Course Syllabus: MATH 211S – Math Skills for Success in Statistics

MATH 211S-55157 Instructor: Mr. Steven Zook Email: <u>steven.zook@reedleycollege.edu</u> Phone: (559) 638-3641 ext. 3279 Office: FEM 4A Reedley College Fall 2019 Office Hours: MTWF 11am – 12pm W 9am-10am

Meeting Room: SOC 31 Meeting Days: F Meeting Time: 8:00 am – 8:50 am

<u>Course Description:</u> Math Skills for Success in Statistics is for students concurrently enrolled in Math 11. In this class, students will review algebraic, geometric, and arithmetic procedures and concepts that underlie statistical formulas and other study skills that promote success in Math 11.

Course Corequisite: MATH 11

Student Learning Outcomes:

Upon completion of this course, students will be able to:

- 1. Perform basic arithmetic calculations using order of operations.
- 2. Interpret statistical graphs.
- 3. Organize and analyze data models.
- 4. Identify six basic study skills.

Objectives:

In the process of completing this course, students will:

- 1. Perform operations with real numbers with and without calculators.
 - a. Addition, subtraction, multiplication and division of real numbers
 - b. Calculator techniques, square roots, summation notation, recognizing order of operations in statistical formulas, factorials.
 - c. Ordering and converting decimals, percentages and fractions.
 - d. Rounding concepts.
- 2. Evaluate algebraic expressions and solve linear equations and inequalities
 - a. Substitution into statistical formulas that are algebraic in nature.
 - b. Applying the addition and multiplication properties to solve formulas
 - c. Solving equations with fractions
 - d. Solving proportions
- 3. Create and Interpret Statistical Graphs
 - a. Create statistical graphs, bar charts, histograms, pie charts, scatter plot, box plots, normal curve, etc.
 - b. Extract information from graphs and tables
 - c. Complement rule
 - d. Inequalities related to area under the normal curve

- e. Expose students to playing cards and board games to learn about probability concepts (suits, face cards, dice).
- 4. Graph linear equations in two variables.
 - a. Finding solutions to linear equations in two variables
 - b. The equation of a line, linear models, regression, linear function notation, making predictions
 - c. Applications Describing points, slope in context, and intercepts using complete sentences
 - d. Calculate vertical deviation of a point from the line
- 5. Study Skills
 - A. Improving your note taking
 - B. Improving your memory
 - C. Effective listening skills
 - D. Using effective time management to optimize your studying
 - E. Coping with test anxiety
 - F. Finding a good study location
 - G. Using studying groups
 - H. A guide for studying math
 - I. Solving math word problems
 - J. Setting and achieving goal

<u>Required Text:</u> There is no text is required for this course.

<u>Office Hours</u>: I will be holding regular office hours. I want to be available to you if you need assistance outside of class. Please visit me during the scheduled times for drop-in questions. You may come unannounced during those times. If the scheduled office hours do not suit your schedule, you may arrange a time to meet me in my office. Please don't hesitate to take advantage of these since I want you to succeed – it's what I am here for.

Attendance: As a student, you are expected to attend all classes for the entire period. Please be on time and ready to start when class is scheduled to begin. I ask this out of respect for your classmates and me. Three (3) absences may result in a drop from the course. Since this course is a requirement for completing MATH 11, you run the risk of being dropped from the MATH 11 as well if you do not attend the support course.

<u>Classroom Behavior:</u> Please take care of any personal responsibilities and needs before entering the classroom. Please **TURN OFF your phones** when entering the class. They should be **off for the duration** of the class period. If you use your phone in class, you may be asked to leave class. While you are in class, I expect you to participate and pay attention. You may not work on the homework in class or prepare for a different class. Please notify me in advance if you plan on bringing a guest to class.

You are allowed to use a **scientific calculator**, but not a graphing calculator for this class. Also, you may not use your phone as a calculator.

Drop Deadline: Friday, October 11. **This is a support course for MATH 11. If you drop this course, you will automatically be dropped from MATH 11 as well and vice-versa.**

Assignments & Exams:

There will be weekly assignments that you will be complete in class or outside of class, depending on the type of assignment. Most computational assignments will be given in class and most personal reflection assignments will be assigned as homework.

Assignment Categories and Weighting

Assignment	Points
Computational Assignments	90
Skills Assignments	90

180

Total

Final Grades (Pass/No-pass)

Grade	Points
Р	126-180
NP	0-125

SPECIAL NEEDS REQUESTS: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

<u>Please refer to the RC Catalog for the Policies on Academic Dishonesty, Cheating,</u> and Plagiarism, pp. 48-49.