

**College of San Mateo**  
**Official Course Outline**

1. **COURSE ID:** MATH 890    **TITLE:** Just-In-Time Support for Path to Statistics  
**Units:** 2.0 units    **Hours/Semester:** 32.0-36.0 Lecture hours; and 64.0-72.0 Homework hours  
**Method of Grading:** Pass/No Pass Only  
**Corequisite:** MATH 190

2. **COURSE DESIGNATION:**

**Non-Degree Credit**  
**Basic Skills**  
**Transfer credit:** none

3. **COURSE DESCRIPTIONS:**

**Catalog Description:**

A review of the core prerequisite skills, competencies, and concepts needed in pre-statistics. Intended for students who are concurrently enrolled in MATH 190, Path to Statistics at College of San Mateo. Topics include basic arithmetic involving whole numbers, signed numbers, fractions, and decimals; estimation, number sense, and order of operation.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**

Upon successful completion of this course, a student will meet the following outcomes:

1. Apply and perform operations with integers, fractions, decimals, and percentages.
2. Apply rules of order of operations.
3. Use number sense to determine appropriateness of solutions.
4. Read and make simple charts and graphs.
5. Perform calculations using a scientific calculator.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**

Upon successful completion of this course, a student will be able to:

1. Apply and perform operations with integers, fractions, decimals, and percentages.
2. Apply rules of order of operations.
3. Use number sense to determine appropriateness of solutions.
4. Read and make simple charts and graphs.
5. Perform calculations using a scientific calculator.

6. **COURSE CONTENT:**

**Lecture Content:**

1. Whole Numbers and Integers- addition, subtraction, rounding, multiplication, division, exponents, order of operations, greatest common factor, least common multiple, factorization, divisibility, problem solving
  2. Fractions - equivalent fractions, multiplication, division, addition, subtraction, mixed numerals, order of operations, problem solving with fractions
  3. Decimals - order, rounding, addition, subtraction, multiplication, division, conversion to and from fractions, percent notation, conversion to and from percents, solving problems with percents and decimals
  4. Applications – a variety of application problems such as: areas and perimeters of geometric shapes (circle, square, rectangle), measurement conversion, reading and making simple charts and graphs.
- Topics related to Developing Effective Learning Skills
1. Study skills: for example, organization and time management, test preparation and test-taking skills
  2. Self-assessment: for example, using performance criteria to judge and improve one's own work, analyzing and correcting errors on one's test
  3. Use of resources: for example, strategies for identifying, utilizing, and evaluating the effectiveness of resources in improving one's own learning, e.g. peer study groups, computer resources, lab services

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

- A. Lecture
- B. Discussion

8. **REPRESENTATIVE ASSIGNMENTS**

Representative assignments in this course may include, but are not limited to the following:

**Writing Assignments:**

Students will write solutions for 1-3 problem sets per week.

**Reading Assignments:**

Students will read sections of a textbook as required.

**9. REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

- A. Exams/Tests
- B. Homework
- C. Quizzes

**10. REPRESENTATIVE TEXT(S):**

Possible textbooks include:

- A. Lehmann, J.. *A Pathway to Introductory Statistics*, ed. Pearson, 2015

**Origination Date:** December 2017

**Curriculum Committee Approval Date:** January 2018

**Effective Term:** Fall 2018

**Course Originator:** Christopher Walker