

Subsidiary Course Agreement / Syllabus

Course: AP Calculus (AB) Number: 4189, 4190

Subject Teacher: _____ Email: _____

Student: _____ Grade level: _____

Description of Semester Course: This course follows the standard syllabus of Advanced Placement Calculus AB as stated in The College Board's most recent Advanced Placement Course Description: Calculus. It provides students the opportunity to sit for an advanced placement examination and earn college credit if they obtain a score of 3, 4, or 5 on the exam.

This course meets the University of California's c (mathematics) subject area requirement.

Directions:

- **Submit course work each month on or before each monthly due date** to the supervising teacher. After assessing the course work for attendance credit, the supervising teacher will pass the course work to the math teacher for academic evaluation. Always use the teacher-created cover sheet listing the monthly assignments.
- **Complete the monthly math test** as scheduled during the monthly test week.
- Students who have difficulty learning the material at an appropriate pace may need to apply various study and practice techniques to be determined by the math teacher.

Semester One Content:

- **Month 1: Prerequisites for Calculus, Limits and Continuity**
- **Month 2: Limits and Continuity, Differential Calculus**
- **Month 3: Differentiation**
- **Month 4: Applications of Derivatives**
- **Month 5: Applications of Derivatives, Approximating the area under a curve**

Semester Two Content:

- **Month 6: Applications of Derivatives, Differential Equations, The Definite Integral**
- **Month 7: Definite Integrals**
- **Month 8: Definite Integrals, and Differential Equations (Integration by Parts)**
- **Month 9: Applications of Definite Integrals (Volumes, and Lengths of Curves), Improper Integrals, and Partial Fractions and Integral Tables**
- **Month 10: Differential Equations and Mathematical Modeling**

Objectives & Methods of Study:

1. **STUDY THE SECTIONS:** Carefully read information, analyze examples, and fully understand the new concepts and the step-by-step procedures before doing the problems.
2. **DO REQUIRED WORK EVERY MONTH:**
 - **Takes notes** on each section about: concepts, procedures, things to memorize, common errors.
 - **Complete the work assigned** on the monthly assignment list/cover sheet.
 - Take a **monthly test**.
 - Complete other monthly assignments as directed by the teacher.
3. **RECOMMENDED METHODS OF STUDY:**
 - Make your own **review questions:** Every day, do 2 or 3 problems from past sections.
 - **Make notes** on the concepts and procedures taught in each section. Review the notes often.
 - **Check your answers** using the solution manual.

- **Memorize and practice**—more practice helps you better remember concepts and procedures, helping you answer math problems correctly. So practice, and then practice even more, until you reach mastery.
- **Prepare correctly for the monthly test:** Practice textbook problems. Analyze, memorize, and practice until fully ready for the test.

Resources:

- **Text:** Finney et al., *Calculus: Graphical, Numerical, Algebraic*, Pearson/Prentice-Hall, 2003
- **Solution Manual:** Use this to check for correct answers.
- **Weekly Study Groups:** See the schedule posted by the school. Attendance is **highly recommended**, and may be required for any students who are not successful in the course.
- **Math Help (Tutoring):**

Due Dates: See page two of Master Agreement, coversheets, and MEA website.

Evaluation Criteria and Methods:

- Work submitted after the due date cannot earn full credit.
- Academic grades will be based on the quality of work submitted on time, according to the directions, rubrics, and expectations above. Assessments will be included.
- The following grades will be used:

"A" = Consistently superior work quality.

"F" = Failure, credit not granted.

"B" = Above average work quality.

"I" = Incomplete course work due to illness.
Six weeks allowed for makeup.

"C" = Satisfactory or average work quality.

"NC" = No credit.

"D" = Below average quality or quantity of work.

Supervising Teacher: _____ Date: _____

Subject Teacher: _____ Date: _____

ESLRS (Expected School-wide Learning Results):

Communicate effectively through reading, writing, listening and speaking.
Think and solve problems independently and critically.
Demonstrate the confidence, resilience, and self-esteem to succeed in life.
Use resources, including technology, to locate needed information.
Demonstrate good citizenship and personal integrity.