

MS. PRIOR
APRIOR@SHREWSBURY.K12.MA.US
ROOM A206 EXT. 2105

COURSE: AP CALCULUS BC

Text: Calculus: Early Transcendentals Single Variable, 8th ed.
Howard Anton/ Wiley Publishing House

Replacement Cost: \$110.00 (each)

Expectations for Student Learning:

Academic Expectations

1. Apply critical thinking to solve problems.
2. Apply creativity to formulate work and express themselves in a variety of ways.
3. Exhibit effective communication skills.
4. Access, analyze and demonstrate an appropriate and varied use of information literacy and technology skills.

Social Expectations

6. Demonstrate personal responsibility.
7. Show respect for all individuals through collaborative and cooperative opportunities.

Civic Expectations

8. Exhibit a commitment to community involvement.

COURSE DESCRIPTION:

Students are expected to take responsibility for their own learning, as the course is designed to be a transition from high school to college curriculum.

A firm foundation in calculus is necessary for pursuing careers in science, mathematics, business, and some social sciences. AP Calculus BC should provide the building materials for success on the advanced placement exam, thus enable those students who successfully complete this course to begin their college careers on firmer footing. In order to have a successful year students must understand that calculus will involve a great deal of their time and energy during the year and in preparation for the AP exam. Topics to be studied include polynomial, trigonometric, logarithmic, and exponential functions and their graphs; polar and parametric curves; limits; differentiation; integration; applications of each of these; definite integrals; basic and advanced techniques of integration; series.

THE AP EXAM:

This Advanced Placement course is designed for the student who has excelled in Mathematics and wants to do advanced work that will prepare him/her to take the AP Calculus BC exam. **THIS AP COURSE REQUIRES EXTENSIVE WORK AS WELL AS A COMMITMENT TO TAKE THE AP EXAM WHEN IT IS OFFERED IN MAY.**

MATERIALS:

- ✓ Math Binder
- ✓ PENCILS and erasers
- ✓ Covered Textbooks *NO CLOTH COVERS*
- ✓ Student planner
- ✓ *Students must have his or her own graphing calculator (TI-83 or TI-84 recommended)*

CLASS WEBSITE

<https://sites.google.com/a/shrewsbury.k12.ma.us/prior/>



COURSE EXPECTATIONS:

Here's what you can expect your TEACHER to do:

- Give you notes and practice problems to reinforce and clarify what you learn from the book
- Facilitate review of homework
- Provide you with frequent assessments and consistent review, both to help you learn the material and to prepare you for the AP Exam
- Provide feedback on your performance
- ANSWER QUESTIONS
- Provide help after school at least two days per week (hours vary and are posted at the start of the week)

Here's what your teacher expects YOU to do:

- **Behave respectfully**, towards your classmates and me
- Listen and participate in class discussion, take good notes, and do all assignments to the best of your ability
- Spend *at least* 5-7 hours a week doing homework and reviewing on your own (more as necessary as we approach the exam)
- ASK QUESTIONS
- Come for extra help after school
- Take the AP Calculus BC Exam

SEMESTER GRADE:

Each quarter grade counts 40% and the semester exam counts 20% of the semester grade.

You will (usually) **EARN** your grades from

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|--|----------------------------|
| ✓ In-class tests (one per unit) | 70-100 points each |
| ✓ In-class quizzes (one per unit, in some units) | 40-60 points each |
| ✓ "Quick" Quizzes (usually 1 per week or so) | 5-15 points each |
| ✓ Gateway Quizzes (Pre-Calc, Limits, Derivatives, Integrals) | 20 points each |
| ✓ Free Response Questions | 9 points each |
| ✓ Writing Assignments | Varies |
| ✓ Participation and Mathematical Communication *See Rubric | Appx. 3% of semester grade |

Your quarter grade will be the percentage of points you earn out of the maximum possible points.

RE-WORKS:

*See "Re-work Info Sheet" (handed out separately)

- ✓ ONE re-work *per quarter* will be counted towards improving your quarter grade

HOWEVER, in order to earn these points back, you must take the test/quiz during the scheduled period.

MAKE-UP WORK:

- ✓ If you are absent (for any reason) the DAY BEFORE a quiz or test, you are still responsible for taking the quiz or test with the class AS SCHEDULED.
- ✓ **If you are absent the PERIOD of a quiz or test, you are responsible for making up the assessment IMMEDIATELY upon your return to school. However, you may NOT get credit for quiz/test corrections for any assessment that is not taken during the scheduled class period.**
- ✓ YOU are responsible for making arrangements regarding make-up assessments and work. Tests and quizzes may be made up by appointment after school or during a free period. Class notes missed may be borrowed from a fellow student.
- ✓ Cutting class, of course, results in a zero for any work done during the period.

LATE WORK: Late work may be accepted as follows:

Homework – NOT ACCEPTED LATE

Other Assignments- varies, and policy will be included in instructions

EXTRA HELP: Available after school with your teacher, as posted weekly. *ALSO, the solution manual and your teacher's solutions will usually be available in the classroom (A206) for you to use. You may work at the back table during any of your free periods during the day, provided (of course) that you do not disrupt the current class. Solutions DO NOT leave the room without the teacher's explicit permission!

A small request: The Teacher's Wish List

Donations of BOXES OF TISSUES would be greatly appreciated, as they are used quickly in our classrooms. Thank you!

An Important Note about Technology:

As part of this course, you will be expected to access the internet to view your view homework assignments, complete writing assignments, and participate in discussions, among other things. You should expect to use the internet on a daily basis. Of course, I understand that is not always possible every day (sports, work, family obligations, etc.); however, I expect you to be proactive and speak with me when you anticipate such a situation. I will do my best to work with you to come up with an alternative solution.

Additionally, you will notice that I will use various technologies as part of our class, including an iPad and iPhone. There will be some activities and assignments that will allow you the OPTION to use your own personal technology (including smartphones) both inside and outside of the classroom. I have a very strong expectation that, during these times, you will be using your devices appropriately and only for the activity or assignment at hand. Furthermore, I want to **strongly emphasize** that the use of any such device is completely OPTIONAL, and not having/using such a device will in no way impede your success in this class, nor will it impact your grade.

If you have any questions or concerns, please do not hesitate to speak with me.

-----Please complete and hand in the portion below-----

STUDENT NAME: _____

STUDENT SIGNATURE: _____

PARENT/ GUARDIAN NAME: _____

CONTACT INFORMATION (E-mail preferred):

PARENT/ GUARDIAN SIGNATURE: _____

DATE: _____