AP® Calculus AB (UMSL Math 1800) Syllabus

Collegiate School of Medicine and Bioscience[1]

2019-2020

Instructor

Samantha Moyerman

Contact Information

e-mail: samantha.moyerman@slps.org (better for parents) & samantha.moyerman@csmb-stl.org (better for students)

Text

Calculus of a Single Variable AP Edition 10e* by Ron Larson and Bruce Edwards

Graphing Calculator

We have a classroom set of TI-84+ CE calculators. However, purchasing a Graphing Calculator is suggested if financially feasible.

Other Materials

Binder, Spiral notebooks (for notes), paper (college ruled and graph), folder, PENCILS (I will not accept work written in pen), a good eraser, **one box of Kleenexes**

Internet Access

AP Calculus is a primarily flipped class, so you will need to be able to watch videos at home nightly. If you will have issues with internet and/or computer access, let me know IMMEDIATELY so that we can figure out a solution. I have no problem getting videos on a drive, **but I do need to know a few days in advance** in order to do so.

[1] Subject to revision based on changes in curriculum or school policy.

Useful Websites

Consider using these if you miss a day of class and/or if you need extra help!

- https://classroom.google.com/
  This is your one stop AP Calc shop! I will post your assignments, in-class lectures and work, links, assessment dates, etc. as they come up. Also, in the Google Drive, you will find the syllabus, important AP info, and "cheat sheets" for trig and algebra.
- https://sis.slps.org/SLPS/
  Check your grades here!
- https://edpuzzle.com/
  You will be assigned and watch videos through Edpuzzle as homework. I will be able to see how much you have watched, how many times, when you watched it, etc. Your account is already set up through Google Classroom.
- http://www.Khanacademy.org
  Videos for a variety of topics. We may also use this for quizzes (as HW or extra credit). We will set up accounts in class.
- https://www.casa.uh.edu/
  These online quizzes are great for reviewing concepts and may be assigned as homework or extra credit. We will set up accounts in class.
- https://www.youtube.com/channel/UCoHhuummRZaIVX7bD4t2czg
  Professor Leonard is a math professor with an excellent YouTube channel. I assign his videos often through Edpuzzle, but feel free to watch on your own for review. He is very engaging and informative and his videos include a ton of examples in addition to the theory.
- https://www.youtube.com/user/hijumpr111/featured
  Mr. Record is a very successful AP Calculus teacher who uses the same textbook as us. His examples are also clear and easy to follow. Highly suggested to help clarify content and as review.
- http://www.chaoticgolf.com/tutorials.html
  Precalculus & Calculus Tutorials
- http://www.calculus-help.com/tutorials/
  Tutorials, Problems of the Week, Cheat Sheet & Songs

- http://tutorial.math.lamar.edu/Classes/CalcI/CalcI.aspx
  Paul's Online Math Notes
- https://www.youtube.com/channel/UC-Ux3NaccCfggcJMbSK5XFA
  Lecture videos on limits and derivatives
- https://www.desmos.com/calculator & http://www.mathsisfun.com/data/function-grapher.php
  Online graphing calculators
- http://www.jamesrahn.com/pages/pre-calculus/table_of_contents.htm
  Pre-Calculus review by topic

General Expectations

AP Calculus is a very difficult course that requires a lot of work. If you work hard in and out of class and do everything that is expected, you should pass the course and be in a good position going into college calculus courses. However, earning an A and/or scoring well on the AP Exam requires particular dedication. I say this not to scare you out of the class, but to let you know that this content is difficult and the expectations are very high. At the end of the day, AP Calculus is an extremely rewarding endeavor that trains you well for mathematics in college whether you retake calculus or proceed to the next level.

Unfortunately, there is a lot of content to cover in the class, so the pace will be quick and there is less wiggle room than in other math courses. This means it is especially important to ask questions when you have them and to advocate for yourself when you need help so that you do not fall behind. You can do this in class when appropriate. I also encourage you to communicate with me via email. I may be able to quickly clear up a question or schedule a one-on-one meeting with you if it requires more discussion.

