2025-26 ATYP Algebra 1 Syllabus

Tuesday: 1:20 – 3:50 pm

Instructor

Mrs. Kassie Reilley
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Website

Gowmu.wmich.edu

- Use to access both **eLearning** for our course and **WMU email**
- You should be checking your WMU email frequently and use this email to communicate with me

Supplies for Class

- **Textbook** (*provided*): *Algebra I*, Prentice Hall Mathematics High School Math Series by Bellman, Bragg, Charles, Hall Handlin & Kennedy, 2007
- **Calculator**: The TI-84 graphing calculator will be used as the primary computing device for this course. Students should become adept at using their graphing calculators not only to evaluate algebraic expressions, but also to investigate the behavior of functions and their graphs and to carry out elementary statistical procedures. Nevertheless, students also have to learn the basic paper-and-pencil rules and techniques of algebra. It is expected that students will be equally competent using both methods.
- **Loose Leaf Paper**: if time permits to begin homework assignment in class.
- **Graph Paper**: 4 squares per inch, for accurate graphs.
- **Folder or Binder:** to stay organized and hold all relevant course materials.
- **Pencil(s) and eraser**: Math should be completed in pencil, not pen or marker. Mistakes happen and should be easily correctable.
- **Ruler** (optional) to be used for drawing straight lines.
- **Highlighter** (optional) can be useful in identifying important information or drawing attention to specific parts of notes/homework.
- **Colored Pencils** (optional) same as for highlighter, but can also be useful when graphing multiple graphs on the same coordinate plane.
- **Stapler** (optional) Homework pages must be stapled in proper order before submitting.
- **Three Hole Punch** (optional)

Grading Scale

A (90 - 99%) **AB** (80 - 89%) **B** (70 - 79%) **C** (60 – 69%) NC below60%

To obtain credit for the course, students are expected to perform satisfactorily on both homework and exams. Both averages must meet the minimum requirements. Other factors, such as class performance and class discussion, will assist the instructor in assessing the student's understanding of content. Final evaluations will assess the student's overall comprehension of the content. Homework grades falling below 60% three times indicates that the program might not be suited to the student. A conference between the parent(s)/guardian(s) and the teacher will be arranged.

Homework (and Other Academic Expectations)

- Mastery comes from practice, i.e., doing homework problems – on a daily basis. Concepts and skills are honed through study and completing homework assignments on time. Before attempting HW problems from the new section, read the section for understanding and review your notes from class. Expect to spend an hour a day on your homework.
- Aim to finish your homework **before** the Sunday Help session so that you can get help when needed.
- **Organization:**
    - Start each problem by writing the problem number on the ***left*** of the margin. Clearly label each section and each problem number. Do not try to fill a page with problems written all over. Show steps/methods on separate lines. If an answer comes from your calculator, state clearly the procedure you used and/or draw a sketch of your graphing screen. Graphs are to be drawn on graph paper (4 squares per inch) **Use a ruler for straight lines**.
    - Each piece of homework must have your name on the top right-hand corner and the Week Number below your name in the top right-hand corner. The completed homework must be stapled on the top left-hand corner **BEFORE** class. 10 points will be deducted for homework not stapled. Graph paper used to draw accompanying graphs for problems should be stapled at the end of the homework.
    - Be sure to show all steps in completing problems, and box or circle your answer. **Write legibly.** If I cannot read your work, I cannot grade it and provide you feedback.
    - Complete problems sequentially by section. Problems out of order may not receive credit.
    - Leave a few lines between problems to provide feedback.
    - **Show all of your work** and give detailed, complete answers on all of your assignments and exams to earn full credit. Answers with little or no work to support them usually receive at best half credit, sometimes less. Showing your work allows us to give partial credit if your answer is incorrect, informs about misconceptions you may have, and is an important skill for upcoming coursework that utilizes math skills, logic, and analytical reasoning. In your career, you will almost always be expected to justify your work. Start now where we can help with feedback.
- **Due Dates:** Homework will be turned in each week of class. Please be reminded that being absent for ATYP is the equivalent of missing an entire week of your home school. Experience has shown that skipping a week proves to have a negative effect on student overall class performance and final grade.
- **Grading:** Homework will be graded each week. This may be a sampling of the problems or all of them. The solutions will be returned in a timely fashion to allow the student feedback on the problems. To assist in feedback to the student, the assignments have an overlap of sections from one week to the next.
- **Late homework** will be accepted the following week after it is due ONLY, but one should not make a habit of completing homework late.
- **Corrections:** Students are encouraged to take risks, to make mistakes and to learn from them. To become fluent and competent in mathematics, students must be aware of their shortcomings and their wrong interpretations of concepts. **Doing corrections is a very important habit in the growth of an algebra student.** You may turn in corrections and earn back points missed. Corrections must be done on an entirely different sheet of paper and the original homework included. Each corrected problem should be identified by the section number and problem number. Please turn corrections in the week after homework is handed back to you.
- **Other Important Considerations:**
    - One of the most important aspects of this class is the need for clear, logical and concise communication of algebraic concepts. **A correct answer to a problem is not the end by itself – I seek for the flow of reasoning in arriving at the answer.** Students should be asking: What properties allow me to do that? What operations do I use? Is the answer reasonable?
    - Every problem assigned should be completed. Do not give up on a difficult problem. Discuss with a classmate, seek help from a parent or ask for assistance by contacting me. There are a variety of ways we can effectively communicate outside of our class time for support!

Exams

Each Exam grade is weighted equally with the average of the previous six homework grades.
Exam 1 and Exam 2 are written by the instructor.
The Final Exam is the Michigan Standardized Exam covering all Algebra I content.

Class Time

Exact order may vary, but these procedures can be expected:

- Discussions covering new topics
- Activities/Exercises for practice/mastery
- Corrections/Revisions on previous homework (time permitting)
- Mastery Quiz (time permitting)

Tips for Success

- Begin homework as soon as possible after our weekly class sessions.
- Take quality in-class notes, including documenting examples to reference later.
- Read the introduction to new sections for understanding.
- Pace yourself throughout the week with homework sessions each day or every other day.
- **Work through the examples step-by-step, thinking about why each step was made.**
- Work an odd numbered problem adjacent to the even numbered problem [answers in book].
- **Write out every step in the solution process and check your work as you go.**
- Phone or e-mail a classmate or Mrs. Reilley for additional homework help.
- When seeking help, be prepared to explain your question and what you've tried so far.
- Form a study group with your peers.

Course Topic Outline (Subject to change, as needed)

- **Variables and Algebraic Expressions**
- **Real Numbers and their Properties:** Natural Numbers, Whole Numbers, Integers, Rational and Irrational Numbers
- **Solving Equations/Inequalities**
- **Solving Systems of Equations/Inequalities**
- **Families of Functions:** Approached through four ways of representing functions (Words, Tables, Algebraic Expressions, Graphs)
    - **Linear**
    - **Absolute Value**
    - **Exponential**
    - **Polynomial**
    - **Quadratic**
    - **Radical**
    - **Rational**
- **Number Patterns and Sequences**
- **Variations and Functions**
- **Statistics**
    - Central Tendency: Mean, Median, Mode, Range
    - Scatter Plots and Linear Regression
    - Probability
    - Permutations and Combinations