

COURSE SYLLABUS: Bridge Math

I. COURSE DESCRIPTION

Instructor: Maribeth Hughes Room 2017
Contact Information mhughes@mauryk12.org school 931-381-2222 ext. 1052

II. EXPECTATIONS OF THE STUDENT

- A. Follow Mrs. Hughes' classroom requirements and all CHS policies
- B. Keep a **three ring 1" or bigger notebook**
 1. **Loose-leaf** paper
 2. Neat and labeled homework, notes and quizzes
 3. **Pencil bag** with plenty of **pencils**
- C. When you return from being absent
 1. Copy the notes you missed from someone in class
 2. Complete all homework.
 3. Schedule a time to make up any missed quizzes and or tests.
- D. Keep up with your grades and progress on Parent Portal
 1. Keep all graded assignments and quizzes in your notebook.
 2. Check parent portal on your phone several times a week.

III. Course Outline: Follows state standards

https://www.tn.gov/content/dam/tn/education/standards/archive/std_arch_math_3181.pdf

1st Quarter

UNIT 1: FOUNDATIONS OF ALGEBRA

1. Lesson 1: Rational and Irrational Numbers
2. Lesson 2: Solving Linear Equations
3. Lesson 3: Solving Multistep Linear Equations
4. Lesson 4: Solving Linear Inequalities
5. Lesson 5: Literal Equations
6. Lesson 6: Measurement and Units
7. Lesson 7: Performance Task: Problem Solving with Inequalities
8. Lesson 8: Foundations of Algebra Wrap-Up

UNIT 2: FUNCTIONS

9. Lesson 1: What Is a Function?
10. Lesson 2: Graphing Functions
11. Lesson 3: Slope-Intercept Equation of a Line
12. Lesson 4: Point-Slope Equation of a Line
13. Lesson 5: Functions Wrap-Up

2nd Quarter

UNIT 3: SYSTEMS OF LINEAR EQUATIONS

1. Lesson 1: Two-Variable Systems: Graphing
2. Lesson 2: Two-Variable Systems: Substitution
3. Lesson 3: Two-Variable Systems: Elimination
4. Lesson 4: Systems of Linear Equations Wrap-Up

UNIT 4: QUADRATIC FUNCTIONS

5. Lesson 1: Factoring $x^2 + bx + c$
6. Lesson 2: Factoring $ax^2 + bx + c$
7. Lesson 3: Special Cases
8. Lesson 4: Solving Quadratic Equations
9. Lesson 5: Completing the Square
10. Lesson 6: The Quadratic Formula
11. Lesson 7: Graphs of Quadratic Functions

12. Lesson 8: Imaginary Numbers
13. Lesson 9: Nonlinear Systems of Equations
14. Lesson 10: Quadratic Functions Wrap-Up

UNIT 5: POLYNOMIAL FUNCTIONS

15. Lesson 1: Polynomial Basics
16. Lesson 2: Polynomial Functions
17. Lesson 3: Synthetic Division
18. Lesson 4: Factoring Polynomials Completely
19. Lesson 5: Solving Polynomial Equations
20. Lesson 6: Graphing Polynomial Functions
21. Lesson 7: Polynomial Functions Wrap-Up

3rd Quarter

UNIT 6: EXPONENTS AND EXPONENTIAL FUNCTIONS

1. Lesson 1: Exponents
2. Lesson 2: Exponential Functions
3. Lesson 3: Examples and Applications of Exponential Functions
4. Lesson 4: Exponential and Linear Growth
5. Lesson 5: Exponents and Exponential Functions Wrap-Up

UNIT 7: TRIANGLES

6. Lesson 1: What Is a Triangle?
7. Lesson 2: The Angles of a Triangle
8. Lesson 3: Similar Triangles
9. Lesson 4: Similarity Theorems and Proportional Reasoning
10. Lesson 5: Right Triangles
11. Lesson 6: Triangles Wrap-Up

UNIT 8: 2-D AND 3-D GEOMETRY

12. Lesson 1: Midpoint Formula
13. Lesson 2: The Distance Formula
14. Lesson 3: Area and Perimeter of Polygons with Coordinate Geometry
15. Lesson 4: What Is a Circle?
16. Lesson 5: Area and Sectors
17. Lesson 6: What Is a Polyhedron?
18. Lesson 7: Surface Area
19. Lesson 8: Volume
20. Lesson 9: 2-D and 3-D Geometry Wrap-Up

4th Quarter

UNIT 9: APPLICATIONS OF PROBABILITY

1. Lesson 1: What Is Probability?
2. Lesson 2: Counting Principles
3. Lesson 3: Basic Rules of Probability
4. Lesson 4: Conditional Probability
5. Lesson 5: Independence
6. Lesson 6: Applications of Probability Wrap-Up

UNIT 10: DATA AND MATHEMATICAL MODELING

7. Lesson 1: Review of Graphical Analysis of Data
8. Lesson 2: Two-Variable Data and Scatterplots
9. Lesson 3: Fitting Linear Models to Data
10. Lesson 4: Nonlinear Models
11. Lesson 5: Data and Mathematical Modeling Wrap-Up

IV. EVALUATION

A. Each daily grade will be given a point value. To calculate the student's daily average, the total points earned will be divided by the total points possible.

Daily grades will be compiled from the following evaluations:

1. Assignments	15%	2. Chapter test	40%
3. Quizzes	30%	4. EOC/Midterm	15%

B. There will be two exams and exemptions will only be possible for the 2nd semester Final. There will be NO EOC for this class.

V. SUPPLIES NEEDED

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|------------------------------|--------------------|
| A. Three ring 1" notebook | D. Highlighter |
| B. Loose leaf paper | E. Several Pencils |
| C. Pencil pouch for notebook | |

VII. REQUIREMENTS FOR BEING A MEMBER OF CLASS

A. Come to Class Totally Prepared

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|-------------|------------------------------------|
| 1. Notebook | 3. Paper |
| 2. Pencils | 4. Homework complete and turned in |

B. Be on time

1. BE IN YOUR SEAT when the bell rings.
2. You MUST have permission to leave the room for any reason. No passes will be given during the first 10 or last 10 minutes of the class time.

C. Always contribute to the class atmosphere

1. Ask questions and share ideas and comments with the class often.
2. Help the classroom stay neat and clean.
3. **Remain seated until the bell rings.**

D. Always give your best effort

1. Do your own work.
2. No one should ever have another person's paper copying. Automatic zero for both parties.
3. Tests and quizzes must be done without help from anyone or anything else.
4. **Follow the school handbook.** Dress code is an issue, as well as cell phones.

VIII. CONSEQUENCES FOR NOT FOLLOWING REQUIREMENTS

- A. Warning
- B. Teacher conference
- C. Parent Contact or conference
- D. Referral to Principal