

COURSE OUTLINE

CLASS: **Advanced Functions and Modeling (AFM)**

PERIODS: **III** (10:50 a.m.–1:00 p.m.)

INSTRUCTOR: **Coach Atkins**

GRADING: **Weighted Average System**

A student's grade comes from various categories, which are weighted differently. For the final course grade, each quarter counts as 40% and the cumulative final exam counts as 20%.

REQUIREMENTS: **Tests (30%)**

At least one test will be given for each unit. Retests are not given and students are expected to take the test when assigned.

Projects (30%)

Most units will have at least one real-world project assigned. Projects must be very neat and will be graded according to a set rubric given in class. Students **MUST** turn in their hand-written rubric with their project. *Unexcused late projects earn a maximum score of 70!*

Classwork / Activities (20%)

Classwork is graded for **completion** and **effort**. Also, daily participation grades are given and scored weekly. Students lose points for being tardy or off-task, not following directions or being prepared, and for not participating. All activities are graded for completion and **accuracy**, and are usually graded *after* correct answers have been given..

Quizzes/Closing Assessments (10%)

Quizzes (announced or unannounced) will be given randomly over class lessons and are usually given as a daily closing assessment. Students **MAY** confer or collaborate during closing assessments, but may **NOT** give or copy answers. Students should be prepared for a quiz every day.

Homework (10%)

Students must complete all assigned take-home practice! Homework is collected *randomly* and is graded for **effort** and **completeness** (this includes showing all work). All homework should be **written neatly**, and should include the student's first and last name, lesson/problem numbers, and written work. **Credit is NOT given for undone, partial, or sloppy work.** Homework *will not be accepted* after the test has been given!

Extra Credit

Daily, opportunities for bonus points are available. A POD (Problem Of the Day) is given most days at the beginning of the class period. Although all students *must* attempt the POD, correct answers count as bonus points (there is no penalty for a wrong answer). Bonus points are also given for *properly* correcting the instructor.

DESCRIPTION: *Advanced Functions and Modeling* is a foundational advanced-level math course designed to allow the student to apply the use of functions to practical, real-life problem-solving. *AFM* also incorporates data analysis (including statistics) and probability using modern technology. Prerequisites for this course include skill in the use of functions, equation manipulation (including systems), trigonometric ratios, and reasoning. The class website (coachedge.weebly.com) is a great resource containing information, notes, practice, and help.

MATERIALS:

- textbook (kept in classroom)
- **at least 2** standard, no. 2 pencils (may use mechanical) with erasers
- **red pen** (for in-class, peer grading)
- **3-ring binder with loose-leaf paper (no spiral-bound themebooks)**
- TI-83 (or better) graphing calculator is recommended but not required.

COMMUNICATION: It is **vital** that students contact the instructor whenever any difficulty arises. The best methods of contact include seeing the instructor in person or via e-mail (atkinsej@rss.k12.nc.us).

EXPECTATIONS: Students are expected to act responsibly, use common sense, and give and receive mutual respect. Students must be **ready for class** each day when the bell rings, and will be expected to do their best on assignments. All students must pay attention during the teaching, take notes when directed, answer questions when called upon, and ask questions when necessary. **Completing assignments, participating in class, and briefly reviewing daily are the best methods of ensuring success.** *All classroom interruptions must be reserved for true emergencies only!* Each student should act responsibly and be considerate of others. **If absent from class, it is the STUDENT'S responsibility to contact the instructor, find out what was missed, and arrange to make up any missed work.** Attendance and punctuality are vital to the student's success in school. Students must be present in class for at least HALF of the class period to avoid being counted absent. Students should include their first *and* last name on all assignments and keep track of all grades. Students are expected to follow NC, RSS, NRHS, and classroom rules and policies.

DISCIPLINE: Should students fail to conduct themselves in a reasonable manner, punishment will be administered to correct the problem. This punishment, based on the severity and frequency of the problem, may consist of student conferences, after-school requirements, parent contacts, parent conferences, after-school detentions, and administrative write-ups.

MISCELLANEOUS: Students should refer to the 2014-2015 *RSS Student-Parent Handbook & Code of Conduct* for any questions regarding rules, dress, etc. Common Core goals are available online at www.ncdpi.edu. Free tutoring is available most Monday and Wednesday afternoons from 2:35-4:00 p.m. through Upward Bound.