

Washington State School for the Blind
Calculus Syllabus

Instructor: Sonja Steinbach, M.ed, MS-MTCH

360-947-3364

sonja.steinbach@wssb.wa.gov

Class Materials

The following is a list of materials that will be used during this course:

- **Larson, Hostetler, & Edwards. Calculus with Analytic Geometry. Seventh Edition. Houghton Mifflin Company. 2002.**
- **Orion Talking Graphing Calculator**
- **Graphing utensils such as graph board and/or graph paper**

Introduction

Welcome to Calculus. Calculus is an advanced course of study in high school. The state of Washington requires that at least 3 years of math be completed while at high school – Algebra 1, Geometry, and Algebra 2. This advanced course is designed to teach you mathematical ways of thinking, problem solving and communication, as well as prepare you for continued scholastic success in mathematics. In particular, this class will continue to build a strong foundation in higher-level algebraic skills, as well as the mathematical prerequisites to study calculus II, statistics, and linear algebra. Additionally, it will prepare you for success on college entrance exams such as the ACT and SAT.

Calculus is an advanced mathematical course. Calculus skills are required for success in future math, science, computer, economics, business, statistics, engineering, and vocational/technical courses you may take. This course will continue your mathematical journey to becoming an advanced critical thinker, analyzer and problem solver. You will most likely hear me say this in class: The more math you know the more money you can make, but more importantly the more math you know the more money you can keep. In other words, being a better thinker and problem solver will pay off in the world of career

opportunities and success as well as allow you to be confident, independent and prosperous in your private life.

This is a college-level course of study and students will learn how to prosper in such an environment. This course is designed to prepare students to continue their education at a four-year university after high school. As a result, expectations and standards will be high.

Topics of Study

The following is a list of topics that will be covered in this course:

- Review of the language and tools of algebra
- power, polynomial, rational, exponential, logarithmic, and trigonometric functions from a calculus perspective
- limits from a graphical and algebraic perspective
- Matrices and vectors
- Derivatives and integrals
- Sequences and series

Grading Policy

Coursework will be completed via participation through class discussions and group projects, homework, and chapter exams. Each of the areas listed above represents a percentage of the grade as follows:

- Homework - 25%
- Participation - 35%
- Exams - 40%

Grades will be awarded according to the following scale:

- 90% - 100% = A
- 80% - 89.99% = B
- 70% - 79.99% = C
- 60% - 69.99% = D
- 0% - 59.99% = F

Important: All work must be turned in as if this were a college course. This means that homework should be emailed, printed, or in neat and precise hand-writing. Braille and large print work will not be accepted.

Late Work Policy

Late work will be accepted. However, for each class day the homework is late 10% of the total points will be docked from the final score. However, if the student presents a doctor's note or other documentation that details a legitimate reason for missing the deadline, exceptions will be made.

Maintaining a Positive Learning Environment

I trust each student to know what is appropriate, and inappropriate for the classroom. I am committed to creating a positive classroom culture and community. Be respectful, communicative, kind and non-judgmental. Do work and allow others to do theirs. Treat all people and property with respect. Be prepared for class. Be involved with the math discussions. Participate fully in the learning experience.