

# Calculus

Fall 2019

Mr. McElrath

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**Available:**

Before School  
8<sup>th</sup> Hour  
After School  
By Appointment

**Expectations:**

- Be Respectful
- Be on time (to class and with work)
- Be Prepared
- Ask Questions

Consequences for not meeting classroom expectations may result in a warning, detention, call home and / or administrative referral.

**Rules:**

- Use technology for educational purposes
- Stay in assigned seat until bell

**Supplies:**

Binder with loose leaf paper OR notebook, pencil/pen, textbook, agenda book, and graphing calculator must be brought to class daily unless otherwise instructed.

**Grading:** During the semester, I'll grade your skills assessments using standards-based grading using the rubric below. Each learning target (see appendix A) will receive a score using the decaying average grading calculation, which puts the weight on the most recent assessment.

0-No Evidence	Level 1-Beginning	Level 2-Approaching	Level 3-Proficient	Level 4-Exceeds Expectations
Student did not provide enough evidence of learning. (Student must be reengaged in the learning process.)	Student provided simplistic evidence of learning with many errors and/or omissions.	Student provided simplistic evidence of learning with some errors and/or omissions.	Student independently provided both simple and complex evidence of learning with accuracy.	Student independently provided evidence of accurate learning, in-depth inferences, and interactions with concepts in ways that exceed what was taught.

Letter Grade	Final Average of Learning Targets
A Range	All 3's and 4's (no score of 2 or below)
B Range	2.67-2.99 average with no score of 1 in any learning target
C Range	2.33-2.66 average with no score of 1 in any learning target
D Range	2.0-2.32 average with no score of 1 in any learning target
F	A score of 1 in any learning target

A semester exam will be given at the end of the semester. Performance on the final may result in a double plus\*, plus, flat, minus, or double minus\*\* using a final scale or teacher discretion.

\*For example: double plus can result in a B increasing up to an A-.

\*\*For example: double minus can result in a B decreasing down to a C+.

### **Retake Assessments:**

Students will be able to retake any or all the learning targets from summative assessments. To retake a learning target, the student must talk to their teacher and create a plan to prepare for the retake. This plan should include elements from both of the following:

- 1) Show evidence of original learning from before the assessment (homework, reviews, etc.).
- 2) Show evidence of the re-learning after the assessment (corrected assessment, retake ticket, etc.).

The deadline to retake learning targets from summative assessments is prior to the next summative assessment. If circumstances require a longer retake timeline, a conference between the student and teacher should take place.

### **Absents:**

All absentees are responsible for arranging make-up work that they have missed. If a student misses a test or quiz, they have one day for every excused absence to make it up. It is the student's responsibility to make up any work or assessment that they missed while absent.

### **Advice for Learning and Studying Calculus:**

- *Don't Fall Behind:* New topics will build on material already covered. Keep up with the study materials and other assignments. "Cramming" won't cut it!
- *Focus your study:* The amount of information you will be expected to learn can sometimes seem overwhelming. It is essential to recognize those concepts and skills that are particularly important. Pay attention to what is emphasized in class.
- *Keep good notes:* During class, you will occasionally be given study guides, keep detailed notes on these study guides; they are designed to help you take notes. If there is not a study guide, you should keep clear and concise notes of definitions and examples given in class.
- *Be prepared for class:* Read topics in the text before you come to class. Get a feel for the topic so that when it is taught, you can relate it to what you have read, it is like getting a head start.
- *Review after class:* A lot can be gained by taking a few minutes to review the day's lesson. Rework some of the examples and relate them to the study materials.
- *Do all study materials:* The best way to really learn a concept is by practicing it, these study materials are designed to give you the best practice.
- *Ask Questions:* If you are having trouble understanding a topic, make sure to ask questions. If there is not enough time in class to answer all your questions, see me on any of my free time. After you have finished your study materials, ask yourself "Do I really know what I just did?" If not, come see me for further explanation. Use your resources!

## **Appendix A:**

The following learning targets will be assessed throughout the school year.

