

# Algebra 2

Mrs. Katie Pennington

Syllabus 2024-2025

#### **Description:**

Algebra II is meant to reinforce the subjects learned in Algebra I while preparing students for higher-level courses by introducing new topics. The topics covered in this course include linear, quadratic, polynomial, radical, and rational functions, exponential and logarithmic functions, and probability and statistics. By covering these topics, students will be prepared for further study of mathematics, including pre-calculus and calculus.

Although it is important for the students to understand, memorize, and be able to apply the theorems that are learned in this course, the most important aspect is to understand the application of mathematics from a Biblical worldview, and develop a greater desire to serve God and others. Therefore, this course will be taught with the application of biblical principles throughout, always using mathematics to point us back to our Creator.

#### **Prerequisites:**

Algebra 1

#### **Course Materials:**

- BJU Press. Algebra 2 Student Text. 3rd ed. Greenville, SC: BJU Press,
  2022. (ISBN 978-1-64626-475-9)
- Graphing Calculator Texas Instruments TI-84 Plus C This is the calculator I will be using in class, so it is highly recommended that you get this calculator. If you can't get this one, any graphing calculator will do.
- The ability to scan/upload assignment work as a PDF It is expected that all work be displayed clearly in an organized fashion. In class, I will



show you how I expect you to display your work for different problems. You will be required to complete your work using pen and paper and, therefore, will need some way of scanning/uploading your assignment. You can do this one of two ways:

- o If you have a smartphone or tablet with a camera, you can get the FREE Adobe Scan App. It is available on Android and Apple smartphones. This powerful app allows you to take a picture of your handwritten work and automatically converts it into a PDF. From there, you can email the document to yourself to access it on your computer for upload.
- You can use a modern scanner or printer to scan multiple pages to your computer and save them as PDFs.

#### **Course Progression:**

The best way to understand this course material is to have students read the textbook and work problems on their own. Repetition is the best way to make the material stick. After they have done this, they should come to the classes and treat it as a review and an opportunity to ask questions and clarify difficult material.

Date	Lecture Plans	Date	Lecture Plans
Aug 19	Chapter 1	Aug 21	Chapter 1
Aug 26	Chapter 1	Aug 28	Chapter 1 Review
Sept 2	No Class-Labor Day	Sept 4	Chapter 2
Sept 9	Chapter 2	Sept 11	Chapter 2 Review



Sept 16	Chapter 3	Sept 18	Chapter 3
Sept 23	Chapter 3	Sept 25	Chapter 3 review
Sept 30	Chapter 4	Oct 2	Chapter 4
Oct 7	Chapter 4	Oct 9	Chapter 4 Review
Oct 14	Chapter 5	Oct 16	Chapter 5
Oct 21	Chapter 5	Oct 23	Chapter 5 Review
Oct 28	Chapter 6	Oct 20	Chapter 6
Nov 4	Chapter 6	Nov 6	Chapter 6 Review
Nov 11	Chapter 7	Nov 13	Chapter 7
Nov 18	Midterm Exam Prep	Nov 20	Midterm Exam Prep
Nov 25	No Class-Thanksgiving Break	Nov 27	No Class-Thanksgiving Break
Dec 2	Chapter 7	Dec 4	Chapter 7 Review
Dec 11	Chapter 8	Dec 11	Chapter 8
Dec 16	Christmas Break	Dec 18	Christmas Break
Dec 23	Christmas Break	Dec 25	Christmas Break
Dec 30	Christmas Break	Jan 1	Christmas Break
Jan 6	Chapter 8	Jan 9	Chapter 8 Review
Jan 13	Chapter 9	Jan 15	Chapter 9



Jan 20	Chapter 9	Jan 22	Chapter 9 Review
Jan 27	Chapter 10	Jan 29	Chapter 10
Feb 3	Chapter 10	Feb 5	Chapter 10 Review
Feb 10	Chapter 11	Feb 13	Chapter 11
Feb 17	Chapter 11	Feb 19	Chapter 11 Review
Feb 24	Chapter 12	Feb 26	Chapter 12
Mar 3	Chapter 12	Mar 5	Chapter 12 Review
Mar 10	Chapter 13	Mar 12	Chapter 13
Mar 17	Chapter 13	Mar 19	Chapter 13
Mar 24	Chapter 13	Mar 26	Chapter 13 Review
Mar 31	Chapter 14	Apr 2	Chapter 14
Apr 7	No Class-Spring Break	Apr 9	No Class-Spring Break
Aug 14	No Class-Spring Break	Apr 17	No Class-Spring Break
Apr 21	Chapter 14	Apr 23	Chapter 14 Review
Apr 28	Final Exam Prep	May 1	Final Exam Prep
May 5	Final Exam Prep	May 7	Final Exam Prep

## **Assignment Structure:**



Assessment	Percentage of Total Grade
Textbook Reading & Attendance	10%
Homework Assignments	15%
Quizzes	20%
Unit Exams	30%
Midterm/Final Exam	25%

**Textbook Reading & Attendance:** To receive the weekly points for textbook reading and attendance, students will answer the attendance questions found under each week's heading in the Canvas portal. Inside the attendance heading, students will state whether they came to the live lecture or watched the recording, and also if they read the assigned material for that week. This is on the honor system, and students are expected to be truthful.

