MTH 125: EVERYDAY COLLEGE MATH

History

Dec 3, 2025 by Sera Bird (sabird)
Dec 3, 2025 by Sera Bird (sabird)

Viewing: MTH 125 : Everyday College Math Last approved: 2025-12-03T14:06:03Z Last edit: 2025-12-03T13:46:34Z

Effective Term Winter 2026

Rationale and proposal summary

Course update based on assessment report

Course Cover

Full Course Title

Everyday College Math

Transcript Title

Everyday College Math

Subject Code

MTH - Mathematics

Course Number

125

Department

Mathematics Dept (MTHD)

Banner Division

MSE

Division/College

Math-Science-Engineering Tech (MS)

Org Code

12200

Course Description

In this course, students will further their knowledge of mathematical concepts and applications they might encounter in everyday adult life. Students will explore the following topics: investing and borrowing, home loans, student loans, sets, Venn diagrams, functions, probability and statistics. The following outcomes will be addressed: interpretation of mathematical information; representation of mathematical information; calculation and communication of results; application of information, which includes making judgments and conclusions based on quantitative analysis of data; and communication of information, which includes expressing quantitative evidence in support of an argument. Topics to be reviewed or covered include rounding, percentages, decimals, place value, exponents and roots, order of operations, solving equations, evaluating simple formulas, basic inequalities, divisors and reducing fractions, and the coordinate plane.

Has this course been approved for online or online blended?

Yes

Grading method

Standard Letter, Audit, Academic Forgiveness

Occupational Indicator

No

ACS Code

110

Credit hours, contact hours, repeatability

Repeatable for additional credit

No

Course credits

4

Lecture contact hours

60

Total Contact Hours

60

Expected Total Contact Hours

60

Prerequisites and prerequisite skill levels

College-Level Math

Level 3

College-Level Reading and Writing

College-level Reading and Writing

Approved Level I Prerequisite:

Academic Reading and Writing Levels of 6; Academic Math Level 3

Course Assessment Plan Learning Outcome

Outcome

Perform consumer finance calculations for interest, loans, annuities, and mortgages.

Assessment #1

Assessment Tool

Outcome-related departmental exam questions

Anticipated Next Assessment Year

2028

Anticipated Next Assessment Term

Winter

Assessment Cycle

Every Three Years

Anticipated assessment population

Other

If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.

A random sample of 25% of students with a minimum of 50 students

How the assessment will be scored

Departmental rubricy

Who does the scoring?

Departmental faculty

Standard of success

70% of students will score 75% (3 out of 4) or higher on the outcome-related questions.

Assessment #2

Learning Outcome

Outcome

Calculate operations on sets and use Venn diagrams to answer questions involving "and", "or", and "not".

Assessment #1

Assessment Tool

Outcome-related departmental exam questions

Anticipated Next Assessment Year

2028

Anticipated Next Assessment Term

Winter

Assessment Cycle

Every Three Years

Anticipated assessment population

Other

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How the assessment will be scored

Departmental rubric

Who does the scoring?

Departmental faculty

Standard of success

70% of students will score 75% (3 out of 4) or higher on the outcome-related questions.

Assessment #2

Learning Outcome

Outcome

Evaluate and interpret models of linear, quadratic, and exponential functions; use graphs and equations to identify trends and make predictions in context.

Assessment #1

Assessment Tool

Outcome-related departmental exam questions

Anticipated Next Assessment Year

2028

Anticipated Next Assessment Term

Winter

Assessment Cycle

Every Three Years

Anticipated assessment population

Other

If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.

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How the assessment will be scored

Departmental rubric

Who does the scoring?

Departmental faculty

Standard of success

70% of students will score 75% (3 out of 4) or higher on the outcome-related questions.

Assessment #2

Learning Outcome

Outcome

Calculate probabilities including those using addition and multiplication rules; solve probability problems.

Assessment #1

Assessment Tool

Outcome-related departmental exam questions

Anticipated Next Assessment Year

2028

Anticipated Next Assessment Term

Winter

Assessment Cycle

Every Three Years

Anticipated assessment population

Other

If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.

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How the assessment will be scored

Departmental rubric

Who does the scoring?

Departmental faculty

Standard of success

70% of students will score 75% (3 out of 4) or higher on the outcome-related questions.

Assessment #2

Learning Outcome

Outcome

Calculate and interpret statistics, including measures of center and spread, and make predictions based on the normal curve.

