

# AP Calculus AB

Instructor: Mr. Shawn Moore

Room: 123

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**Course Information:** The purpose of this class is to provide an application-based and conceptually relevant mathematics experience that will better prepare students for collegiate-level and career-applicable mathematics experiences.

This course is roughly equivalent to material covered in a traditional collegiate-level calculus course. The course content is outlined by the College Board and is an approved Advanced Placement (AP) Course. Students may elect to take the AP Test in May in an effort to receive college credit.

- Unit 1: Limits and Continuity
- Unit 2: Differentiation-Part 1
- Unit 3: Differentiation-Part 2
- Unit 4: Contextual Applications of Differentiation
- Unit 5: Analytic Applications of Differentiation
- Unit 6: Integration
- Unit 7: Differential Equations
- Unit 8: Applications of Integration

**Necessary Supplies:**

1. Pencil (Work will not be accepted in pen).
2. Checking Pens (Red, Green, Orange, etc.)
3. Colored Pencils (I have group sets, but you might want your own).
4. 2"-3" Binder with 5 Divider Tabs
5. Graph Paper Composition Book (They have them at Staples, Office Max, etc.)
6. TI n-Spire Calculator

Students will need to bring these supplies to class on a daily basis, along with any homework assigned the previous night. They should also bring their textbooks and agendas to class daily. Be sure to check the board to make sure you have everything you need for the day!

**Behavior Expectations:** Students are expected to be in their assigned seat when the bell rings. Students are held accountable for their actions, and should come to class ready to participate actively and give their best effort each day. Students are expected to be respectful to the teacher and to each other. This includes avoiding unnecessary disruptions that affect the learning environment of other students. The same expectations apply for me as well. You should feel respected, safe, and a part of an environment that will help you be successful. I am your biggest "cheerleader"- if you need me to help you in any way to be successful in this class, please don't hesitate to ask! Additionally, ALL Warren Consolidated Schools and MMSTC rules and policies apply!

**Grading:** Grades will be based on homework, projects, activities, and assessments. Student grades will be weighted according to the following criteria: 80% Assessments (Quizzes, Tests, Mini-Quizzes, Performance Tasks), 10% Activities (Investigation/Inquiry Activities, Mini-Projects, Labs, etc.), and 10% Assignments (Daily Homework/Practice)

**Binders:** Students are required to maintain a 2-3 inch binder with all of the important materials for this class. Each binder should have 5 divider tabs labeled: Resources, Bellringers, Notes, Assessments, and Other. Each unit will include a binder check. Students will be provided with a 'course pack' of notes that they are responsible for completing during instruction, among other materials.

**Assignments:** While every effort is made to give time in class to work on assignments, you may not always finish. Work that is not finished in class becomes homework (even some Fridays!). In this course, daily practice homework will be graded using a 3+2 point system-each assignment totaling 5 points. 3 points will be awarded for having the assignment complete, with all work shown, on the due date. The remaining two points will be awarded for correcting incorrect problems, with work included. Assignments will be due by the day after it is checked.

**Late/Absent Homework Policy:** If you are absent, please make sure to check the absent folders or the website for your missed work. You will have one day for every day that you are absent to turn your work in to me on time. For instance, if you are absent on Monday and Tuesday, you have Wednesday and Thursday to make up the work, meaning that the assignments are due on Friday. Late homework will be accepted up to 3 days late for a deduction of 15% for each day late. **HOWEVER**, you will be responsible for correcting your answers if you have a late assignment.

**Breakout Discussions/Mini-Quizzes:** Breakout discussions will be given for each section of material and can be found in Schoology. It consists of a performance task that will be completed to lead into the section. Your initial post (answers uploaded to the questions) is required by the beginning of class for that particular lecture (will be announced and in lesson plans on website). Then, you will provide **two respectful and substantive** responses ("I agree" or "I disagree" will not get you full credit. You need to explain **WHY** you agree or disagree with your group member's responses). **THEN**, as a group, you must come to a consensus on one set of answers for each Breakout Discussion and post them. I will select one breakout task from each week and score it as a mini-quiz.

**Projects/Performance Tasks:** In this class, projects may be assigned that require you to **APPLY** the concepts that we have covered in class in a real-world/practical application setting. Although this is done regularly in this course, these projects will require you to take your knowledge a step further. These are graded for accuracy, and are scored as a quiz grade.

**Tests:** Each unit has a test that covers all material covered in that unit. These tests will be announced at least one week in advance. Tests are worth 100 points. Tests are designed to emulate the AP Test. Tests will take two class periods, one for the free-response questions (FRQ's) and one for the multiple choice questions (MCQ's). Due to the nature of these assessments, grading will be adjusted to align with AP Cut Scores. Please note that Unit Tests **WILL BE CUMULATIVE**.

Extra help opportunities will be announced when each test is announced. A topics list will be distributed prior to the test in order to aid with studying.

**Test Corrections Policy:** Students may complete test questions after a test for point back per point missed, for a score **NOT TO EXCEED 70%**. Test corrections must be done by: fixing the incorrect problem and identifying the mistake made originally. Students will only be eligible for test corrections if they have all homework for the unit turned in. Test Corrections are **ONLY** available on **TESTS**.

**Extra Credit:** The CollegeBoard has created an online platform, **AP Classroom**, that is designed to provide students with extra preparation resources for the AP Test. Students can complete **Progress Checks** within the unit-which provide students with practice AP questions that align to each unit of study. Students who complete all of the units for each quarter with 80% proficiency will receive a 3% grade increase. Students who complete all of the units for each quarter with 65% proficiency will receive a 2% grade increase. Students who complete all of the units for each quarter with less than 65% proficiency will receive a 1% grade increase.

**Studying for Math:** As a math teacher, one of the most common excuses that students give for not studying for a math test is that "there isn't a way to study". The best way to study for a math test is to continue doing additional practice problems, and asking for help when you get stuck. There are many great resources available for additional study materials.

(THIS PAGE GETS RETURNED. THE REST OF THE SYLLABUS GOES IN YOUR BINDER!)

Please discuss the information and procedures for MMSTC Calculus and Analytic Geometry with your child. I encourage you to contact me with any questions or concerns regarding this class at [smoore@wcskids.net](mailto:smoore@wcskids.net) You can also check the daily agenda and class news at [mooremathscience.weebly.com](http://mooremathscience.weebly.com)

Please sign below indicating that you have read and understand the procedures and expectations for this class. I look forward to working with you and your child for a rewarding and educational class.

Section \_\_\_\_\_

Student's Name (Please Print) \_\_\_\_\_

Student's Signature \_\_\_\_\_

Parent's Name (Please Print) \_\_\_\_\_

Parent's Signature \_\_\_\_\_

Parent E-Mail \_\_\_\_\_