AP CALCULUS AB 2020-21 David Yang Room 3302
Email: yangd@fultonschools.org Website: http://mryangteacher.weebly.com/ Text Reminders for Group AB Calc 2020-21

## Course Description

The objective of this class is to offer an instructional environment where every student has a full opportunity to learn, study, and make discoveries in the different areas of calculus. Focus for this semester will be on a review of functions and their graphs, an investigation of limits, and a rigorous study of derivatives and their applications. The students will be challenged to apply their knowledge to a number of real-life applications by working together on in-class group activities, and by individual efforts on homework assignments. The use of technology is a necessity, and graphing calculators will be frequently incorporated into the lessons.

## First Semester Units:

I . Chapter 1 sections $1-5$, ch 3 section 5
II. Chapter 2 sections 1-5
III. Chapter 3 sections 1-4, 6
IV. Various sections from ch 2, 3, and 8
V. Chapter 5 sections $1,3,4$, and 5
VI. Various sections from chapters $1-5$

| Limits and Their Properties | $(\sim 13$ days $)$ |
| :--- | :--- |
| Differentiation | $(\sim 15$ days $)$ |
| Applications of Differentiation | $(\sim 12$ days $)$ |
| Optimization, Related Rates, L'Hopital's Rule | $(\sim 9$ days $)$ |
| Exponential \& Logarithmic Functions | $(\sim 12$ days $)$ |
| Trigonometric Functions | $(\sim 13$ days $)$ |

*(will reference/cover Chapter P sections 1-3: Preparation for Calculus when needed over course of Semester)

## Second Semester Units:

I. Chapter 4, sections 1-6
II. Chapter 5, sections 2, 4, 5, 7

Chapter 6, sections 2, 3
III. Ch 7, sections 1, 2
IV. AP Exam Review

Antiderivatives/Integration
Integrals of Logs and Exponentials,
Slope Fields and Differential Equations
Area and Volume
(~ 17 days)
( $\sim 15$ days)
( $\sim 8$ days)
( $\sim 9$ days)
( $\sim 40$ days)

## GRADING

Students will earn numerical final grades for the course if they complete at least $80 \%$ of the course's summative assignments/assessments based on the following grading scale:

- A - 90 and Above
- B - 80-89
- $\mathrm{C}-70-79$
- F-69 and below
- I - Incomplete (If less than $80 \%$ of summative assignments/ assessments were completed)
- NG - No grade


## FORMATIVE GRADES

While formative assessment grades will be entered into the Infinite Campus platform, THEY WILL HAVE ZERO ( 0 ) weight and will not impact the student's course average.
(examples are Classwork assignments due before each assessment, checkpoints, and "Ticket Out the Doors" in order to gauge and monitor student learning).

## SUMMATIVE GRADES

Student grades will be calculated based upon the completion of eight summative assignments/assessments and a final exam (if applicable) using the following:

| Summative <br> Grades | Type | Weight |
| :---: | :---: | :---: |
| 1 | Chapter 1 Limits Test | 2 |
| 2 | 2.2-2.3 Derivative Quiz | 1 |
| 3 | 2.1-2.5 Derivative Test | 2 |
| 4 | 2.6 Related Rates Test | 2 |
| 5 | 3.1-3.2 Differentiation Applications Quiz | 1 |
| 6 | Ch. 3.1-3.7 Curve Sketching/Optimization Test | 2 |
| 7 | Ch. 5.1-5.5 Logarithm/Exponential Derivative Test | 2 |
| 8 | Trig Derivatives Quiz | 1 |
| $\mathbf{9}$ | Final exam* | $\mathbf{2}$ |

## FINAL EXAM EXEMPTION

Students will be required to complete all eight (8) summative assignments/assessments AND be passing the class to exempt the final exam.

## RETAKE/REDO/RECOVER

If a student receives an incomplete or a failing grade (below 70\%) on any of the eight (8) summative assignments/assessments, they must do the following:

- Initiate a request for remediation with their teacher within one week (five school days) of the assignment/assessment
- Schedule the recovery opportunity upon completion of the remediation

Upon successful completion of the retake/redo/recovery process, the original failing grade will be replaced with a grade of up to $70 \%$.

There is a district NO ZERO policy in place but an 'I' for incomplete will be entered into Infinite Campus to communicate to students and parents that an assignment/assessment is missing.

## ATTENDANCE

Students will be marked present for daily course attendance if the student performs one of the following actions: participates in the synchronous lesson or is logged into the class and has direct contact with the teacher or submits an assignment in the Teams platform. If a student cannot attend "live" due to connectivity or technology issues, the student should reach out through Teams to log into the class, get information or view what was missed, and contact the teacher to alert of
presence. Due to Infinite Campus attendance settings, if this happens, the teacher and/or attendance office will correct the student's attendance within 48 hours. It is the student's responsibility to reach out to the teacher to correct attendance before the end of the day.

## HONOR CODE

URL provides unique challenges to teachers and students with regards to the Honor Code. However, cheating and plagiarism will not be tolerated. Cheating is defined as "the giving or receiving, in any form, information relating to a gradable experience." Cheating is any act whose intent is to gain reward or success that is not honestly earned. Plagiarism is the presentation of materials as ones' own effort when it is actually the work of another. Violations of the Honor Code will result in a referral to the proper administrator for disciplinary action pursuant to Rule 9 in the FCS Student Code of Conduct and Discipline Handbook.

## COMMUNICATION

Students: Every student should check their FCS email EVERYDAY for announcements and communication. Teachers will communicate with students via Teams and FCS email.
Parents: Teachers will call and/or email and/or Teams meet with parents and their student, as needed, to discuss student progress.

## Textbook Info

- CALCULUS (Tenth Edition), Larson, Hostetler, Edwards (2014), Brooks/Cole, Cengage Learning
- ISBN 1-285-0603-4


## Calculators:

Graphing Calculator (TI-84 plus CE, TI-83, TI-89).

## Help Hours

7:30 am before school and after school most days to provide individual assistance and instruction, although parent conferences and faculty meetings can sometimes interrupt this time.

