

# Mrs. McCarty's Pre-AP Pre-Calculus B Course Syllabus

## **Course Description/Overview**

Pre-Calculus is a rigorous mathematics course that extends the concepts learned in Algebra II and adds new concepts, primarily trigonometry, with the intent of building a bridge to calculus courses. The primary goal is to learn analytical and problem-solving skills by using algebraic, graphical, and numerical techniques.

## **Course Content**

- Exponential and Logarithmic Functions
- Trigonometric Functions
- Analytic Trigonometry
- Applications of Trigonometry

## **Materials:**

- Pencils and pens,
- Textbook
- Graphing calculator (preferably TI-84)
- Notebook paper, and a 3-ring binder or folder to hold both notes and homework

## **Course Policies**

### ***Homework Policy:***

- Homework will be assigned almost every school day in order to allow you to explore and practice what you are learning.
- Late assignments will not be accepted.
- No homework or make-up work will be accepted after the test day.
- Copied assignments will receive a zero. The original person's assignment will be a zero as well.

### ***Work Requirements:***

- Write your name on all assignments. Any assignment turned in without a name will be thrown away.
- Write the name of the assignment on the paper. (Ex. Pg. 95 #1-15)
- Show all calculations and work even if you do it in your head or on a calculator. All work must be shown in order to receive full credit.

***Absences and Makeup Work:*** Because of the sequential nature of mathematics, for a student to be successful and to learn he/she must be in class daily. Assignments and notes can be emailed to a student during an absence if the student contacts me. Homework assignments can be found on MyHomework. There is a link to MyHomework on my webpage. When you return from an absence, you are responsible for the following:

- Turning in any homework that was due the day(s) of your absence
- Picking up any missed handouts and homework assignment(s) from the makeup folder and updating your notebook with notes
- Turning in your makeup work

According to school policy, you have three days to turn in assignments missed due to an excused absence; if the absence is unexcused, you may not make up the missed work. If you have missed more than one day, you should turn in at least one makeup assignment as well as the current assignment each day until you are caught up. If you are absent the day before a test, you will take the test on the scheduled date with the rest of the class. If you are absent on a test day, you must make up the test within five school days. When you make up a quiz or test, you must leave your electronic devices with me. All work must be turned in before the final exam is taken.

**Class Participation:** You will be called upon at random; discussion is encouraged when concepts are not understood. Be willing to share your ideas with others and to support your reasoning to help each other understand new ways to solve problems. In other words, participate fully in all class activities.

**Study Island:** Students should expect at least one assignment on Study Island a week. Students may trade in blue ribbons for rewards. A blue ribbon is awarded when a student answers 76% of the questions correctly. A minimum of ten questions must be completed.

*1 blue ribbon = a piece of candy*

*3 blue ribbons = a homework pass*

*5 blue ribbons = 20 bonus points*

## **Grading Policy/Assessment**

**Grade Distribution:** Two primary kinds of grades are earned in this class.

- *Daily Assignments* (40%) – These grades you achieve in process of learning class material (including class discussions, class work, homework, notebook checks, exit slips, and vocabulary assignments).
- *Tests/Quizzes* (60%) – These are grades you achieve that show knowledge and mastery of material. Quizzes will be given periodically. Tests will be given at the end of each unit. Unit tests make up a large portion of the trimester grade.

20% of the final trimester grade will be determined by the final exam.

**Extra Credit:** Extra credit can be obtained by working problems on the board or creating a digital video in which the student teaches the viewer about a concept covered in class. For example, the video could teach the viewer how to use right triangle trigonometry to find the missing side of a right triangle. The topic must be teacher approved. The video must be accurate and appropriate. Students must be able to prove that they made the video. No credit will be awarded for plagiarism. Videos may be emailed or iMessaged to me at ([holly.mccarty@anderson.kyschools.us](mailto:holly.mccarty@anderson.kyschools.us)) or posted on YouTube. Videos must be emailed to me before the day of the final exam. Students may earn up to 10 extra credit points for each video. Two students may split the extra credit if they make a video together

## **Course Procedures**

**Course Format:** Students are expected to be in their seats working on the bell ringer when the tardy bell sounds. The bell ringer may cover automaticity, review, or ACT questions. Each class lesson will consist of notes, practicing new skills, participating in class activities, and correcting homework. Students may use two hall passes per week. Students are not allowed to congregate at the door during the last 5 minutes of class. Students must remain seated until the dismissal bell sounds. In addition, students are expected to listen to the morning and afternoon announcements. If a student is disruptive during the announcements, a discipline referral will be issued.

**Extra Help:** Get extra help when you need it. I am usually available after school on Mondays through Thursday from 3:10 p.m. – 3:30 p.m. ESS is offered after school. ESS times and locations will be posted in the classroom.

