**Calculus Course Syllabus**

**School Year 2018-2019**

**Instructor** Mrs. Ketcham

**E-mail address** liz.ketcham@hanoverhorton.org

**Course Length** 1 year (2 semesters)

**Credits**  1 credit

**Textbook** *Calculus of a Single Variable, 8th Edition*

**Cost of book:** $70.00

**Calculator** TI-84 Highly Recommended

**Course Description** The purpose of this course is to introduce the accelerated mathematics students to college level mathematics. In this course, we will cover functions limits, derivatives and integration, as well as differential equations. We will also focus on applications of derivatives and integrals, as well as drawing 3-D graphs. Students will have the opportunity to pay for and take the AP Calculus exam at the end of the course. If passed, students will receive college credit.

**Prerequisite**: Pre-Calculus

**Course Content** The following chapters may be covered:

Chapter P: Preparation for Calculus

Chapter 1: Limits and Their Properties

Chapter 2: Differentiation

Chapter 3: Applications of Differentiation

Chapter 4: Integration

Chapter 5: Logarithmic, Exponential, and Other Transcendental Functions

Chapter 6: Differential Equations

Chapter 7: Applications of Integration

**Materials** Assigned textbook

Folder or binder

Notebook

lined paper

Pencils

Erasers

TI-84 Calculator is HIGHLY RECOMMENDED

**PROCEDURES**

1. Come to class prepared
   1. Bring all materials: books, pencil, erasers, calculators
   2. Use the bathroom before coming to class
2. Be respectful
   1. Treat others the way you would like to be treated
   2. Do not touch/take other people’s belongings
   3. Speak politely and in a polite tone
   4. Respect the classroom and its materials
   5. Clean up after yourself
3. Be productive
   1. Give 100% effort to work hard every day.
   2. Use class time wisely
   3. Complete your own work – DO NOT CHEAT \*\*\*cheating results in automatic failure\*\*\*
   4. Work on designated assignments
   5. Bring book to read if you finish early
   6. Help others who may be struggling
4. Eating and drinking is allowed if and only if
   1. You clean up your mess
   2. You do not make a distraction with your food or drink
   3. You bring small amounts
      1. No large bags to pass around the room
   4. If it becomes a distraction or the room is left a mess it will be banned
5. Cell Phones
   1. Not to be used during class time
      1. Will be taken away if caught using during instruction
      2. If there is an activity that requires technology, I will inform students before hand
   2. Phones are not to be used for calculators during any test or quiz.
      1. If a phone is out during this time it will be confiscated and turned into the office for you to pick up at the end of the day
      2. If a phone is out during a test or quiz, the test or quiz will be confiscated and a zero will be put in the grade book.
      3. Students will be required to put phones under their desk or on my desk where I can see them before they receive a test or quiz
   3. Students will be allowed to listen to music during independent work time
      1. If music becomes a distraction to any students it will be shut off
      2. If student is found playing with their phone rather than working on assignment, it will be taken away and can be picked up at the end of the day
      3. The teacher has the right to take the music device if student is not willing to follow rules

**Homework Policy:** Homework will be assigned after every lesson. Homework is due at the very beginning of the next class period. If the homework is not out on the desk at the beginning of the period, it will be considered not done and result in a zero for that grade. If a student is absent, they will have an additional day to complete the assignment. It is the responsibility of the student to get the assignment. Homework is to be completed on the assigned template, but I will accept assignments on other paper from absent students.

Homework is practice and is not graded right and wrong, the homework grade is based on how much was completed. Homework will not be checked every day, but rather spontaneously a few times a week without warning. A student that tries and completes all their homework will get a 100% for their homework grade. I will show all the answers at the beginning of the class and answer any questions students may have. After every homework assignment, students will get classwork problems to try, which are graded right and wrong.

**Grading Scale** A93-100%

A- 90-92%

B+ 87-89%

B 83-86%

B- 80-82%

C+ 77-79%

C 73-76%

C- 70-72%

D+ 67-69%

D 63-66%

D- 60-62%

E Below 60%

**Grades and grading**

In this class you will have 5 categories that you will be graded on: 1) Homework, 2) Classwork, 3) Quizzes, 4) Tests, and 5) Note-Taking Guides and Project tasks.  These components are the makeup of the Semester grades.

