**Advanced Functions and Modeling**

Mr. Lawhon – Room 1719

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Welcome to AFM!This is a single period class which meets for 86 minutes every other school day. Upon successful completion of the course, one AFM credit is earned, this will typically be the fourth \credit a student needs in order to graduate.

**Classroom Expectations`**

**S**tudious- Complete all assignments, Study Daily

**O**n-Time- Submit work on time, Arrive at class on time

**A**ccountable- Responsible for your behavior and actions

**R**espectful- Display respect for teachers, peers, and classroom

**Course Description**

Advanced Functions and Modeling provides students an in-depth study of modeling and applying functions.

Content topics include: probability, univariate data, analysis, exponential and logarithmic functions, power models, piecewise functions, trigonometric functions, parametric equations, matrices, and financial math.

**Texts:**

* Prentice Hall Trigonometry
* Merrill Advanced Mathematical Concepts
* Brooks/Cole Algebra and Trigonometry

**AFM Grading Policy**

The grading policy used to calculate students’ grades each quarter is as follows:

* Tests- 60%
* Quizzes- 30%
* Homework- 10%

**AFM Overall Year-Long Grade Policy:**

1st Semester Average: 40%

* 1st Q- 50%
* 2nd Q- 50%

2nd Semester Average: 40%

* 3rd Q- 50%
* 4th Q- 50%

NCFE Test: 20%

Final Grade Scale:

100-90%-A

90-80%-B

80-70%-C

70-60%-D

Below 60% -F

*Tests:*

Tests will be given at the end of each unit to assess the students’ mastery of the concepts. The following policy will be held:

* Students who receive a test grade below a 70% will be given the opportunity to take a quarter test in order to replace the failing grade with a higher one. The quarter test will replace one test grade below 70% for that quarter, with the highest grade possible of 70%.

**Grade Intervention/Recovery:**

If a student receives below a 60% for 1st, 2nd, or 3rd quarter will be given a Grade Recovery Contract. The Grade Recovery Contract will:

* Serve as an intervention for any student whose quarterly average is below a 60%.
* Outline a plan of action for the student to promote successful completion of classroom objectives for the remainder of the year
* Allow a student’s quarterly average to be changed to a 60% provided the student has fulfilled all expectations outlined in the plan.

It is REQUIRED that the teacher, student, and parent sign the Grade Recovery Contract

**Breakdown of Student Assessments:**

All students in AFM will take common assessments (formative, summative quizzes and tests).

*Formative Assessments* are used to determine growth, but are not used in the grade calculation. The purpose is to guide instruction throughout the unit.

*Homework:*

Homework is an extension of class work and affords students the opportunity to practice skills and concepts learned in the classroom.

* Students should be prepared for nightly homework.
* If homework is late, it will be accepted up until the day of the unit test.
* If homework is turned in after the unit assessment, no credit will be given, but feedback will be provided.
* Study Cards

*Final Exam:* This course will have North Carolina Final Exam (NCFE) developed by the state.

***Missed Work:***

* Students are expected to make up the work that they missed during an absence. Tests and quizzes must be made up within one week of the original administration.
* Students are expected to get assignments and materials, according to class procedure, as soon as they return to class.
* Missing work will be accepted for full credit according to WCPSS policy (found in handbook). When that time expires, late policy will be applied.

**Additional Resources for learning:**

* Videos to aid in concepts can be found from Khan Academy.
* Tutoring:
  + Available in room 1719 Tuesday or Thursday by request afterschool.
  + Students should request tutoring at least 24 hours in advance.
* **Calculator:**

A TI-83+, TI-84, or TI-84+ Graphing Calculator is needed for this course. While we provide calculators for in class activities, we have a limited supply. It is highly recommended that each student has their own graphing calculator. Students will also need the technology of the graphing calculator at home to complete homework assignments.

**Attendance:**

Students should plan on attending class every day it is scheduled. Refer to the student handbook regarding the school and board policy concerning, tardiness and absences.

**Required Class Materials:**

* **3 ring-binder (you will be receiving handouts of notes and practice so it is expected you have a binder for them)**
* **Pencil and eraser**
* **Graphing Calculator**
* **Colored pen/pencil (for correcting work)**
* **Highlighters**
* **Loose leaf paper**

I am ***excited*** to be your teacher! Let’s have a great year together!

**Please Sign and Date**

**I have read and reviewed the syllabus for AFM.**

**Student Name:**

**Student Signature: Date:**