
II. Course Information
Course Title: Mathematics and the Modern World With Algebra Review
Course Abbreviation and Number:  MTH 1440
Course Credit Hours: 4
Course Cross Listing(s) Abbreviation and Number:
Check (“x”) all applicable:
General Education Course__X___ Writing Intensive Course_____ Service Learning
Course_____
Laboratory Course_____ Ohio TAG (Transfer Assurance Guide) Course _____
Ohio Transfer Module Course_____ Others (specify)_____

III. Course Registration
Prerequisites: WSU Math Level 2 or minimum ACT math score 17 or minimum SAT math score 415
Corequisites: None
Restrictions: None

IV. Student learning Outcomes
1) Identify the various elements of a mathematical or statistical model.
2) Determine the values of specific components of a mathematical/statistical model or relationships among various components.
3) Apply a mathematical/statistical model to real world problems.
4) Interpret and draw conclusions from graphical, tabular, and other numerical or statistical representations of data.
5) Summarize and justify analyses of mathematical/statistical models for problems, expressing solutions using an appropriate combination of words, symbols, tables or graphs.

V. Suggested Course Materials: Using and Understanding Mathematics by Bennett and Briggs

VI. Suggested Method of Instruction: Lecture

VII. Suggested Evaluation and Policy: Tests, quizzes, homework, in-class group assignments

VIII. Suggested Grading Policy: 15% on the remedial prep assessment, 45% on 3 tests, 15% on HW/quizzes/group work, and 25% on a comprehensive final over MTH1450 portion of the course.

IX. Suggested Assignments and Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Translation and word problems</td>
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<tr>
<td>2</td>
<td>Fractions, decimals, percents, and order of operations</td>
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<tr>
<td>3</td>
<td>Exponents and roots; solving linear equations</td>
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Lump sum savings and savings plans
Loan, mortgages, credit cards and credit scores
Abuses and misuses of percentages
How numbers deceive – polygraphs, mammograms, and more
Statistical reasoning and should you believe a statistical study?
Characterizing a data distribution and measures of variation
The Normal Distribution

Weeks 11-13: Instructor choice of topics to be covered include (but are not limited to) voting theory, graph theory, linear programming, topics in geometry, propositions and truth tables, taxes and probability.

One week reserved for testing spaced throughout the term

X. Other Information: None

This is a sample course syllabus guideline. Course materials, method of instruction, evaluation and policy, grading policy, assignments, and other course matters can differ by specific course sections and individual professors. Additional information can be obtained by contacting the appropriate college and department.

Approved:
Undergraduate Curriculum and Academic Policy Committee ________________________
Faculty Senate ____________________________________________________________