Assessment #1

Assessment Tool

Outcome-related departmental exam questions

Anticipated Next Assessment Year

2028

Anticipated Next Assessment Term

Winter

Assessment Cycle

Every Three Years

Anticipated assessment population

Other

If not including all students from all sections, please provide an estimation of how many students will be included (percentage and estimated number), and how you're planning to ensure representation for all schedule types, delivery methods, full-time and part-time students, all instructors, etc.

A random sample of 25% of students with a minimum of 50 students.

How the assessment will be scored

Departmental rubric

Who does the scoring?

Departmental faculty

Standard of success

70% of the students will score 75% (3 out of 4) or higher on the outcome-related questions.

Assessment #2

Course Objectives

	Objective(s)	
1.	Solve problems relating to compound interest. Calculate compound interest on savings and annuities and compare earnings from simple versus compound interest.	
2.	Solve problems relating to mortgages. Calculate down payment, principal, monthly payment, total interest paid on mortgages, and compute amortization tables.	
3.	Find annual percentage interest rate for purchases such as rent-to-own and payday loans.	
4.	Solve problems involving "and", "or", and "not" with a Venn diagram.	
5.	Calculate Measures Of Central Tendency: mean, median and mode.	
6.	Solve problems relating to probability. Calculate probability of events using multiplication and addition rules.	
7.	Calculate monthly personal budget amounts under stated criteria.	
8.	Calculate compound interest on savings and annuities, and compare earnings from simple versus compound interest.	
9.	Calculate measures of spread (variance, range and standard deviation), and use these measures to draw conclusions and comparisons between data sets.	
10.	Find z-values for specific data values and probabilities for given z-values and data values.	
11.	Use z-values to make decisions about data values.	
12.	Calculate conditional probabilities.	
13.	Calculate rounded values for financial calculation, including intermediate rounding of calculations where necessary.	

14.	Represent information given in a problem with a Venn diagram.	
15.	Represent linear and nonlinear models in various ways including tables, equations, and graphs.	
16.	Identify the mathematical domain and range of functions, and determine plausibility in context.	
17.	Find x- and y- intercepts of functions; interpret and communicate applications of x- and y- intercepts.	
18.	Solve problems involving rounding, percentages, decimals, place value, exponents and roots, order of operations, solving equations, evaluating simple formulas, basic inequalities, divisors and reducing fractions, and the coordinate plane.	
19.	Employ quantitative reasoning to communicate mathematical solution paths, explain mathematical results symbolically, visually, and/or numerically, and justify quantitative arguments in writing.	

General Education Area(s)

Area 1: Writing

No

Area 2: 2nd Writing or Communication/Speech

No

Area 3: Mathematics

Yes

Area 3 Mathematics Applicability

Area 3: Mathematics (AA) Area 3: Mathematics (AAS)

Area 3: Mathematics (AS)

Area 4: Natural Science

No

Area 5: Social and Behavioral Science

No

Area 6: Arts and Humanities

No

MTA General Education

Yes

MTA Applicability

MTA Mathematics

Review

Is conditional approval requested?

No

Is this course currently conditionally approved, and you are now submitting it for full approval?

Yes

Key: 7437

Washtenaw Community College Comprehensive Report

MTH 125 Everyday College Math Effective Term: Fall 2021

Course Cover

College: Math, Science and Engineering Tech Division: Math, Science and Engineering Tech Department: Math & Engineering Studies

Discipline: Mathematics **Course Number:** 125 **Org Number:** 12200

Full Course Title: Everyday College Math Transcript Title: Everyday College Math

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog, Time Schedule, Web Page **Reason for Submission:** Three Year Review / Assessment Report

Change Information:

Consultation with all departments affected by this course is required.

Outcomes/Assessment

Rationale: Update based on assessment report

Proposed Start Semester: Fall 2021

Course Description: In this course, students will further their knowledge of mathematical concepts and applications they might encounter in everyday adult life. Students will explore the following topics: investing and borrowing, home loans, student loans, sets, Venn diagrams, functions, probability and statistics. The following outcomes will be addressed: interpretation of mathematical information; representation of mathematical information; calculation and communication of results; application of information, which includes making judgments and conclusions based on quantitative analysis of data; and communication of information, which includes expressing quantitative evidence in support of an argument.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 60 Student: 60

Lab: Instructor: 0 **Student:** 0 **Clinical: Instructor:** 0 **Student:** 0

Total Contact Hours: Instructor: 60 Student: 60

Repeatable for Credit: NO Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 3

Requisites

Prerequisite

MTH 097 minimum grade "C" or Academic Math Level 3

or

Prerequisite

MTH 094 minimum grade "C" or Academic Math Level 3

or

General Education

MACRAO

MACRAO Science & Math

General Education Area 3 - Mathematics

Assoc in Applied Sci - Area 3 Assoc in Science - Area 3

Assoc in Arts - Area 3

Michigan Transfer Agreement - MTA

MTA Mathematics

Request Course Transfer

Proposed For:

