Midland College Syllabus
2018 - 2019
MATH 1350
Mathematics for Teachers I
3 Semester Credit Hours
(3 Lecture/0 Lab)

Instructor Information:
Instructor: Jamie Kneisley
Office: AHSF 104
Phone: 432-685-4645
Email: jkneisley@midland.edu
Office Hours: MWF 10:00-11:00, MW 12:00-1:00, M 2:30-4:30, T 12:00-2:00

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: MATH 1314 (College Algebra) or 1414.

Text, References and Supplies:
  - ISBN: 978-0-13-522998-9 (Midland College custom printing)
- Computer access is required by some instructors.
- My MathLab Access Code 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:

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<thead>
<tr>
<th>Assessments</th>
<th>Percentage of Grade</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>35-40%</td>
<td>90-100 A</td>
</tr>
<tr>
<td>Quizzes/Assignments</td>
<td>0-30%</td>
<td>89-80 B</td>
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<tr>
<td>Project</td>
<td>15-30%</td>
<td>79-70 C</td>
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<tr>
<td>Final Exam</td>
<td>20-25%</td>
<td>69-60 D</td>
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<td>59-0 F</td>
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</tbody>
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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:**
From the text, select topics from chapters 1 through 7 will be covered. Approximate assignments from the text and computer assignments will be used to enhance concepts.

In addition to the text material, students will participate in class activities designed to reinforce concepts, demonstrate potential classroom use, enhance critical thinking, and use individual and collaborative learning to broaden mathematical foundation.

**Thinking Critically**
- 1.1 An Introduction to Problem Solving
- 1.2 Polya’s Problem Solving Principles
- 1.3 More Problem-Solving Strategies
- 1.4 Algebra as a Problem-Solving Strategy
- 1.5 Additional Problem-Solving Strategy

**Sets and Whole Numbers**
- 2.1 Sets and Operations on Sets
- 2.2 Sets, Counting, and the Whole Numbers
- 2.3 Addition and Subtraction of Whole Numbers
- 2.4 Multiplication and Division of Whole Numbers

**Numeration and Computation**
- 3.1 Numeration Systems Past and Present
- 3.2 Algorithms for Adding and Subtracting Whole Numbers
- 3.3 Algorithms for Multiplication and Division of Whole Numbers

**Number Theory**
- 4.1 Divisibility of Natural Numbers
- 4.2 Tests for Divisibility
- 4.3 Greatest Common Divisors and Least Common Multiples

**Integers**
- 5.1 Representation of Integers
Fractions and Rational Numbers
- 6.1 The Basic Concepts of Fractions and Rational Numbers
- 6.2 Addition and Subtraction of Fractions
- 6.3 Multiplication and Division of Fractions

Decimals, Real Numbers, and Proportional Reasoning
- 7.1 Decimals and Real Numbers
- 7.2 Computations with Decimals
- 7.3 Proportional Reasoning
- 7.4 Percent

ADA Statement:
Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. More information can be found at the Student Services – Disability Services or by contacting the Midland College Disability Specialist at 685-4505.

Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm or call 1 (800) 421-3481.

Spanish
Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. Para más información sobre estas políticas no discriminatorias, visite http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm o llame al 1 (800) 421-3481.
Math/Science Division Information:
Division Dean: Dr. Margaret Wade 125 AHSF (432) 685-4615
Department Chair: Dr. Sonia Ford 110 AHSF (432) 685-4525
Division Secretary: Mrs. Carol Pritchard 124 AHSF (432) 685-6404
Division Clerk: Ms. Sarah Anderson 124 AHSF (432) 685-6896

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