Welcome to Advanced Functions and Modeling! I look forward to a very enjoyable and productive year in cooperation with you and your parents. I know that we will learn a lot together as long as **your attitude is positive and your focus is on learning**. Homework/classwork is very important in mathematics because you learn by practicing, not just by listening and watching the teacher doing it. Since your brain is a muscle, it is important that it is exercised daily. Each day will be filled with new concepts and activities. My goal is for you to be successful; therefore, I will use a variety of teaching strategies. Below is a copy of my expectations for our class this year along with required materials, and contact information. Please take some time to go over the information with your child. This will ensure that both you and your child understand our expectations so that we can have a successful and fun school year. I also ask that after reading the sheet, both you and your parents sign the attached sheet so that everyone is clear on the expectations. Our cooperative efforts throughout the year will support your child’s efforts to be successful at High Point Central.

This is an upper level advanced math course that covers many topics previously touched on in earlier math courses. This course studies functions (linear, quadratic, exponential, polynomial, and logarithmic), modeling, and trigonometry.

By the end of this course students will be able to

* Analyze data and apply probability concepts to solve problems
* Use functions to solve problems

Advanced Functions and Modeling (AFM) does not have an EOC but it does have a FINAL Exam that will count 20% of their class grade!

**Course Outline:**

**1st Quarter:**

Unit 1: Univariate Statistics

Unit 2: Probability

Unit 3: Functions

Unit 4: Exponential and Logarithmic Functions

**2nd Quarter:**

Unit 5: Trigonometric Functions of Angles

Unit 6: Graphs of Trigonometric Functions

Unit 7: Sequences and Series

Unit 8: Bivariate Data

**End of Semester-Final Exam**

1. Be On Time
2. You are expected to be INSIDE the classroom and either working, or getting your material ready when the tardy bell rings.
3. Standing outside the classroom door when the bell rings IS considered being tardy whether you have already been inside to drop your things off or not.
4. **Bathroom Passes**: Students will be given 4 bathroom passes each Quarter (9weeks). They will be handed out on colored sheets. Students will only be given 4 bathroom passes. At the end of the 9 week period if students have not used their bathroom passes they will be given 2 points extra credit on their final average. Students: this could mean the different between an A and a B so think about your class change time to get your business done. Students who have medical issues must provide a doctor’s note.

1. A student is considered tardy to class if he/she is not in his/her assigned location when the tardy bell rings. If a student is late to school and has a written excuse from a parent, the student must first come to the attendance office to get a pass to class. If a student arrives late to school **without** a note but it is within ten minutes after the final bell rings, the student should report directly to class. If the student arrives to school ten minutes **after** after the final bell rings **without** a note, they **must** report to the attendance office.

\*The tardy count restarts each quarter.

\*\*Students arriving to class more than ten minutes late without an excused note can be considered skipping and subject to disciplinary action.

1. Be Prepared
2. You are expected to come to class prepared everyday with all your materials.
3. You will use your notebook, workbook and textbook every day. There is no excuse for you not to have them with you in class every day.
4. Materials Required:
	* + Composition Notebooks
		+ Pencils
		+ Colored pencils (optional)
		+ Graph paper
		+ TI-83 or TI-84 are STRONGLY RECCOMENDED
5. Expectations
6. Be respectful of yourself, others and their property.
7. Keep all personal electronics put away! Absolutely NO CELL PHONES!!
8. Always do your best work.
9. Show all work.
10. Participate, respond and ask relevant questions on a daily basis.
11. You will be expected to be able to work alongside each other as individuals, as partners and as groups on a regular basis.
	1. Working together is a privilege that you can benefit greatly from, but it WILL be revoked if the CLASS cannot do it in an acceptable or productive manner
12. Stay in your seat at all times, unless you have permission.
13. Follow instructions the 1st time they are given.
14. Our class will allow opportunities for us to laugh and talk but we still have to understand that we are in school and we have work that has to be done.
15. Notebooks
	1. A notebook check will take place AT LEAST three times per quarter (usually every test day).
	2. Specific guidelines for these checks will be given prior to grading them, but they will be graded on completeness and organization.
	3. Notebook quizzes may also take place throughout the semester so a complete and organized notebook is essential to your success in this class.
	4. Students are NOT allowed to share or borrow someone else’s notebook—this will result in an immediate zero for both students involved.
16. Tests and Quizzes
17. You will have a quiz or a test every week. Some of the quizzes will be unannounced.
18. If a student misses a quiz or test, they are responsible for scheduling a makeup time before or after school.
19. Homework
20. Homework assignments will be given when necessary including weekends. All assignments should have your name on it and the assignment should be properly labeled (If I don’t know what you are turning in, or who is turning in the assignment it will be considered garbage! 0).
21. If you are absent it is up to you to determine what assignments need to be made up and to turn them in.
22. Grading
23. Your math grade will be based on tests, homework, quizzes, and class work. There will be some form of assessment every day.

Your final class grades will be divided into the following 4 categories and calculated using the averages shown below:

|  |  |
| --- | --- |
| Tests  | 35% |
| Quizzes  | 30% |
| Classwork | 25% |
| Homework | 10% |

1. Late and Missing Work
2. All late or missing work must be turned into the assignment basket by the day of the unit test; the only exception is if you were absent the day the test was given.
3. The highest grade you will receive on late work is a 70 (if all answers are correct), the exception is only if you were absent the day I collected the assignment.
4. All assignments given (except bookwork) will be located in a white notebook on the back table (I will show you)
5. HELP!!!
6. Do not wait until the end of the semester to let me know you need help. I am here to make sure that you are getting and understanding all the materials covered during class. I will have tutoring every Monday 4:00-4:45.
7. You can also contact me via email or phone if necessary.
8. There is absolutely no excuse for failure if you are willing to make use of all the extra help that is available, and are willing to work hard and do your best 100% of the time!

**Please return this page only**

**Keep the other pages to ensure you are familiar with the class expectations.**

**Student Section:**

Please sign below indicating that you have read and understand the expectations and guidelines outlined in this syllabus.

Student name (printed) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Parent/Guardian Section:**

Thanks for agreeing to work with me to make your child a more responsible, respectful, successful student. When students realize that their parent(s) and teachers are working together with their best interest in mind, they work harder and behave better. **Please encourage your child to pay attention and do all work that is assigned.** This will enable him/her to better understand how to work the problems. **Also, students need to stay for tutoring as soon as they don’t understand or begin to struggle!**

Parent/Guardian name (printed) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Daytime phone number (8:00 – 4:30) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If I cannot reach the parent/guardian, please indicate someone else that I can contact.

Name (printed):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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