Eastern Michigan University

Ferris State University

Grand Valley State University

Jackson Community College

Kendall School of Design (Ferris)

Lawrence Tech

Michigan State University

Oakland University

University of Detroit - Mercy

University of Michigan

Wayne State University

Western Michigan University

Student Learning Outcomes

1. Perform consumer finance calculations for interest, loans, annuities, and mortgages.

Assessment 1

Assessment Tool: Outcome-related test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: A random sample of 25% of students with a minimum of 50

students

How the assessment will be scored: Departmental rubric

Standard of success to be used for this assessment: At least 70% of students will score 75% (3

out of 4) or higher on the outcome-related questions.

Who will score and analyze the data: Departmental faculty

2. Calculate operations on sets and use Venn diagrams to answer questions involving "and", "or", and "not".

Assessment 1

Assessment Tool: Outcome-related test questions

Assessment Date: Fall 2023

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Course section(s)/other population: All sections

Number students to be assessed: A random sample of 25% of students with a minimum of 50

students

How the assessment will be scored: Departmental rubric

Standard of success to be used for this assessment: At least 70% of students will score 75% (3

out of 4) or higher on the outcome-related questions.

Who will score and analyze the data: Departmental faculty

3. Identify and state domain and range; graph and interpret linear, quadratic and exponential functions.

Assessment 1

Assessment Tool: Outcome-related test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: A random sample of 25% of students with a minimum of 50

students

How the assessment will be scored: Departmental rubric

Standard of success to be used for this assessment: At least 70% of students will score 75% (3

out of 4) or higher on the outcome-related questions.

Who will score and analyze the data: Departmental faculty

4. Calculate probabilities including those using addition and multiplication rules; solve probability problems.

Assessment 1

Assessment Tool: Outcome-related test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: A random sample of 25% of students with a minimum of 50

students

How the assessment will be scored: Departmental rubric

Standard of success to be used for this assessment: At least 70% of students will score 75% (3

out of 4) or higher on the outcome-related questions.

Who will score and analyze the data: Departmental faculty

5. Calculate and interpret statistics, including measures of center and spread, and make predictions based on the normal curve.

Assessment 1

Assessment Tool: Outcome-related test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: A random sample of 25% of students with a minimum of 50

students.

How the assessment will be scored: Departmental rubric

Standard of success to be used for this assessment: At least 70% of the students will score 75% or higher (3 out of 4) on outcome-related questions.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Solve problems relating to compound interest. Calculate compound interest on savings and annuities and compare earnings from simple versus compound interest.

- 2. Solve problems relating to mortgages. Calculate mortgage payments including tax and insurance liabilities and amortization tables.
- 3. Find annual percentage interest rate for purchases such as rent-to-own and payday loans.
- 4. Solve problems involving "and", "or", and "not" with a Venn diagram.
- 5. Calculate measures of central tendency: mean, median and mode.
- 6. Solve problems relating to probability. Calculate probability of events using multiplication and addition rules.
- 7. Calculate monthly personal budget amounts under stated criteria.
- 8. Calculate compound interest on savings and annuities, and compare earnings from simple versus compound interest.
- 9. Calculate measures of spread (variance, range and standard deviation), and use these measures to draw conclusions and comparisons between data sets.
- 10. Find z-values for specific data values and probabilities for given z-values and data values.
- 11. Use z-values to make decisions about data values.
- 12. Calculate conditional probabilities.
- 13. Calculate rounded values for financial calculation, including intermediate rounding of calculations where necessary.
- 14. Represent information given in a problem with a Venn diagram.
- 15. Represent linear models in various ways: table, equation or graph.

New Resources for Course

Course Textbooks/Resources

Textbooks

Sobecki. Mathematics in our World, 4 ed. McGraw Hill, 2018

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Reviewer	Action	<u>Date</u>			
Faculty Preparer:					
Laura Perez	Faculty Preparer	Apr 16, 2021			
Department Chair/Area Director:					
Lisa Manoukian	Recommend Approval	Apr 26, 2021			
Dean:					
Victor Vega	Recommend Approval	May 20, 2021			
Curriculum Committee Chair:					
Randy Van Wagnen	Recommend Approval	Aug 05, 2021			
Assessment Committee Chair:					
Shawn Deron	Recommend Approval	Aug 10, 2021			
Vice President for Instruction:					
Kimberly Hurns	Approve	Aug 17, 2021			