Homework Assignments: Problems will be handpicked from the textbook for each lesson as homework. These problems will be under the 'exercise' section in your book. It is required to complete these problems after each lesson to practice what was discussed in the lesson. Each week, students will be asked if they completed the homework. It will be a true/false question. It is very important that the student complete this homework, as quiz questions, exam questions, and the midterm and final exams will be based on these exercises. It will be on their honor to indicate whether or not they completed it.



Quizzes: There will be a short quiz due each Friday (unless otherwise specified). These quizzes will be timed, and consist of a few problems from the material covered for that week. Their purpose is to provide an opportunity for the student to demonstrate his or her comprehension of the material. Students are to complete them using the appropriate activity on the Canvas course page. For full credit, all work must be uploaded and clearly display each step in the process of reaching their answer. If I cannot see how an answer is achieved from the work given, even if the answer is correct, full credit will NOT be given.

**Unit-Exams:** There will be an examination at the end of each unit (unless otherwise specified). These will be longer than the weekly quizzes and will be different but similar to the exams found in the book. Students should use their books, exercises, and quizzes to study. These will be closed book exams, and **all work must be uploaded and should clearly display each step in the process to the answer.** If I can't see how the answer was achieved from the work given, even if the answer is correct, full credit will NOT be given.

Midterm/Final Exams: These exams are on all of the material studied, up to that point. The midterm will be given right before Thanksgiving break, and will cover all of the units that we have covered so far. The final exam will be the last assignment due, and will cover all of the units that were learned. These exams will be closed-book, timed exams. You will have 4 hours to complete each exam, and must upload your work. Each step must clearly display in the process of reaching your answer. To study for these exams, use your book, the homework assignments, quizzes, and unit exams.

#### **Due Dates and Late Policy:**



Students are encouraged to print a copy of the weekly assignments for personal reference. They should either keep it with their algebra materials or tape it to a wall near their workstations.

Students are responsible for keeping track of all scheduled due dates and are responsible for any changes announced during lectures and/or on Canvas. The instructor reserves the right to change due dates at any time but must give students notice at least one week prior.

All deadlines are 11:59 p.m. Eastern Standard Time (EST). A late penalty of 10% will be applied for every additional **week** that an assignment/exam is late. Parents can request extensions via email for situations beyond the student's control. All extension requests must be received by Friday at 5 p.m. EST (Family emergencies are an exception). If an extension is requested, please explain the situation in the email. If the extension is approved, all late penalties will be waived. Students with extensions should post an exam comment with a reminder of the granted extension.

#### **Class Canvas Portal:**

Students will access the course through the Canvas course portal: <a href="https://apologia.instructure.com/">https://apologia.instructure.com/</a>.

#### **Weekly Live Lecture:**

Mondays & Wednesdays, 11:30 a.m. - 12:15 p.m.

## **Conduct & Academic Dishonesty:**

The online class environment requires special rules to minimize distractions and enable everyone to maximize the benefit of attending class. As the



instructor, it is my role to provide the best learning environment possible. My rules include:

- 1. Treat my classroom as if we were in a physical classroom together.
- 2. Do not talk or type while I am lecturing unless you have a question or we are having a class discussion.
- 3. If you have a question during class, please type a (?) into the chatbox. Have your question already typed out so that your question is ready to send when I call on you.
- 4. Do not multitask during lectures. This includes the use of mobile devices/tablets, playing games, using social media, or anything online.
- 5. If you must leave early, please private message me on Adobe Connect before exiting.
- 6. If you join the meeting late, please do not disrupt the lecture with messages. It will be your responsibility to watch the recording to catch up on missed material later.
- 7. Come to class prepared! Before class, read the current module in the textbook, and bring your textbook, notebook, pen, and calculator to every class.
- 8. Please do not abuse the emotes on Adobe Connect.
- 9. Remember, these lectures are recorded. Use conversation that is appropriate and on topic.
- 10. Students should select a display name on Adobe Connect that consists only of their first name and last initial for privacy reasons.



### Help and Questions Outside of Live Class:

I can be reached directly by email at <a href="mailto:mrspennington@apologia.com">mrspennington@apologia.com</a> if personal issues or questions arise that cannot be posted to the entire class discussion on Canvas. The best time to contact me via email (for the fastest response) is Monday through Friday from 12 p.m. to 2 p.m. You can email me anytime, though, and I will get back to you within 12-24 hours. I will do my absolute best to get back to you ASAP.

