

### COMMUNITY HIGH SCHOOL

## CALCULUS SYLLABUS 2019-20

<b>Course Name</b> Reference Text	<b>Calculus</b> Calculus Early Transcendentals, Ninth Edition, by Anton, Bivens & Davis
Instructor	Maneesha Mankad
Contact	mankadm@aaps.k12.mi.us
Website/Google Classroom Code	www.mathinspires.weebly.com/ trkhai
Meeting Times Office Hours	Block 5, Mon, Wed, Fri - Room 320 Mon: Lunch, Thu: 2:00 – 3:00 pm

#### **General Description**

Calculus is a two-semester course that covers the topics of a Calculus AB curriculum, the main categories being:

- Functions
- Limits
- Derivatives
- Integrals

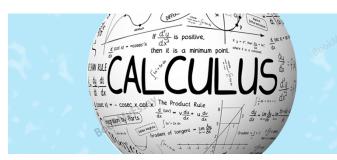
Students are encouraged to take the Calculus AB AP Exam in May, but must be committed to devote additional time to prepare during the months preceding the exam.

#### **Expectations**

- The teacher is expected to create a safe learning environment where all students can succeed.
- Students are expected to come to class prepared, develop a system of organization that works for them, actively participate, and seek additional help when needed.
- Students are expected to develop learning goals and work towards their attainment. Academic honesty is expected on all work.
- Students are expected to be respectful of others and develop strong problem solving, listening, and communication skills.

#### Attendance

Attendance is vital for a successful educational experience. Coming in late is impolite and disruptive to the learning environment. When a student must be absent or tardy, it is their responsibility to obtain missed work or notes.



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#### **Unverified Absences/Tardies**

Teachers are not required to give make up work when absences are unexcused.

#### Verified Absences

Scheduling make-ups for assessments is the student's responsibility must be completed within 3 days by appointment. There will be no multiple-choice questions on makeups. All questions must be answered in the free response form. Please see me if you have questions about this policy.

#### Requirement for all absences verified or unverified

- Please print a copy of the assignment that you missed in class from Google Classroom (Code: trkhai).
- Please watch the video for the lesson posted on Google Classroom and read the section of the book.
- Write down notes and questions you have and come for help during office hours.

<u>Grading Scale (Semester: Quarter 1 - 40%, Quarter 2 - 40%, Final - 20%)</u> The district guidelines require that 70% of the points must come from assessments. The CW and HW will be worth the additional 30% of points. At the end of the semester, each 9-week grade will count for 40% and the final exam will be 20%.

#### <u>CLASSWORK (Should be completed on the day assigned. Due on Test days)</u>

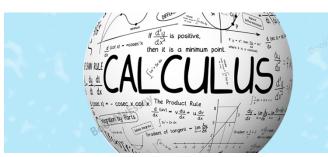
**Daily Warm Up:** At the beginning of each class, students are given warm up questions to complete. These questions may be review or a lead-in to the lesson. Differing methods of solution are shared and discussed.

**In Class Assignments:** Block scheduling allows for time to learn a new concept as well as working on challenging problems with peer and teacher support. It is essential that students utilize their time in class efficiently and complete this assignment.

**Group Competency- Test Review:** In each unit we set aside time for review through an assignment called the Group Competency. This assignment is like a practice test that gives students an opportunity to practice problems like the ones on the test with peer support. Student questions regarding lack of understanding should be answered as soon as they arise, not waiting until the day of the group competency.

#### HOMEWORK (HW is due in the next class):

Assignment sheets will be posted on Google Classroom for each unit and HW problems are always due in the next class. Homework will be graded for completion and presentation only. Students with questions from the previous assignment might have their questions answered by fellow "expert" students who will present the problems in a step-by-step manner and verbally explain the sequence and the rationale. This usually leads to great peer discussion about alternate representations and approaches to a particular problem.



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To receive full credit for an assignment, students must complete the **core** problems on time as well as the **more OR** the **soar problems and show all work**. Clearly **label assignment number**, **book section, page and problems**. If an assignment is **late**, a point will be taken off and no credit will be given for any assignments turned in past the day of the Unit test.