UMSL Math 1800 Course Description and Registration Information: This course provides an introduction to differential and integral calculus. Topics include limits, derivatives, related rates, Newton's method, the Mean-Value Theorem, Max-Min problems, the integral, the Fundamental Theorem of Integral Calculus, areas, volumes, and average values. Registration information can be found at http://www.umsl.edu/acp.

What the student will learn in the course:

- Understand the theory of limits, continuity, differentiation
- Become proficient in using the techniques of differentiation
- Obtain the ability to apply differentiation to solve related rates and optimization problems
- Understand the concept of a Riemann integral and the use of the Fundamental Theorem of Calculus to calculate Riemann integrals
- Use of the method of Riemann sums to find areas, volumes and other geometric and physical quantities
- Develop a proper writing style for solutions of mathematical problems

Course Overview:

Unit 1: Limits and Continuity-12 hours

In this unit students develop an understanding of limits as the foundational building block for both derivatives and integration. One goal of this unit is to ensure that students are comfortable solving limit problems using the Rule of Four. The Rule of Four is a method where students can solve problems using:

1. A graphical approach
2. A numerical/tabular approach
3. An algebraic approach
4. A verbal or written approach, communicating effectively what their final answer means in the context of the problem

Units 2 & 3: Derivatives, Implicit Differentiation, and Related Rates -22 hours

In these units students use their understanding of limits to explore the meaning of a derivative and instantaneous rate of change. Building on the limit definition of the derivative, students will explore and begin to use the various rules for taking a derivative. One goal of this unit is for students to use the Rule of Four to solve for derivatives of many different types of functions. Students then expand on their understanding of derivatives and their use in real-world related rates problems. Students explore how to take derivatives of equations that are not mathematical functions using implicit differentiation.

One goal of this unit is for students to take derivatives of an expression with relation to any variable, typically time with related rates problems.

Unit 4: Applications of Differentiation-10 hours
In this unit students discover how we can use the first and second derivatives of functions to describe the function's behavior and sketch it accurately. One goal of this unit is for students to understand how to apply the Existence Theorems (which include the Intermediate Value Theorem, Extreme Value Theorem, Rolle's Theorem, and the Mean Value Theorem) to help problem solve and justify their conclusions.

Unit 5: Integration and Accumulation/Fundamental Theorem of Calculus-20 hours
In this unit students discover the relationship between differentiation and integration as inverse operations. Students learn how to integrate functions and then, using the definite integral, learn how to "accumulate" in various real-world settings. As the unit progresses they learn the importance of the Fundamental Theorem of Calculus and its many applications.

Unit 6: Area/Volume of Revolution & Other Applications of Integration- 14 hours
In this unit students discover the real power and beauty of calculus in a variety of integration problems. Building upon their knowledge of accumulation (and specifically area under a curve), students will be able to find the area between two curves given two functions. Students also learn to find volume of a solid where a function (or two functions) is rotated around a horizontal line or vertical line. Using a variety of geometric shapes, students will also be able to find the volume of a 3-D solid using known cross-sectional areas.

Unit 7: Differential Equations/Slope Fields-10 hours
In this unit students discover how to "read" a slope field and see how a function (or other equations that are not mathematical functions) behave. Slope fields are the graphical interpretation of a differential equation (DE) and tie in nicely to the Rule of Four. Students will also build upon their knowledge of integration, using separation of variables to solve more complicated differential equations.

Unit 8: AP Test Review
Once students have learned all the material we will review for the AP Exam (Given on Tuesday, May 5). This review will include a practice exam to be used as the final exam for the course.

Course Timeline/Pacing: (for 80 minutes classes that alternate meeting 2 and 3 times a week)
The following is a more detailed outline of the topics we cover and a typical sequence in which those topics are covered. The time spent is only an estimate of the average number of days allotted to the topic because the actual time varies from year to year depending upon the richness of class discussions as well as amount of instructional time in the school schedule. However, we will remain VERY close to this schedule. Note that each unit exam will occur on the last day of the unit with a review day the period prior.

