PLACEMENT

<u>Credits:</u> 3 <u>Lecture Hours:</u> 3 <u>Lab/Studio Hours:</u> 0 <u>Clinical/Fieldwork Hours:</u> 0

<u>Required Textbook/Materials</u>: Elementary Statistics: Picturing the World, by Larson/Farber; \*Some sections of the course may use Open Educational Resources

<u>Additional Time and Supplemental Requirements:</u> Based on a 15 week semester, students are required to spend an additional 6 hours per week on assignments outside of class time.

**<u>Course Learning Outcomes</u>**: Upon successful completion of this course, students will be able to:

- Compute measures of descriptive statistics.
- Apply basic rules of probability (binomial, conditional, addition, etc.)
- Solve problems involving probability distributions.
- Formulate conclusion through inference.
- Analyze bivariate data through linear correlation and regression.
- Apply basic statistical concepts.

# **General Education Outcomes:**

- 1. Students will translate quantifiable problems into mathematical terms.
- 2. Students will use arithmetic, algebraic, geometric or statistical methods to solve problems.

**Grading Standard:** Final evaluation of class performance will be based on the following:

Participation	5%
Homework	10%
Project	5%
Tests	60%
Final Exam	20%
Total	100%

\*Subject to change or could vary slightly by course section

#### **Course Content:**

(Schedule and suggested topics, readings, and assignments subject to change based on instructor and instructional resource)

- Introduction to Statistics
- Descriptive Statistics
- Correlation and Regression
- Probability
- Discrete Probability Distributions
- Normal Probability Distributions
- Confidence Intervals
- Hypothesis Testing with One Sample

## **Department Policies:**

ACADEMIC HONESTY POLICY – The Mathematics department at Passaic County Community College highly values the honesty and the integrity of each student while helping them to pursue their academic goals. All students must abide by the following academic honesty policy. Students are expected to be honest and ethical at all times in their completion of any coursework. Any dishonesty will not be tolerated in this course. This includes, but is not limited to, cheating, plagiarizing, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person, or obtaining solutions from any website or outside source. Students who are found to be dishonest will receive academic sanctions, such as an "F" grade on the assignment or exam, and the instructor will reserve the right to report the incident to the Academic Affairs Office for possible further disciplinary action.

**CALCULATOR POLICY** — Only scientific or graphing calculators may be used, if permitted by instructor. <u>CELL PHONE CALCULATORS ARE PROHIBITED!</u> The instructor reserves the right to limit the use of the calculator on certain course assessments.

## **College Policies:**

For Information regarding:

- PCCC's Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process

Please refer to the PCCC Student Handbook and PCCC Catalog

### **Panther Alert:**

The College will announce delayed openings, closings, and other emergency situations through the Panther Alert System. Students are encouraged to sign up for Panther Alert Notifications by logging into their student accounts through the PCCC website at <a href="https://www.pccc.edu">www.pccc.edu</a> and following Panther Alert System instructions.

#### **Notification for Students with Learnings Disabilities:**

If you have a disability, and believe you need accommodations in this class, please contact at 973-684-6395, or email <a href="mailto:ods@pccc.edu">ods@pccc.edu</a>. You should do so as soon as possible at the start of each semester. If you require testing accommodations, you must remind me (the instructor) one week in advance of each test.