### **Semester 1**

- LT1: I can evaluate limits numerically, graphically, and algebraically.
- LT2: I can analyze functions for intervals of continuity or points of discontinuity.
- LT3: I can use the limit definition of a derivative to find the derivative.
- LT4: I can estimate derivatives from tables or graphs.
- LT5: I can find the derivative of a variety of different functions.
- LT6: I can use derivatives to analyze the behavior of functions.
- LT7: I can calculate derivatives using the product, quotient, and chain rule.
- LT8: I can calculate the derivative using implicit differentiation
- LT9: I can calculate the derivative of an inverse function.
- LT10: I can solve related rates problems.
- LT11: I can apply differentiation to solve optimization problems.

### **Semester 2**

- LT12: I can estimate areas of shapes by using the Riemann Sum and Trapezoid Rule.
- LT13: I can solve definite and indefinite integrals.
- LT14: I can find the average value by using integration techniques.
- LT16: I can analyze functions defined by an integral.
- LT17: I can interpret, create, and solve differential equations from problems in context.
- LT18: I can integrate by utilizing the substitution method.
- LT19: I can integrate by utilizing the separation of variables method.
- LT20: I can find the area of a shape using integration techniques.
- LT21: I can find the volume of an object using integration techniques.
- LT22: I can use L'Hopitals Rule to find a limit.

## **Appendix B:**

The following are schoolwide behavioral learning targets that will be emphasized and expected during the year.

### **United**

- A. S1: Students will communicate and collaborate with others to accomplish tasks and develop solutions to problems and opportunities.
  - A.S1.a. Learning Target: I can effectively work collaboratively with others.
  - A.S1.b. Learning Target: I can communicate appropriate thoughts and feelings using verbal and non-verbal language.

### **Respectful**

- B. S1: Students will identify and apply employability skills.
  - B.S1.a. Learning Target: I can identify and demonstrate positive work behaviors and personal qualities needed to be employable.
  - B.S1.b. Learning Target: I can evaluate how self-discipline, self-worth, positive attitude, and integrity displayed in a situation affects success.
  - B.S1.c. Learning Target: I can manage my roles in school responsibly to balance them with other life roles and responsibilities.

- B. S2: Students will use technology appropriately to further their learning.
  - B.S2.a. Learning Target: I can use technology to communicate respectfully with others.
  - B.S2.b. Learning Target: I can use technology to promote my academic success by creating unique and original work, citing my sources.
  - B.S2.c. Learning Target: I can use technology to promote my academic success by using online resources that support my learning and avoid technology that may distract from learning.

**Accountable**

- C. S1: Students will formulate and defend judgements and decisions by employing critical thinking
  - C.S1.a. Learning Target: I can defend an idea, judgement, or argument with evidence and rationale.
  - C. S1.b. Learning Target: I can formulate an idea and defend it using available information and resources, personal knowledge, and my experience.
- C .S2: Students will approach new learning with flexibility and accountability.
  - C.S2.a. Learning Target: I can be flexible and adaptable when faced with a challenge.
  - C.S2.b. Learning Target: I can approach new learning with a growth mindset.

Dear Parents(s) / Guardian,

Attached you will find a copy of the expected behaviors and the consequences of disobedience for your son/daughter's Calculus class. Please take a few minutes to go through these expectations with your child and encourage them that they need to be followed to experience success in this class. Please sign on the lines below along with your son/daughter and return by Friday, September 6<sup>th</sup>. If you have any questions or comments throughout the school year, feel free to contact me at 920-779-7900 ext. 17118 or email me at [kevinmcelrath@hasd.org](mailto:kevinmcelrath@hasd.org). A positive relationship between the school and home is an important contributor to a student's achievement in school. I look forward to working with your child. Sincerely,

Mr. McElrath

**AS A STUDENT, I AGREE TO** follow the guidelines as stated in the Student Handbook and Mr. McElrath's expectations.

PRINT NAME: \_\_\_\_\_

STUDENT SIGNATURE: \_\_\_\_\_

**AS A PARENT, I AGREE TO:**

- Insist on regular attendance.
- Reinforce the guidelines of the class and the school.
- Provide the time and place for my teenager to study.
- Encourage my teenager to ask questions and get help when needed.

PARENT SIGNATURE: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_