Unit 1 : Limits (9 classes; Aug 20-Sept 11)
Big Idea 1: Limits Enduring Understandings: EU 1.1, EU 1.2

Textbook Section	**Learning Objectives**	**Estimated Time**	**Possible Activities/Formative Assessments**
1.2: Finding Limits Graphically and Numerically	LO 1.1A(a) LO 1.1A(b) LO 1.1B LO 1.1C LO 1.1D	1 class	□ Limits Graphical and Numerical Guided Practice □ Limits Task Cards □ Limits Graph Interpretation WS □ Limits Graphical Stations Activity
1.3 Evaluating Limits Analytically	LO 1.1B LO 1.1C	2 classes	□ Limits Analytical Guided Practice □ Analytical Limits Skill Builder □ Limits Clue □ Limits Scramble Card Match
1.4 Continuity & One-Sided Limits	LO 1.2A	1 class **Quiz**	□ Continuity Guided Practice □ Limits Card Match □ Limits Free Response Analysis □ Non-Traditional Composition Notes and Practice and/or Speed Dating Card Activity
3.5 Limits at Infinity/1.5 Infinite Limits	LO 1.1B LO 1.1C LO 1.1D	1 class	□ Limits at Infinity Guided Practice
Intermediate Value Theorem (1.4), Extreme Value Theorem (p. 162)	LO 1.2B	1 class	□ Continuity and IVT Skill Builder □ Theorems Foldable
Assessment: 1 Quiz, Unit Exam			□ Limits and Continuity Circuit Training □ Limits 5 for 5

Unit 2: Derivative Rules (10 classes; Sept 16-Oct 11)

Big Idea 2: Derivatives Enduring Understandings: EU 2.1, EU 2.2, EU 2.3

Textbook Section	Learning Objectives	Estimated Time	Possible Activities/Formative Assessments
2.1 The Derivative and the Tangent Line Problem p. 12 (Average and Instantaneous Rates of Change); Continuity and Differentiability	LO 2.1A LO 2.2A & B LO 2.3B LO 1.1B LO 1.1D	3 classes	□ Limit Definition of Derivatives Guided Practice □ Recognize Definition of Derivative WS □ Limit Definition of Derivative Card Match □ Graphs of Derivatives Packet □ Derivative Graph Match WS □ Derivative Card Match
2.2 Basic Differentiation Rules and Rates of Change	LO 2.1C	1 class **Quiz**	□ Derivative Review WS
2.3 Product and Quotient Rules and Higher-Order Derivatives/2.4 The Chain Rule	LO 2.1D LO 2.1C LO 2.2A	3 classes	□ Derive Quotient Rule □ Chain Rule M&M Activity □ Chain Rule Stations □ Chain Rule and Numeric Functions □ Derivative Rules Data Tables □ Data Tables, Graphs, an Generic Functions Stations □ Chain Rule Free Response Questions
Assessment: 1 Quiz, Unit Exam			□ Computing Derivatives Guided Practice (fill in WS) □ Big 10 Multiple Representations of Derivative □ 5 for 5 Derivatives

Unit 3: Implicit Differentiation, Related Rates, Straight Line Motion (7 classes; Oct 14- Nov 1)

Big Idea 2: Derivatives Enduring Understandings: EU 2.1, EU 2.3

Textbook Section	Learning Objectives	Estimated Time	Possible Activities/Formative Assessments
2.5 Implicit Differentiation	LO 2.1C LO 2.3A	2 classes **Quiz**	□ Inverse Trig Derivative Derivation □ Guidelines for Implicit Differentiation □ Implicit Differentiation Skill Builder □ Implicit Differentiation Circuit Training

2.6 Related Rates	LO 2.3C LO 2.3D	1 class	□ Practicing RR Problems □ RR Examples WS □ RR Guided Practice □ RR in MC and FRQ Worksheet
AP Topic: Straight Line Motion	LO 2.3C	1 class	□ Particle Motion Deconstruction Deriv. Only □ Position, Velocity, and Acceleration WS □ Four Corners for Particle Motion □ Error Analysis (Interpreting Derivatives in Motion) □ Particle Motion Reference Guide □ PVA Foldable □ Quick Sheet Particle Motion
Assessment: 1-2 Quizzes, Unit Exam			□ Computing Derivatives Guided Practice (fill in WS) □ Big 10 Multiple Representations of Derivative □ 5 for 5 Derivatives

