## "Oak Harbor High School Builds Individual Excellence"

## OHHS Mathematics Department
## Course Syllabus

**Teacher:** Ms. Voorhees        svoorhees@ohsd.net

**Course Name:** AP Calculus BC
**Course Code:** MA051A

**Course Description:** This course extends the content learned in AP Calculus AB to different types of equations (polar, parametric, and vector) and introduces the topic of sequences and series. Students will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. A review of previous Calculus course is included.

**Prerequisites:** Students who earned an A or B in AP Calculus AB are encouraged to take this course.

**Primary Textbook:** Calculus for AP (Cengage Learning 2017)

**Course Outline:** The following is a tentative outline of the course.

| Unit | Topics |
|------|--------|
| 1 | Limits and Continuity |
| 2 | Differentiation and their Applications |
| 3 | Integration and Applications of the Definite Integral. |
| 4 | Differential Equations |
| 5 | Parametric Equations, Polar Coordinates, and Vectors |
| 6 | Infinite Series |
|   | Review for AP Exam |
|   | Capstone Project |

**Technology:** Students are encouraged to purchase a TI-84 calculator but they are not required to do so. A TI-84 calculator will be provided to those students who do not own one. (A TI-84 would be a beneficial calculator to have for future college-level courses.)

**Extra Help:** My after-school availability will be displayed weekly on the board. But, last minute cancellations/changes can occur.

Students are encouraged to seek outside resources such as Khan Academy (official practice partner for AP courses) for extra help and review. Another great website is patrickjmt.com. You can search the videos by topic.

**Grading Scale:** The grading scale reflects the rigor of an AP course and has been agreed upon by all OHHS AP teachers.

| | |
|---|---|
| 90-100 | A |
| 85-89.9 | A- |
| 83-84.9 | B+ |
| 77-82.9 | B |
| 75-76.9 | B- |
| 73-74.9 | C+ |
| 67-72.9 | C |
| 65-66.9 | C- |
| 55-64.9 | D |
| 54.9 and below | F |

**Weighted Categories:** Grades will be based upon two categories: assignments and assessments.

| Category | Percentage of overall grade |
|---|---|
| Assignments | 20% |
| Assessments | 80% |

**Assignments:** Graded assignments will be given through WebAssign. In-class activities and assignments are generally not graded but are used as practice for the graded assignments. If there is a lack of completion of the in-class activities/assignments, then the teacher can assign grades to them.

**Re-Do Policy:** Students will be allowed to retake tests provided all assignments are complete. You have the opportunity to retake each test once. When need arises, please see me to work out a contract.

**NMSI Partnership:** The National Math and Science Initiative has chosen OHHS to participate in the College Readiness Program. This program provides grant money and along with additional financial support from OHPS will be used to provide students extra support in preparation for the AP Exams. These student supports include: 1) No fees for any AP Exams; 2) Saturday Study Sessions; and 3) Financial incentives for earning a 3 or higher on the AP Exam.

The Saturday Study Sessions for AP Calculus are <<insert dates here>> You are strongly encouraged to attend these sessions. Please put the dates in your calendar now.