#### **<u>Unit Tests</u>: (70% of quarter grade)**

At the end of each unit, a unit test will be given. All material on the test will be based on the assigned homework, classwork, and review given prior to the test date. Students who are absent the day of a test will take the makeup in the following 3 days (not during class). **Students absent for the test on the original date will not have the multiplechoice section.** These questions will now be free response. Students who are absent the class before a test will still take the test on the regularly scheduled day.

#### **Test Corrections**

Any student not satisfied with a test score may complete corrections, see the teacher to go over mistakes and relearn the material to earn a few additional points.

#### Final Exam: (20% of semester grade)

The final exam is intended to recap the major concepts covered throughout the entire course. We will spend time reviewing for these exams as they get near.

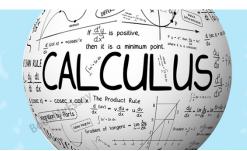
#### Study Group (Math Buddies)

I encourage students to keep the phone number of two classmates on hand for assistance on their homework. University research indicates that math students who worked regularly with a study group performed at a significantly higher level than those who did not. Study groups are an excellent way to get help and to reinforce what you know. But be warned: **Copying does not equal Collaboration**. You may learn in groups, but you will take assessments on your own.

#### Academic Integrity & Honesty

### It is imperative that students understand that academic honesty is expected on all assignments\*. Students will receive a "zero" if caught cheating on an assignment, quiz or test.

Any quiz, test, project or other classwork turned in under your name, should be your own original work. Anything you turn in should not be work that has previously been submitted in another class by you or by any other student in any other class. Further, if you assist or collaborate in any time of academic dishonesty including giving, selling or loaning your work to someone who uses it to plagiarize you are colluding. If you create or facilitate a shared file, drop box or database where students can access the work of others without proper attribution, regardless of your intent, you may be subject to consequences as outlined for this course and in the Student Rights & Responsibilities Guide.



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Consequences for Cheating, Plagiarism, including collusion, can also result in Level 1 or 2 behavior consequences as outlined in the 2015-16 Student Rights & Responsibilities Guide: <u>http://www.a2schools.org/Page/7363</u>

#### **Cell Phones and Calculators**

Technology will be used in the classroom for educational purposes only. Please note, cell phones will **NOT** be allowed **in place of graphing calculators**. Cell Phones are not allowed on any testing (standardized or otherwise), therefore it is imperative that students learn to use their own graphing calculators effectively to maximize their own learning and make use of time efficiently on testing.

<u>Students will be asked to turn off and put away all technology during class time.</u> <u>Students will lose the privilege</u> <u>to use technology in class if they cannot use it responsibly.</u>

#### **Recommended Materials**

Students should come to class prepared daily with the following:

- A three-ring binder with dividers or another organization system for quick access to the following: warm ups, class assignments, class notes, homework, handouts for reference materials and tests.
- Use of Graphing Calculator: Students are responsible for their own graphing calculators (TI -84 Plus, TI 84 Plus Silver Edition, TI 84 Plus CE recommended) and may sign one out from the main office if needed. I have a few graphing calculators in class that students may borrow during class in exchange for their student ID. The graphing calculator will be used regularly in class as a learning tool so that students can make calculations using tedious numbers, support their work graphically, make conjectures regarding the behavior of functions among other topics thus allowing students to view problems in a variety of ways.

#### **Teaching Philosophy:**

This course will focus not only on learning the necessary skills and operations but also on the mathematical theories and implications of the concepts. You will learn critical reading and thinking skills, how to express yourself both verbally and in writing, and how to manage your time and learn math effectively. This will NOT be a "watch what I do, do what I do" course. You will be actively involved in creating your own knowledge. Throughout the year, students will develop skills that will be valuable their entire lives: self-discipline, self-confidence, rigorous habits of mind, problem solving skills, and a love of learning. At the end of the course, the student will have the option to take the AP® examination, will be well-prepared for college-level mathematics, will be able to think and learn for themselves and will have developed the ability to answer the questions that stem from their own curiosity.

Please provide your contact information and acknowledge that you have read the syllabus by completing the survey **"Calculus Syllabus and Contact Information Survey"** in google classroom (**Class Code: trkhai**).

I believe that working together as a team (students, teachers and family members) will ensure the success of students in Calculus. I look forward to working with you this year! Maneesha Mankad