Unit 4: Uses and Applications of Differentiation (11 classes; Nov 4-Dec 9)

Big Idea 2: Derivatives Enduring Understandings: EU 2.1, 2.2, EU 2.4

Textbook Section	**Learning Objectives**	**Estimated Time**	**Possible Activities/Formative Assessments**
5.3 Inverse Functions (Derivatives of Inverses only) 5.1 The Natural Log Fn: Differentiation 5.4 Exponential Fns: Differentiation and Integration (Diff Only)	LO 2.1C	1 class	□ Derivative of an Inverse Derivation, Notes WS □ Derivative of an Inverse Exploration Activity □ Big 10 Using Multiple Representations
8.7 Indeterminate Forms and L'Hopital's Rule (AB forms only)	LO 1.1B LO 2.1C	1 class **Quiz**	□ L'Hopital's Rule Guided Practice □ L'Hopital's Rule Skill Builder □ L'Hopital's Rule Four Corners □ L'Hospital's Rule FR and Multiple Choice

3.2 Rolle's Theorem and the Mean Value Theorem 3.1 Extrema on an Interval	LO 2.2A LO 2.4A	1 class	□ Theorems Foldable and/or Chart □ Visualizing the MVT Guided Practice □ Speeding MVT Guided Practice □ Theorem's Card Match □ Theorems Multiple Choice Practice WS □ Theorems Multiple Choice and Free Response □ Theorems Problem Set 2019
3.3 Increasing and Decreasing Functions…/3.4 Concavity and the Second Derivative Test/3.6 A Summary of Curve Sketching/ 1.4 Continuity and One Sided Limits (Cut 3.6 if necessary)	LO 2.2 A	2 classes **Quiz**	□ Project-highway vs street partner problem □ Graph Analysis Card Scramble □ Writing Justifications PP □ Gallery Walk for Free Response □ Curve Sketching and Composition of Fn LTF □ Derivative Analysis Scavenger Hunt □ Find the Error - FDT and Test for Concavity
3.7 Optimization Problems	LO 2.3A LO 2.3C	1 class	
3.9 Differentials (Tangent Line Approximation, Error) 3.8 Newton's Method	LO 2.3B LO 2.2A LO 2.1B LO 2.1C	1 class	□ Tangent Line Approximation Guided Practice □ Tangent Lines and Linear Approximations WS □ 3.8 lab outside class time if needed
Assessment: 2 Quizzes, Unit Exam			□ 5 for 5 Derivatives Review (part 3) □ Derivatives Applications Problem Set

Unit 5: Integration and Accumulation, Fundamental Theorem of Calculus (12 classes; Jan 6-Feb 5)

Big Idea 3: Integrals and the Fundamental Th'm of Calculus Enduring Understandings: EU 3.1, EU 3.2, EU 3.3, EU 3.4

Textbook Section	Learning Objectives	Estimated Time	Possible Activities/Formative Assessments
4.1 Antiderivatives and Indefinite Integration 5.2 The Natural Log Fn: Integration (no logarithmic differentiation) 5.4 Exponential Functions: Differentiation and Integration (Integration only)	LO 3.1A LO 3.3B(a) LO 2.3F	1 class **Quiz**	□ Integration Techniques-Using Formulas WS □ Integration Techniques Skill Builder
4.3 Riemann Sums and Definite Integration	LO 3.3B(b)	1 class	□ QR Codes Riemann Sums □ Demonstration: TI Inspire emulator investigation □ Riemann Sums Area Approximation and Accumulation □ The Definite Integral as the Limit of a Riemann Sum Guided Practice (in Applications Section)
4.2 Area 4.6 Numerical Integration (no Simpson's Rule)	LO 3.2A(a) LO 3.2A(b) LO 3.2B LO 3.2C	2 classes	□ Guided Notes
4.4 The Fundamental Theorem of Calculus-split between units 4 & 6) (FTOC part 1 and FTOC part 2)	LO 3.3A LO 3.4A	2 classes	□ FTOC AP Module □ Fundamental Theorem of Calculus Guided Practice □ First Fundamental Theorem of Calculus Skill Builder □ DISCOVERY—Part II of the Fundamental Theorem of Calculus □ FTC Applications Activity
4.5 Integration by Substitution (Algebraic)	LO 3.3B(a) LO 3.3B(b)	2 classes	□ Integration by Substitution card match or fill-in □ Transcendentals Card Match (??) □ Calculus Clue
Assessment: 1-2 Quizzes, Unit Exam			□ 5 for 5 Riemann Sums □ 5 for 5 Integration Techniques