1. **Homework** – You will have an assignment after every lesson. There will be several homework assignments every week. These are always due at the beginning of the next class period. This makes up 5% of the quarter grade.

**Handing in assignments** – At the beginning of class I will walk around and check to see if you completed the assignment. I will not do this every day, but rather only a couple times a week. When I walk around and check the homework, I will look for work. If there are just answers written and no work done, I will not give any credit for that assignment. I expect to see a good attempt. Homework is an attempt grade not an accuracy grade.  This means that when you come into class with the assignment done you will be able to correct your own paper with a pen. It does not benefit any student to use aps to get answers or copy someone else’s work. I will have all the answers projected on the screen, if you make a mistake I would like you to ask questions and get clarification. Once I complete answering all the questions, there will be a few problems to try in class that will be graded right and wrong.

1. **Classwork Problems** – You will have 2 – 5 problems based directly off the homework assignment. This classwork is collected and graded right and wrong. All work should be shown for full credit. This makes up 20% of the quarter grade.

1. **Quizzes** - There will be several short quizzes through the chapter. Expect to 1 or 2 quizzes every week. If you are absent for a quiz, it is your responsibility to find a time to make up the quiz. It will go into grade book as a zero if you do not complete the quiz. Some quizzes will be a short 5-10 minute quiz, while others are longer.  Those days you are absent, you may want to get notes from another student. There are also quizzes given periodically that are a little more extensive.  These will be worth 25% of the quarter grade.

1. **Tests –** These are given at the end of every chapter.  These are worth 35% of the quarter grade.

1. **Note-Taking Guides and Project Tasks –** Students are suggested to get a 3-ring binder that is about 1.5-2 inches thick.  This will help keep them organized.  The Note-Taking Guide is assigned to you at a cost of $5.00. The note-taking guide should be completed as we go through the lesson. This will be graded after every chapter. Tasks are activities that help students dig deeper into problem solving skills and make the connections between the math they already know and new concepts that are being taught. Note-taking guides and projects will make up 10% of the quarter grade.

**POLICY CHANGES:**

Please understand that as the year progresses there may be a need to change the weighting of the categories due to advances in technology and need for me to properly assess all students to assure that they are understanding the concepts. A notification will be sent home if the category weights do get changed.

**CHEATING:**

First offense: a grade of zero on the assignment/quiz/test, teacher contacts parent, and the student is placed on probationary status.

Second offense- parent conference and loss of credit in class for the grading period.

**Tardy:**

1) Three tardies (under 10 minutes) per class will equal one unverified absence.

2) Tardies of more than 10 minutes shall be considered an unverified absence.

**\*\*Students will serve an in school suspension detention for every three tardies\*\***

Please understand that cell phones and other technology devices can be a huge distraction in the classroom. Students should not bring their cell phones to class. If a student has a cell phone in class, the cell phone needs to be turned off. If a cell phone is being used during instructional time, I will take the cell phone away from the student and follow the infraction plan listed in procedures. If a student argues or refuses to turn in their cell phone, they will be sent to the in-school suspension (ISS) room for the remainder of the class.

**Discipline Process –** If an expectation is not met than the student must be responsible for the choice that is made.  Consequences will be imposed for these actions.  A reasonable consequence is one that follows logically from the behavior.  Logical consequences are used to teach the student to choose between acceptable and unacceptable behavior.  If expectations are not met repeatedly, further actions will take place such as administration involvement, and/or detention**.**

If you agree to everything in this introduction, please fill out and return the next page to me by Monday August 27, 2018 for a 50 point homework grade. After Monday, a student may turn in this assignment for partial credit. If you have questions, please e-mail me so we can discuss them. If you care to leave me a message, you are welcome to use the space below. This syllabus tells me that you have had the opportunity to understand what I am expecting of your son/daughter.

**Student signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Parent signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Phone number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Email \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**