

Mathematical Modeling Course Syllabus

Mr. Willie Bradford

Mae Jemison High School

Math Department / Room #1175 (1st Floor)

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Course Description

This course will provide you with the necessary skills required for you to be successful in collegiate math and science courses. This class will also help to strengthen your critical thinking and problem-solving skills, which will be an asset to you for the rest of your life.

Class Goals

1. All students will reach at least 80% mastery on all coursework.
2. All students will be academically and socially prepared for higher education or career.

Course Topics

- Mathematical Reasoning and Problem Solving
- Money Management
- Probability / Statistics
- Math Modeling
- Measurement
- Graph Theory
- Number systems

Grading Scale

100-90 A

89-80 B

79-70 C

69-60 D

59-0 F

Evaluation and Grade Assignment

Grade Distribution

Tests, Quizzes, and assessments - 60%

Classwork/Homework - 40%

Instructional Methods

Various levels of instruction will be used throughout the course. The class will always begin with a Do Now. This will be followed by the introduction to new material, guided practice, and independent practice. All classes will end with a Reflection.

Textbooks and Materials

a. Textbook: McGraw Hill, Math in our World.

b. Materials: composition notebook or small 3 ring binder.

c. Technology: **Charged** computers must be brought to class and used responsibly every day.
Calculators will be used occasionally.

Daily Expectations

1. Students will be in seat/logged in working silently on the Do Now with all supplies ready when BELL RINGS.
2. Students must raise their hand to ask or answer a question or to express a concern unless otherwise stated (virtually – a chat/text function may also be used)
3. Students will come to class prepared and be fully engaged. Absolutely NO sleeping.
4. Students will follow all instructions the first time they are given.
5. We will use kind words and be respectful of one another at all times.

Videoconferencing (Live Instruction Sessions)

Students participating in videoconferencing sessions (live instruction) should always have the camera turned on. Students should use their school issued Google Account to access the Google Meet or Microsoft Teams sessions. Teachers will not admit students in the live sessions who use nicknames or unknown names as their screen name. All students should be fully dressed when appearing in a live instruction session. Proper behavior and decorum will be expected from all students logged into the videoconferences.

Rewards for positive behavior

- Class points reward system / preferred activity time on assigned days

General classroom policies

- **Absences:** All details of the day will be listed on the Schoology site. Students should access that page before asking teacher questions.
- **Failed tests:** If students make a 60% or less, student must schedule an appointment with Mr. Bradford to discuss the grade and request to retake the test.
- **Bathroom passes:** Students must take care of any business outside of the classroom during class changes. Passes outside of the class will be limited.
- **Late work:** Students are expected to submit all assignments by the due date! Late assignments will have 10% deducted per day late. Students have 5 days after an Excused absence to make up an assignment with no penalty. **After 10 days late, assignment will not be graded and grade will remain a zero.**
- **Mastery Bonus:** With a focus on mastery of math concepts, students may receive a Bonus grade by showing mastery (80% or more) on Mastery Quizzes for each 9 weeks.

Grading Summary

Type of Work	Summary Score	Weight	Weighted Score
Tests, quizzes, etc.	85	60%	.85 x 60% = 51%
Classwork/Homework	90	40%	.90 x 40% = 36%
		Total	87%

-----All District and JHS policies and rules will be upheld and followed in my classroom-----