Unit 6: Area/Volume of Revolution & Other Applications of Integration (9 classes; Feb 7-March 2)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus Enduring Understandings: EU 3.4

Textbook Section	Learning Objectives	Estimated Time	Possible Activities/Formative Assessments
4.4 The Fundamental Theorem of Calculus (Accumulation Functions, Functions Defined by Integrals)	LO 3.3A LO 3.4A	1 class	□ AP Module: Functions defined by Integrals □ Picture-It □ Interpreting Definite Integrals and Derivatives Error Analysis □ Accumulation Circuit Training □ Interpreting Calculus Skill Builder
7.1 Area of a Region Between 2 Curves/ Applications of the Definite Integral as an Accumulator (motion, volume)	LO 3.2C LO 3.4E LO 3.4C LO 3.4B	2 classes **Quiz**	□ Comparison of Instantaneous and Average Rates of Change □ Interpret This (Applications with Tables) □ Area Between Two Curves Guided Practice □ Error Analysis: Interpreting Integrals in Particle Motion
7.2 Volume: The Disk Method	LO 3.4D	3 classes	□ Area and Volume Guided Practice □ Area and Volume Foldable □ Area and Volume Mega Question Make n Take □ Area and Volume Sidewalk Chalk Activity □ Volume and Area Representations Card Activity
Assessment: 1 Quiz, Unit Exam			□ 5 for 5 Area and Volume □ 5 for 5 Integral Applications

Unit 7: Differential Equations/Slope Fields (7 classes; March 4-April 1)
Big Idea 3: Integrals and the Fundamental Theorem of Calculus

Enduring Understandings: EU 3.1, EU 3.5

Textbook Section	Learning Objectives	Estimated Time	Possible Activities/Formative Assessments
6.1 Slope Fields and Euler's Method (Euler's Method BC only)	LO 3.5A LO 2.3E LO 2.3F	1 class	□ Slope Fields Wikki Stix Activity
6.3 Separation of Variables (logistic equations BC only)	LO 3.5A LO 3.5B LO 2.3E LO 2.3F	2 classes **Quiz**	□ Separable Differential Equations Skill Builder □ Guide on the Side Free Response for Separable Differential Equations □ Free Response Separation of Variables
6.2 Differential Equations: Growth and Decay	LO 3.5A LO 3.5B LO 2.3E LO 2.3F	1 class	□ Four Corners Diffy Q Skill Review
Time Permitting: 5.6/5.7 (Inverse Trig Fns: Differentiation/Integration)	LO 2.2A LO 2.1C LO 3.1A LO 3.2C	2 classes	
Assessment: 1 Quiz, Unit Exam			□ Slope Fields and Differential Equations Stations Activity □ 5 for 5 Slope Fields and Diffy Q

Unit 8: AP Review) (4 weeks; April 6-May 4)

Big Ideas: All **Enduring Understandings: All**

Interpreting Calculus Skill Builder
AP Motion Module (combined applications)
AP Module: Tabular Data
Examination of part c of BC FRQ from 2016
Multiple Choice Practice
Short Answer Practice
Full Practice Exam
Completion, Review, and Peer Grading of FRQs from past AP Exams

Important Dates

- Saturday Study Sessions (you are expected to attend all 3): December 14, February 8, April 18
  Location: Clyde C Miller High School
- Mock AP Exam: TBD (during mock exam week, probably late March/early April)
  Location: CSMB
- AP Calculus Exam: Tuesday, May 5
  Location: CSMB

Grading Formula (per semesters, NOT quarters)

Unit Exams, Quizzes, and Take-Home Projects: 70% Homework, HW Quizzes, In-Class Work: 10% Final Exam: 20%
UMSL Grade: Average of Semesters 1 and 2

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Less than 60%

Assessments

Students will have at least one quiz per unit and a unit exam to assess their knowledge.

