

### UNION GROVE HIGH SCHOOL Course Syllabus

Instructor: Ashleigh Eidson Room #: 326

Year: 2021-2022

Course Name and Code: AP Calculus

Textbook Used: Calculus of a Single Variable (Larson and Edwards)

Supplementary Texts or Special Materials: Graphing calculator-recommended TI-84 CE+

| Daily Materials: |                             |
|------------------|-----------------------------|
| Pencil           | 3 Ring Binder (recommended) |
| Notebook paper   | 8 Dividers (recommended)    |

#### **Course Description:**

This course will cover a wide variety of topics associated with limits, derivatives, indefinite integrals, and definite integrals. Through the course, students will be able to:

- Manipulate functions presented in multiple formats and understand the connections among these representations.
- Understand the meaning of the derivative in terms of a rate of change, and use derivatives to solve a variety of problems.
- Recognize the relationship between the derivative and the definite integral.
- Communicate mathematics both orally and in well-written sentences to explain solutions to problems.
- Model a written description of a physical situation with a function, a differential equation, or an integral.
- Use technology to help solve problems, experiment, analyze results, and verify conclusions.

### **Course Outline and Content:**

- Limits and Continuity
- Differentiation: Definition and Fundamental Properties
- Differentiation: Composite, Implicit, and Inverse Functions
- Contextual Applications of Differentiation

- Analytical Applications of Differentiation
- Integration of Accumulation of Change
- Differential Equations
- Applications of Integration

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*Classroom Rules and Discipline Procedures*: All students must adhere to the rules and expectations outlined in the Henry County Schools student handbook and the Union Grove High School student handbook addendum.

### Additional Class Information:

- No late work will be accepted.
- Chromebooks must be fully charged and in class every day. Students are expected to follow all Henry County handbook rules concerning technology.
- Tutoring is available daily during IF and can be scheduled at any time to best meet the needs of individual students. \**Please contact Mrs. Mavis Mayfield in the counseling office if you wish to schedule a parent conference.*

*Hall Pass Policy*: Students are required to utilize and display the standard issued UGHS pass at all times while out of the classroom, failure to do so will result in disciplinary consequences. Students are also required to fill out the Google form prior to leaving the classroom and document their return time on the same form. Teachers will not give out hall passes during the first ten minutes or last ten minutes of class. It is the teacher's discretion to allow or deny a hall pass request.

*Chromebook Policy:* It is an expectation for students to have their charged Chromebook with them every day. Failure to do so will be regarded as "not being prepared for class."

*Make-up Policy*: When a student is absent from class, he or she should check with Mrs. Eidson before or after class on the day of their return for missed work. Handouts will be available in the drawer in class upon return. The Henry County BOE make-up policy will be followed.

| Practice Work  | Assessment Tasks   | Semester Summative Assessment<br>Tasks |
|--|--|--|
| Such as quick checks,<br>quizzes, classwork,<br>homework | Such as constructed response<br>assessments, selected response<br>assessment, summative unit<br>assessments, culminating<br>performance tasks, projects. | Cumulative semester exam.              |
| Counts 40% of the grade.                                 | Counts 40% of the grade.   | Counts 20% of the grade.               |

Grading System:

*Cell Phone/Electronic Device Policy:* The cell phone/electronic device policy begins when students enter the designated classroom area. All students will place all cell phones/devices in

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the teacher assigned caddy. During this time, cell phones must be turned off. Additionally, all smart watches or other electronic devices connected to the phone must be caddied until the end of class. Cell phones/devices will remain caddied until the end of class. Students will NOT be allowed to take their phones/devices out of the room when they have a hall pass to the restroom, media center, etc. Students will be allowed to use cell phones/devices before first period, during lunch, and during class transition.

*On Time Policy:* In order to be considered "on time" to class, the student must be across the threshold of the classroom or designated classroom area by the end of the tardy bell.

**Unit Repair Plan:** As it is the goal of the mathematics department, our AP mathematics program and Union Grove High school to provide students rigorous, appropriate coursework that will result in college ready students, opportunities for unit repair have been structured in a framework that reduces the opportunities yearly throughout the mathematics sequence, thus at the AP level there are no unit repair opportunities.

*Exam Exemption:* To encourage and reward excellent attendance, each student may earn the right to exempt one (1) spring semester non-state required final exam. Each student must meet clear guidelines to qualify for this exemption. Please see our school website for all requirements and guidelines.

To acknowledge that both parent and student have read and understand all of the objectives, requirements, and expectations for the course AP Calculus taught by Mrs. Ashleigh Eidson, please use the link or QR code provided. This will also allow you to provide Mrs. Eidson with contact information to use throughout the year. <u>https://forms.gle/KYWYL7gRavqTLV8s8</u>

