Professors: Alan Worley Office Number: TA118

Email: <u>aworley@southplainscollege.edu</u> Semester: 2nd 8-weeks, Spring 2024

MATH 0332/1332 Contemporary Mathematics Support Course/Contemporary Mathematics

LOCATION: Kinesiology 115 DAYS/TIMES: MTR 1:30-3:00pm

COURSE DESCRIPTION: The Contemporary Mathematics Support Course (MATH 0332) is the study of the basic algebraic concepts necessary for success in MATH 1332, to include order of operations, exponent rules, polynomials, radic all expressions, and the solution of equations and inequalities. This course is not applicable toward any degree. Prerequisites: Math level 6, Reading level 7. Co-requisite: MATH 1332 (3:3:0)

In Contemporary Mathematics (MATH 1332), this course is designed specifically for those students who will terminate their mathematical training with one or two courses in mathematics. It includes the fundamentals and principles of al gebra; introduction to geometry and trigonometry; use of graphs, proportions, percentages, and logarithms; and heavy emphasis on applications. (3:3:0)

COURSE MATERIALS:

- REQUIRED: Scientific Calculator. In some cases, a graphing calculator will not be allowed.
- REQUIRED: Large 3-ring binder, notebook paper, pencils, graph paper, and erasers.
- SUGGESTED RESOURCE: OpenStax https://openstax.org/details/books/contemporary-mathematics

The materials on this course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated. The materials on this course website may be protected by copyright; any further use of this material may be in violation of federal copyright law.

STUDENT LEARNING OUTCOMES:

MATH 0332

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

- 1. Add, subtract, multiply, and divide real numbers.
- 2. Use order of operations to evaluate expressions.
- 3. Understand the basics of geometric concepts.
- 4. Simplify and perform operations with radical expressions.
- 5. Solve linear equations and equalities of a single variable.
- 6. Solve quadratic equations by factoring and quadratic formula.
- 7. Graph linear equations functions.
- 8. Understand the basics of statistical concepts.

MATH 1332

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

- 1. Apply the language and notation of sets.
- 2. Determine the validity of an argument or statement and provide mathematical evidence.
- 3. Solve problems in mathematics of finance.
- 4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 5. Interpret and analyze various representations of data.
- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

GENERAL EDUCATION OUTCOMES:

- CRITICAL THINKING Students will develop habits of mind, allowing them to appreciate the processes by which
 scholars in various disciplines organize and evaluate data and use the methodologies of each discipline to understand the
 human experience.
- 2. COMMUNICATION SKILLS Students will communicate ideas, express feelings and support conclusions effectively in written, oral and visual formats.
- 3. EMPIRICAL & QUANTITATIVE SKILLS Students will develop quantitative and empirical skills to understand, analyze and explain natural, physical and social realms.

GRADE RANGE:

90 - 100	Α
80 - 89	В
70 - 79	С
60 - 69	D
Relow 60	E

GRADING FORMULA:

The final letter grade for this course will be based on the following:

3 Exams	30%
3 Projects	30%
In-Class Assignments	10%
Homework	
Personal Responsibility	
Total	

HOMEWORK/TEST MAKE-UP POLICY:

Homework and other assessments are mandatory. Knowledge of material will be assessed through graded assessments. Homework will be assigned weekly. If a class is missed, it is the student's responsibility to obtain a copy of the notes, to print any worksheets or handouts from Blackboard, and to do the assigned homework. (Absence is not an excuse for failure to do homework.) Homework done after the due date will be accepted, but at a significant penalty (50%). Completing all assignments is understood and expected, not optional.

In-class assignments will be due each day and will be completed in class. Make-up work will not be allowed for a missed class assignment.

Projects over material for each exam will be given. Students will be allowed to work in groups of 2 or 3.

Personal Responsibility will include what employers deem as important basic soft skills. Show up on time. Respect your peers and leader. Do not be distracted with a cell phone during work. Be professional.

STUDENT SUPPORT: South Plains College provides free tutoring on a variety of subjects. Tutoring is FREE and is here to benefit you. There is a Student Tutoring Center on each campus.

SYLLABUS STATEMENTS: Please use the following link regarding Intellectual Exchange, Disabilities, Non-discrimination, Title IX, CARE Team, Campus Concealed Carry, COVID-19, and Artificial Intelligence.

Syllabus Statements (southplainscollege.edu)

Note: The last day to drop with a grade of W is May 1.

Math 0332/1332 **Professors** Alan Worley Spring 2nd 8-wk 2024 Room M128 Week Contemporary Math MTR 1:30-3:00pm 3/18 3/19 3/20 3/21 3/22 Syllabus Introduction to Stats Online 3/25 2 3/26 3/27 3/28 3/29 Online Online Online 3 4/1 4/2 4/3 4/4 4/5 Graphs/Charts Measures of Center Measures of Variation Measures of Center Measures of Variation 4/8 4 4/9 4/10 4/11 4/12 Measures of Spread Exam 1 Percentages Exam 1 Review Fractions to decimals Project 1 Due Decimals to percentages Basic percentage apps 5 4/15 4/16 4/17 4/18 4/19 Introduction to Finances Taking Control of Finances Savings Plans Taxes Investments Loans Discounts Simple & Compound Interest Credit Cards Mortgages 6 4/22 4/23 4/24 4/25 4/26 Unit Conversions Amortization Exam 2 Distance Excel Weight Project 2 Due

5/1

5/8

Foundations of Algebra III

Building a Math Bridge

Speed

Time

5/9

Foundations of Algebra I

Review Exam 3

Project 3 Due

5/3

5/10

Exam 2 Review

Area and Perimeter

4/30

5/7

Simplifying Radicals

Pythagorean Theorem

Foundations of Algebra II

4/29

Triangles

Circles 5/6

Exam 3

Rectangles