

Course Outline for: MATH 0980 Math Skills for Statistics

A. Course Description

Number of credits: 2
Lecture hours per week: 2

3. Prerequisites: High School GPA 2.0-2.69; or

Accuplacer next Generation Arithmetic score 265-300; or

Accuplacer Next Generation Quantitative Reasoning, Algebra, and

Statistics score 250-264

4. Corequisites: MATH 1080 Introduction to Statistics

5. MnTC Goals: None

This course is taught concurrently with MATH 1080 Introduction to Statistics and is designed to support students in completing the topics covered in both beginning algebra and college-level introductory statistics in one semester. MATH 1080 (4 credits) and the co-requisite MATH 0980 (2 credits) are useful to students whose academic program is satisfied by an introductory statistics course, and MATH 0980 allows those students who are not eligible for MATH 1080 Statistics to complete a college-level statistics course in 1 semester. Math Skills for Statistics covers converting among fraction, decimal, and percent equivalencies; addition and subtraction of decimal numbers; rounding decimal numbers accurately; order and equivalence of rational numbers; understanding inequality symbols; understanding scientific notation; an introduction to probability; necessary topics from beginning algebra; and student success skills. Students must complete MATH 0980 and MATH 1080 concurrently.

B. Date last reviewed: October 2022

C. Outline of Major Content Areas

- 1. The statistical analysis process, populations, sampling, studies and experiments
- 2. Decimal, fractional, and percent forms of rational numbers
- 3. Rounding
- 4. Scientific notation
- 5. Ordering of rational numbers
- 6. Linear functions,
- 7. Exponents
- 8. Graphing functions
- 9. Evaluating expressions
- 10. Recognizing the correct meaning of statistical and relational symbols

D. Course Learning Outcomes

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

- 1. Graph linear functions
- 2. Interpret slope & y-intercept of linear functions
- 3. Order and compare rational numbers
- 4. Correctly use decimals and fractions in applied problems
- 5. Recognize how to interpret scientific notation
- 6. Translate accurately among fraction, decimal, and percent forms of rational numbers
- 7. Use inequality symbols accurately
- 8. Round numbers accurately and appropriately
- 9. Use correct calculator steps for order of operations
- 10. Interpret statistical symbols accurately

E. Methods for Assessing Student Learning

The instructor may choose assessment methods, including attendance, participation in group learning activities, discussion board posts, homework assignments, quizzes, exams, and projects.

F. Special Information

The curriculum requires extensive use of either computer software or a statistical calculator (TI-83/84 is recommended).