

syllabus 2019-2020

mt si high school

AP Calculus BC

Evaluation

Why take AP Calculus?

Calculus is a FUN, rigorous, college level, math class with several benefits:

- Calculus is the foundation for future study in most STEM fields.
- Calculus has clear links to and applications within physics, finance, engineering, and many other fields.
- Scoring a 4 or 5 on the AP Calculus BC exam can earn up to 5 math credits at most 4 year colleges. Its rigor will prepare you for more advanced math classes in many degrees.

General Course Topics

Heavy review of Calculus AB topics including:

- 1: Limits and Continuity
- 2: Derivatives
- 3: More About Derivatives
- 4: Applications of the Derivative
- 5: The Integral
- 6: Applications of the Integral

New BC material including:

- 7: Euler's method, arc length, improper integrals, integration by parts, etc.
- 8: Taylor and MacLaurin Series and tests for convergence/divergence
- 9: Calculus of parametrics and polar
- 10: Additional Practice for AP Exam

Instructor

Melanie Breitbach
Room 5207
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425-831-8161

Textbook

Calculus for the AP Course by Sullivan and Miranda

Calculators

A TI-84+ graphing calculator is required (talk to me if you already have a different model).

Grading Scale

The math department adheres to the standard Mt Si High School grading scale.

Course grade will be based on:

Tests:	65%
Daily Work:	15%
Final Exam:	20%

- * 2 Test Retakes will be offered with a 75% maximum score each semester. Students will be able to earn back a few points lost on each test through a designated test corrections procedure.
- * Quizzes are included in Daily Work as they are formative assessments.
- * Unless otherwise noted, all assignments are due the day after they are assigned. Students have 1 day for every day of an excused absence to turn in work that was assigned during the absence.
- * Students can turn homework in late on occasion but not a regular basis, since Calculus topics are extremely sequential. No late homework will be accepted after the day of the corresponding chapter test. A maximum of 2 late assignments can be turned in on any given day.
- * Finals each semester will be full-length practice AP exams (graded on AP scale).

No Extra Credit will be offered.

Grading

"A" students attend class regularly, turn in all work on-time, bring necessary materials to class, take thorough notes, manage time effectively, participate in class discussions, come for extra help as needed, and consistently demonstrate mastery of the content through assessments.

Tentative Pacing Guide for AP Calculus BC

<i>September</i>	Identify weak AB areas Review and assess Chapter 1 Review, complete, and assess Chapters 2-3
<i>October</i>	Review, complete and assess Chapters 4-6
<i>November</i>	Complete and assess Chapter 7
<i>December</i>	Begin Chapter 8
<i>January</i>	Complete and assess Chapter 8 Semester Final (AP Calculus AB exam)
<i>February</i>	Begin Chapter 9
<i>March</i>	Complete and assess Chapter 9 Review for AP Exam
<i>April</i>	Review for AP Exam Semester Final (AP Calculus BC exam)
<i>May</i>	AP Exam Final Projects
<i>June</i>	Final Projects

Additional notes from Ms. Breitbach:

- No drinks consumed in the classroom, except water (please bring a reusable bottle).
- Please avoid all peanut and tree nut products as we have several allergies present.
- Be respectful. No cellphones or headphones during learning time. They are allowed (if used appropriately) during work time.
- One-to-one devices are a privilege and not to be used to distract from daily learning. Always honor professional courtesy in use of technology devices.
- Come to class on time.
- Students can earn back some homework points by coming for extra help right away.
- Students are required to monitor Schoology account. Be sure to set alerts (for texts or emails).
- All grades are kept updated regularly online for this class.

I teach periods 1, 2, and 3 only. I will often stay after school to help students. I am available every day before school, and most days I will also be available during both lunches. Please contact me at any time with questions:

Ms. Breitbach
(425) 831-8161
breitbachm@svsd410.org or through Schoology