Midland College Syllabus
2022 - 2023
MATH 1350
Mathematics for Teachers I
3 Semester Credit Hours
(3 Lecture/0 Lab)

Instructor Information:

Instructor: Click here to enter text.
Office: Click here to enter text.
Phone: Click here to enter text.
Email : Click here to enter text.
Office Hours: Click here to enter text.

Notice: Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity may be reported as never attended and dropped from the course.

Course Description:
This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the conceptual development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. Prerequisite: A C or better in MATH 1314 (College Algebra) or 1414.

Text, References and Supplies:
- Required: MyMathLab Access ISBN:9780136937708
- Optional: Beckmann, Mathematics for Elementary and Middle School Teachers with Activities 6^{TH} edition.
- Computer access is required by some instructors.
- Scientific calculator

Student Learning Outcomes:
After successfully completing this course the students should be able to:
1. Explain and model the arithmetic operations for whole numbers and integers.
2. Explain and model computations with fractions, decimals, ratios, and percentages.
3. Describe and demonstrate how factors, multiples, and prime numbers are used to solve problems.
4. Apply problem solving skills to numerical applications.
5. Represent and describe relationships among sets using the appropriate mathematical terminology and notation.
6. Compare and contrast structures of numeration systems.

Student Contributions, Responsibilities and Class Policies:
Students will be expected to comply with the policies outlined in the Midland College Catalog. Instructor policies concerning attendance and academic behavior are consistent with the policies in the catalog. Regular attendance is required to do well in this class.
Students will be evaluated based on the results of assessments outlined in the syllabus and Instructor Handout.

Attendance Policy:
It is the responsibility of the students to know the policies and procedures associated with absences. These policies are set by instructors. Excused absences may include, but are not limited to, illness, severe weather, and death in the family. Instructors will determine whether or not an absence is excused. Please visit the Midland College Catalog

Withdrawal Policy:
Students who have enrolled in a Texas public institution of higher education as a first-time freshman in fall 2007 or later are permitted to drop no more than six courses during the entire undergraduate career. This limit includes all transfer work taken at a Texas institution of higher education and to second baccalaureate degrees. This statute was enacted by the State of Texas in spring 2007 (Texas Education Code 51.907). Any course that a student drops after Census Day is counted toward the six-course limit if "(1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student's transcript indicates or will indicate that the student was enrolled in the course; and (3) the student is not dropping the course in order to withdraw from the institution." Please visit the Midland College Catalog

Scholastic Dishonesty:
Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the Student Rights & Responsibilities section in the Midland College Catalog for more information.

Evaluation of Students:
Students will be evaluated based on grades which may including the following but are not limited to:

Assessments	**Percentage of Grade**	**Grade Range**
Exams	35-45%	90-100 A
Quizzes/Assignments	0-35%	89-80 B
Project	15-30%	79-70 C
Final Exam	20-25%	69-60 D
		59-0 F

Students will be evaluated based on the results of examinations given throughout the semester. Your lecture instructor will inform you on the first day of class as to the tentative dates and content for each exam. Students are expected to complete each exam. Your instructor will inform you on the first day of class as to make-up procedures for missed exams and any exemption procedures if they apply (See Instructor Handout).

Course Schedule:

This class meets for 3 contact hours per week. For a tentative schedule of the class meetings and material to be covered during those meetings, please refer to the schedule distributed to each student on the first class meeting (See Instructor Handout).

Course Outline:

Chapter 1: Numbers and the Base-Ten System
1.1 The Counting Numbers
1.2 Decimals and Negative Numbers

Chapter 2: Fractions and Problem Solving
2.1: Defining and Reasoning about Fractions
2.2: Reasoning about Equivalent Fractions
2.3: Reasoning to Compare Fractions
2.4: Reasoning about Percent

Chapter 3: Addition and Subtractions
3.1: Interpretations of Addition and Subtraction
3.2: The Commutative and Associative Properties of Addition, Mental Math, and Single Digit Facts
3.4: Reasoning about Fraction Addition and Subtraction

Chapter 4: Multiplication
4.1: Interpretations of Multiplication
4.2: Why Multiplying by 10 is Special in Base Ten
4.3: The Commutative and Associative Properties of Multiplication, Areas of Rectangles, and Volumes of Boxes
4.4: The Distributive Property
4.5: Properties of Arithmetic, Mental Math, and Single-Digit Multiplication Facts

Chapter 5: Multiplication of Fractions, Decimals, and Negative Numbers
5.1: Making Sense of Fraction Multiplication
5.2: Making Sense of Decimal Multiplication
5.3: Extending Multiplication to Negative Numbers

Chapter 6: Division
6.1: Interpretations of Division
6.2: Division and Fractions and Division with Remainder
6.3: Why Division Algorithms Work
6.6: Dividing Decimals

Chapter 7: Ratio and Proportional Relationships
7.1: Motivating and Defining Ratio and Proportional Relationships
7.2: Solving Proportion Problems by Reasoning with Multiplication and Division

Chapter 8: Number Theory
8.1: Factors and Multiples
8.2: Even and Odd
8.3: Divisibility Tests
8.4: Prime Numbers
8.5: Greatest Common Factor and Least Common Multiple
8.6: Rational and Irrational Numbers
8.7 (eText only): How Are the Number Systems Related?

Non-Discrimination Statement
Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:
Tana Baker
Title IX Coordinator/Compliance Officer
3600 N. Garfield, SSC 131
Midland, Texas 79705
(432) 685-4781
tbaker@midland.edu
For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Americans with Disabilities Act (ADA) Statement:
Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

Continuity of Instruction Statement

In the event that on campus activities are suspended due to extenuating circumstances, such as weather or quarantine, the instructor will continue instruction in a manner that best supports the course content and student engagement. In this event, your instructor will notify students of the change via Click here to enter text. At that time, they will provide details about how instruction and communication will continue, how academic integrity will be ensured, and what students may expect during the time that on campus activities are suspended. If a student becomes unable to continue class participation due to extenuating circumstances, (e.g., health and safety, loss of power, etc.) the student should contact their instructor and advisor for guidance. Resources are available to students via the SOS program. Information can be found at https://www.midland.edu/services-resources/student-services/sos.php.

Grievances or complaints

Concerns should be expressed as soon as possible to allow for early resolution. Midland College encourages students to discuss their concerns with their instructor first. If you feel uncomfortable discussing your situation with your instructor, students should discuss their concerns with the Chair of the appropriate department (Biology Chair – Mr. Tomas Hernandez (432-685-6751), Chemistry Chair – Mr. John Anderson (432-685-6737), Engineering and Physics Chair – Dr. Brian Flowers (432-685-4586), Geology Chair – Mr. Antony Giles (432-685-5580), Kinesiology Chair – Ms. Sheena Thompson (432-685-4579), Math Chair – Dr. Krista Cohlmia (432-685-4541) then the Dean of Math and Science – Dr. Miranda Poage (432-685-4561). If a resolution is still not possible, students may proceed with the formal complaint process.
http://catalog.midland.edu/content.php?catoid=14&navoid=2579#grievances-and-complaints

Math & Science Division Information:

Division Office: AHSF 124 (432) 685-4561
Division E-Mail: mns@midland.edu

Department Chair: Dr. Krista Cohlmia (432) 685-4541
Dean: Dr. Miranda Poage
Secretary: Sarah Anderson
Clerk: Liliana Orcutt

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