Calculus 2
Mr. Smith

Course Overview
This is the second course in the calculus sequence. It covers techniques of integration, improper integrals, Simpson's Rule, Trapezoid Rule, arc length, surface area, and other applications of integration, direction (slope) fields, parametric equations, polar calculus, conic sections, infinite sequences and series, power series, and Taylor's formula

Class Materials
Thomas' Calculus: Early Transcendentals, 13ᵗʰ Edition, by Hass, Heil, and Weir, Pearson, 2013.
Notebook
Scientific Calculator (with graphing capability)
Pencils

Grading Policy
Grade will be divided into the following categories over the course of each semester:

* ✸ Daily Work (Homework and Classwork) 40%

* ✸ Quizzes + Projects 20%

* ✸ Unit Exams 30%

* ✸ Final Exam 10%

Grading Scale
    A   90 to 100
    B   80 to 89
    C   70 to 79
    NC 0 to 69

Homework
    Students will complete daily homework assignments consisting of problems from the textbook. Homeworks may be handwritten or typed, however a physical assignment must be submitted at the start of class to be graded. Homework assignments will be graded based on completion/ attempts of all problems and accuracy of select problems. Students may receive completion credit by attempting all problems, or by providing a written explanation of what specific concepts they are struggling with on *each incomplete problem*. Students may use calculators, and utilize all provided resources (textbook, notes, supplemental resources, ect.) to complete their assignments. Collaboration with

other students and the usage of external resources is permitted, however students must complete their own work, and be able to explain all solutions to teachers upon request.

Quizzes

Students will take quizzes every 2-4 textbook sections. Unless otherwise specified, the use of calculators is permitted on all quizzes. Students will also be allowed to reference any notes that they have created, completed homework assignments, and handouts provided by the teacher. Collaboration and the use of resources, other than those listed above, is prohibited unless explicitly specified. Corrections will not be available for quizzes.

Unit Exams

At the conclusion of each unit, students will take a comprehensive exam of all concepts covered in that unit. Students will be allowed the usage of a calculator and be permitted to bring a single page, of standard printer or notebook paper, note sheet of their own creation. Unit exam corrections will be allowed, and are explained below.

Late Work

Students may receive no more than 70% for any late assignment. Any missing or late assignment may be submitted up to two school days after the assignment is marked missing in PowerSchool. Exceptions to this policy may be requested by the student in writing or email. The instructor will make the final determination on extension requests and will inform the student of the decision in writing or email.

Corrections

If a student receives below a 70% on a unit exam, they may submit corrections to receive **up to** 50% of their missing points back. Corrections will be completed on a separate sheet of paper and will include: 1) a written explanation of 1-2 sentences explaining why they reached an incorrect answer 2) All work leading to the correct answer. Corrections are due on the date of the next unit exam, after which students will receive no credit. Corrections must be attached to the original exam to be graded.

Course Units Semester 1
Arc Length, Surface Area, and Center of Mass
Advanced Integration Techniques
Slope Fields and Ordinary Differential Equations

Course Units Semester 2
Sequences and Series
Parametric Equations
Polar Calculus