Unit Exams: At the conclusion of each unit we will have an exam. Each exam will be worth 36-45 points and later scaled to 100 points. The exams will be a combination of multiple choice and multi-part free response questions. Each of these two sections will be further divided into a "with calculator" and a "without calculator" section (just like the AP Exam).

Section 1: 5 Multiple Choice – (With calculator)	Each problem is worth 1 point.	5 points
Section 2: 1 Free Response – (With calculator)	Each problem is worth 9 points.	9 points
Section 3: 10 Multiple Choice – (Without calculator)	Each problem is worth 1 point.	10 points
Section 4: 1 Free Response – (Without calculator)	Each problem is worth 9 points.	9 points

The multiple-choice points you receive will be multiplied to balance the two portions of the exam equally. There is no penalty for guessing on the Multiple Choice sections.

Final Exams: The first semester exam will be cumulative for the first semester topics, and the final exam at the end of the year will be an AP practice test and will be administered before the AP Exam (thus, it will cover topics from the entire school year). The results of the final exam as well as the mandatory AP Mock exam can be used to review and prepare for the AP test.

Note: There will not be dedicated review days or packets before tests and quizzes. You will be expected to prepare for assessments outside of class using notes, materials, and homework assignments from the unit.

Homework

AP Calculus (AB) is primarily taught as a flipped classroom. This means that you will be required to watch videos on your own between class periods. You will be required to watch those videos on Edpuzzle.com. This way I can see whether you have watched the video. You will be awarded points based on how much you have watched.

You are expected to take notes on every video. Taking notes is important for a few reasons: notetaking helps cement the learning; you will have notes to review/reference later; if there is a technical malfunction, you can use your notes to prove that you watched the video and receive points. I reserve the right to check your notebook at any time and if notes are missing, to take away points for video assignments.

As you watch the video, **write down any questions you have**. You will have time after the "do now" to ask your questions on the video, but the expectation is that you have written down in your notes so that you are prepared to ask them when you get to class.

If you have technology issues and you can't get the video to load, Edpuzzle is not showing that you have watched the video, etc. it is your responsibility to let me know about the issue immediately by email. If you have watched the video, you can show me your notes before class to receive credit. If you can't get the video to load in Edpuzzle, but can find it on Youtube.com, watch it there and show me the notes before class so that you can receive credit.
Note: If you do not have internet access at home and/or will not be able to access the videos, let me know immediately. If I know ahead of time I can download the videos for you, but I will only do this if you tell me that you need that option.

Each class students will work on assignments and activities. Some of these will be completed in class, while others may be completed at home as homework. Many assignments will involve analysis, Rule of Four, and other higher order thinking skills required for success on an AP test or in college. Any worksheets, activities, or HW problems that are expected to be turned in will be posted with due dates on Google classroom. These assignments will generally be graded for accuracy, although answer keys will be made available on Google Classroom so students can check their work.

In addition, some assignments may be suggested problems that do not need to be submitted for credit. This distinction will be made clear in class and on Google Classroom. If an assignment is not to be turned in, the due date represents when that material should be mastered and/or when an assessment will be given over that content.

Homework quizzes will be given periodically over assigned work. These quizzes are graded for accuracy and count as homework grades.

