# Functions with Analysis 

Mr. Petersen<br>ryan.petersen@ankenyschools.org<br>Check my google classroom page for updates

## Course Description:

Functions with Analysis will explore mathematical systems. The first semester will study various topics including a deeper understanding of right triangle trigonometry and trigonometric functions. Second semester, students will investigate algebraic, logarithmic, exponential, and rational functions. Topics will include algebraic manipulation as well as graphical representation and transformations. Students will develop conceptual understanding of functions including explorations with graphs, tables, equations and solving techniques. Second-semester topics will reinforce student understanding of the functions studied in previous years.

## Class Rules:

- Be respectful to yourself and others
- Be Prepared
- Work Hard


## Supplies needed:

- Notebook and Folder
- Pen and pencil
- TI Graphing Calculator
- Chromebook
- Positive Can Do Attitude ©
- Notebooks:
*You are expected to take notes in this course. Many of the examples supplement the text and cannot be found anywhere but in your notes.


## Daily Work:

- You will be working with an online homework called Math Lab. Math Lab will give you support with tutorial videos. Math Lab will give you the correct answers and score your answers.
- Homework is assigned to help you learn, there are both practice problems and extension problems, both are important for your learning.
- Partner work and group work is encouraged, however, copying is not.
- Correct all optional, additional problems with answers found in the back of the book or on Google classroom. (If you still need support talk to the instructor about additional help time or SOS)
- You will have a syllabus outlining each assignment; this will be posted on the google classroom page.
- Assignments for each chapter are to be completed in a timely matter. No work will be accepted after the chapter test.
- "Homework" checks will be given for each chapter. These will provide great feedback with where you are at in learning the material while we go through each chapter. **THESE CHECKS WILL BE EXACT PROBLEMS FROM MATHLAB ASSIGNMENTS**


## Quizzes:

- Chapter quizzes will be given periodically.
- No retakes are given on quizzes.


## Tests:

- There will be a test at the end of each chapter.
- Students will be reassessed on future assessments. All grades will be collected together to give students an overall grade for each standard/topic.

Assessments in Functions with Analysis are spiraled in nature, meaning that concepts that appear on a unit assessment appear on subsequent assessments as well. There are several reasons for this policy:

- Spiraled content on assessments is research-based
- To encourage retention of knowledge learned throughout the course
- To empower students to be successful in this and future mathematics courses
- To allow students multiple opportunities to assess on course objectives
- To allow students to demonstrate mastery over time
- To gain a true picture of student achievement rather than a one-time snapshot

As a result of this practice, students will no longer need to "re-take" a unit test. Students can focus on new learning while developing mastery of past concepts over time. This practice is in accordance with Board Policy 602.02 and the district's vision for Standards-Referenced Grading.

## Grades:

Overall grade:
Semester grade is composed of:
90\% 18 week grade
90 \% Assessments
Tests
Quizzes
10\% Homework
Homework is done online. (Mathlab)
Bell Ringers and other activities will be added to this category at the teacher's discretion.
Homework Checks

## 10\% Final Exam

Grading scale per the student handbook:

| A | $93 \%$ | B+ | $87 \%$ | $C+$ | $77 \%$ | $D+$ | $67 \%$ | F | Below $60 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A- | $90 \%$ | B | $83 \%$ | $C$ | $73 \%$ | $D$ | $63 \%$ |  |  |
|  |  | B- | $80 \%$ | $C-$ | $70 \%$ | $D-$ | $60 \%$ |  |  |

## Behavioral Expectations

The work habits/behavior standards are for grades 6-12 courses in our district. These work habits/behavior standards will be reported throughout the semester and are as follows:

- Organization and Readiness
- Productivity and Accountability
- Collaboration Skills

For those of you accessing this document electronically, the work habits tool can be accessed here. We will be using the following performance levels:

| Performance Levels for Work Habits/Behavior Standards |  |  |  |
| :---: | :---: | :---: | :---: |
| MS | PM | DM | NE |
| Meets Standard | Partially Meets Standard | Doesn't Meet Standard | No Evidence |

These descriptors are intended for feedback and communication and do not impact a student's GPA.

## Absences:

Students who are absent will have two days to make up work for every day they were absent. You must take the initiative to determine what assignments have missed and schedule a time to take missed tests or quizzes.

## NEED HELP?

Every student will need extra help at some time during this year. The following lists opportunities for students to receive extra help.

- Before school Mon, Tues, Thurs, and Fri
- After school Mon, Tues, Wed, and Thurs in SOS which will have a teacher and peer tutors.
- Check with me and schedule appointments as needed
- Talking with me and email are good ways to communicate.

Do not come in on the morning of the test and expect to have many questions answered! Get help right away when you need it!

Practice the skills being taught daily, ask questions during class, take notes, and pay attention in class. I want each of you to do the very best job you can in your study of mathematics. I really enjoy solving math problems and I hope math will be fun for you as well.

[^0]
[^0]:    ** If you need a more accessible version of this document contact the instructor.