## ***Apps that will be used in class:***

- MyHomework
- Infinite Campus
  - Username: Student id number
  - Password: first initial last initial (lowercase) birthday (MMDDYY) ex). js032598
  - District Code for the app: WNSMPW
- QR Code Scanner

**Classroom Rules:**

1. Be in your assigned seat (with materials) *ready to work* when the tardy bell rings.
2. Listen when the teacher is speaking.  
*If you have a comment or question, raise your hand until called upon.*
3. Class participation is required.
4. Respect all property. (School property, personal property, and other's property)  
*DO NOT sit at my desk or assume that what's mine is yours.*
5. Be respectful in word and action.  
*Do not talk out of turn or use curse words. Stay awake, keep your head off your desk, and be quiet during announcements.*
6. Respect all ideas given in class.  
Do not criticize anyone's ideas or thoughts.
7. ALL school rules apply in class.  
*This includes the dress code, the restriction on electronic devices, the tardy policy, etc.*

**Classroom Expectations:**

- Come to class ready to learn.
- Be responsible for your work. Bring supplies and work every day.
- EVERY student is expected to contribute to the class.
- Work quietly. If you finish all of your assigned work early, you may: a) read independently b) work on extra credit c) work on an assignment for another class d) write e) draw. DO NOT TALK OR DISTURB OTHERS.
- Seek additional help if a topic seems difficult or requires more explanation.
- Hall passes are a privilege. Abuse it and you lose it. Students are given two hall passes a week. You must leave your cell phone with me when leaving the classroom.
- Food and drink are allowed as long as you don't leave a mess, and large drinks (like McDonald's Sweet Tea) are not allowed.

\*Each policy may be modified if the need arises during the course of the trimester/year.

**Personal Statement**

- Solving problems involves asking questions and taking risks.
- Good students seek help sooner than later.
- Try all problems on an assignment. Do not stop at the first one you do not understand. "If you don't know how to solve a problem, do what you know how to do." In other words, "TRY SOMETHING."
- Bring a positive attitude.
- Be proactive about studying. Use outside resources such as textbooks, other math teacher, peers, older siblings, and websites. Any and all of these strategies can help you understand the concepts we will be studying more thoroughly.

\*Each policy may be modified if the need arises during the course of the trimester/year.

**Contact Information:**

School telephone/voice mail: (502)839-5118

Best time to reach me directly: 4<sup>th</sup> period 12:46 – 1:55

School e-mail address: [Holly.McCarty@anderson.kyschools.us](mailto:Holly.McCarty@anderson.kyschools.us)

Website: <http://www.anderson.kyschools.us/HollyMcCarty.aspx>

## Math Resources – For Parents and Students

Does your child need some extra help and examples with a specific math topic? The following websites may help:

- \*[www.khanacademy.org](http://www.khanacademy.org) – You have to create an account, but it's free. There are short videos (boring but good) on every math topic imaginable.
- \*[www.purplemath.com](http://www.purplemath.com) – Algebra lessons over a ton of topics; includes videos and written examples
- \*[www.freemathhelp.com](http://www.freemathhelp.com) – text and video lessons on a variety of math topics. You must register, but it's free
- \*[www.mathisfun.com](http://www.mathisfun.com) – extra practice and instruction on Pre-Algebra and Algebra topics. Also includes a tutoring forum, puzzles and teaching games.
- \*[www.brightstorm.com](http://www.brightstorm.com) – video lessons for Algebra through Calculus topics. It also includes ACT prep.
- \*[www.math-play.com](http://www.math-play.com) – games on a variety of topics. Great extra practice!

Here are some apps that may also be useful:

- \*Math Ref – includes helpful formulas, figures, tips, and examples of equations and concepts. It also includes example problems and solutions (\$0.99)
- \*Wolfram Alpha – a computational knowledge engine (not just math) that will give solutions, graphs, and explanations. (\$2.99)
- \*GeometrIQ – a Geometry picture game over common topics. It's fun! (free)
- \*DragonBox – practice with solving equations in a form of a fun game (\$5.99 – and worth it)
- \*Math Sprint – geared toward younger kids but helps with multiplication and mental math. (free)

Is your child ready to prepare for the ACT or PLAN test? Here are some study options

- \*[www.freerice.com](http://www.freerice.com) – ACT prep; not all is math but some is
- \*PLAN Test: There are sample test questions at the bottom of the page.  
<http://www.act.org/planstudent/tests/>
- \*ACT Test: There are sample questions for each subject area to the left side of the page.  
<http://www.actstudent.org/sampletest/>
- \*COMPASS Test: <http://www.act.org/compass/sample/>
- \*ACT Practice Test online: <http://www.4tests.com/exams/examdetail.asp?eid=13>
- \*ACT Practice and Tutorial: Create an account and then work through a tutorial before you work practice questions. <https://www.number2.com/>
- \*\*\*Note – If your child does not know their multiplication facts, please find time to make sure they memorize these. Flashcards and apps (just search for multiplication facts) are both good options. It's tough to learn Algebra and Geometry without strong multiplication and division skills.

## **Mrs. McCarty's Pre-AP Pre-Calculus B Syllabus Signature Sheet 2016-17**

Signature(s): Discuss this course and behavior syllabus with your parent(s) or guardian(s). Please sign and return the last page to me by **(Friday, February 24<sup>th</sup>, 2017)**. I am looking forward to working with you this year.

I, \_\_\_\_\_ (Student), have read, understand, and accept the Pre-AP Pre-Calculus syllabus and course expectations.

I, \_\_\_\_\_ (Parent/Guardian), have read, understand, and accept the Pre-AP Pre-Calculus syllabus and course expectations.

\_\_\_\_\_  
(Student Signature)

\_\_\_\_\_  
(Parent/Guardian Signature)

**Parents: Please answer the following questions.**

Do you access to parent portal?      ☐ Yes      ☐ No

What is your email address? \_\_\_\_\_

What is your phone number? \_\_\_\_\_