If Absent

If you miss class, it is **your responsibility** to find out if there is any in-class work you need to make up. Most assignments and lessons can be found on Google Classroom. Email or ask me before or after class if you have any additional questions. You will be able to turn in missed assignments the class after you have returned to school without penalty. If you have been absent for an extended period of time and/or need additional time to get caught up, it is your responsibility to explain why you need more time and ask for an extension immediately, preferably by email. **Assessments (including homework quizzes) must be made up within a week of your return to school.**

Tutoring

AP Calculus after school tutoring will be offered before assessments and as needed (generally once every 2 weeks, no more than once a week). A date is only guaranteed if 8 students sign up. You can also attend math tutoring on Wednesdays and Thursdays, but the other instructors will not always be able to help with AP Calculus content.

I am also more than willing to work with you during the school day if you need help. You can schedule time with me during mentor or stop by during senior study hall. I am also very responsive to email, so please send me any questions you have when you are not at school. If you are having trouble and need extra help, please let me know!

Late Work

Late work will be accepted for one week after its due date for 80% of your earned score (20% penalty). If there are exceptional circumstances, I may grant you an extension if you make the request and explain the circumstances BEFORE THE DAY IT IS DUE. Such requests should be made through email if possible.

Math ICU

Math ICU is a program designed to assist and support you with math if you need it. You will be placed in ICU if you fail to maintain to following criteria:

- ✓ 80% of all assignments completed
- ✓ 70% average score on all assessments given
- ✓ Attentiveness and engagement during class time
- ✓ Maintain a passing grade in math class

In the Math ICU, you will lose all privileges to participate in extracurricular activities and are mandated to:

- Strive daily to achieve the above listed conditions.
- Attend sessions during study hall with your math teacher. These sessions are open only to ICU students.
- Attend two math tutoring sessions after school per week.

Removal from extracurricular activities includes displacement from any leadership positions you hold in a club or sport.

You can graduate from ICU by meeting the criteria set above. The first ICU check-in will occur after the first progress report grading period. After that, check-ins will occur every two weeks.

Cell Phone/Electronic Device/Headphone Policy

The use of cell phones or headphones/earbuds is not permitted in class at any time without permission. This means that the moment you enter my class you should put your phone in your pocket or backpack and take off your headphones or earbuds. Additionally, you may NOT charge your phone in my outlets without permission. Breaking these rules will lead to confiscation of your phone/headphones/earbuds/charger for the remainder of the day and/or other disciplinary measures.

Academic Dishonesty

All of a student's work is expected to be his or her own. Cheating, in any form, will not be tolerated. If a student is caught cheating, they will receive a zero on the assignment and parents/guardians will be contacted.

Skipping class is also unacceptable. If you are at school, but skip class, you will receive a 0 on all classwork for the day, receive late credit for any work that was due the period you skipped, and receive a 0 on assessments given that day.

Food Policy

You can't eat in the classroom. The only exception is candy given to you by the teacher in class. Drinking water is fine.

Collegiate Core Values/Classroom Expectations

1. Practice **Integrity:** Always turn in your own work.

2. Practice **Self-Discipline**: Since this is a flipped classroom, much of the class is self-directed, so it is up to you to make the most of your time and stay focused on assigned problems or the activity you are working on rather than socializing.

3. Be **Respectful**: This applies to your teacher and fellow students. Being respectful means showing up to class on time and starting your "do now" immediately, paying attention in class, staying awake and on task, raising your hand and NOT interrupting me, being helpful during group work, asking questions, using respectful language, and respecting the classroom (not throwing things or leaving trash around, etc.).

4. **Strong Academic Habits:** You will succeed in my course if you work hard from the very beginning. In math, concepts build on one another, so it is imperative that you practice and understand each new topic. Be ready to review old concepts at the beginning of the year and if they come up later in the semester. It is your responsibility to catch up if you miss an assignment. You need to be responsible and prepared for every class. Your homework should be completed on time. Your notebook should be organized and labeled accurately. You should always come to class with the required materials.

5. **Intellectual Curiosity:** Don't be afraid to ask questions, even deeper questions that go beyond clarification. If you want to know why, ask!

6. **Compassion and Ethics:** Do not tell other students the answers to problems in group work or if they ask while you work on homework problems; explain the process to them so they can learn how to find the answer themselves.