

Applied Calculus (MATH 1044 & 1045): R. Seals (seals_r@betheltate.org or 734-2271 ext. 7037)

Course Description: Applied Calculus is a college-level course designed for high achieving math students who plan to further their educational career. Students will also have the option of taking it for college credit through the University of Cincinnati with an appropriate placement score.

Applied Calculus I includes:

1. Functions and their graphs
2. Limits and continuity of functions
3. The derivative
4. Applications of the derivative

Applied Calculus II includes:

1. Anti-differentiation
2. The fundamental theorem and integration
3. Functions of two variables
4. Partial derivatives
5. Lagrange multipliers and applications to probability and area

Text: *Elements of Calculus with Analytic Geometry*

Supplies/Materials Required: Notebook, pencil, dry erase markers, graph paper and paper

Classroom Procedures: Homework is assigned at least 4 times a week. This means that your student will usually have material that will need to be completed out of class. Homework is checked every time that it is assigned. Homework assignments are worth 5 points each. Homework is assessed on a “good faith effort” basis. That means I will check it for completion, notation, necessary steps and accuracy, even though the final answer may not be correct. As long as the homework is attempted and completed with “good faith effort,” the student will receive 5 points. Homework is viewed as practice and because of this is not accepted late. If a student is absent on the day an assignment is checked in class or needs to complete the assignment as make-up work due to an excused absence, the assignment should be submitted in Google Classroom prior to the beginning of the next assigned class period. If the absence is “unexcused,” the assignment must be submitted prior to the beginning of the class period on the due date in order to receive credit. In addition to this, if the absence is “unexcused,” the work assigned on that day will be due the next day as if the student is present in class. Also, if you choose not to be in class on Tuesdays and Thursdays, the assignments due that day must be uploaded into Google Classroom prior to class on that day. In addition, class notes and examples will be posted on my website www.math4tigers.org on a daily basis. These notes should not replace those that the student is expected to take in class, but should supplement them. If the student misses class because of an excused absence, work assigned prior to the absence is due on the day the student returns to school. The student can use my website to get any missed notes and have make-up work ready the day after the return to school as stated in the student handbook. We will also be using Google Classroom for assignments and announcements. Parents are encouraged to join the Google Classroom as well. Every homework assignment will be returned to the student so that s/he may use it to prepare for each test or quiz. All tests and quizzes will be returned to the students so that they may be able to see their progress, but the test or quiz will be kept in my room. Students are welcome and encouraged to come in during advisory or after school to go over them in more detail, but they must remain in my room unless prior arrangements have been made. Students needing extra help may attend the scheduled help sessions during advisory or after school or may see me after school upon request.

Classroom Procedures: As part of the CCP agreement, you are not *required* to attend class on Tuesdays and Thursdays. It is recommended that you attend these days if you have below a C+. These days are designed to offer extra support and practice that supplement our other class periods. There may also be new material taught on these days. You are responsible for ALL material every day. You are *always* welcome to attend every class. If you choose not to be in class on Tuesdays or Thursdays, please note that you are expected to submit in Google Classroom assignments due that day *prior* to the class meeting time if you would like credit for it.

Evaluation Procedures:

The board adopted grading scales will be used to calculate grades. Grades are based on the total points earned divided by the total points possible. Homework assignments are worth 5 points, quizzes are worth 15-25 points, tests are worth 40-60 points, and projects are worth approximately 15-25 points. All coursework is 80% of the semester grade with the final exam worth 20% of the semester grade. All work is to be completed in pencil – NO exceptions. Absence must be EXCUSED to receive credit for work not turned in on the due date. Or it can be submitted in Google classroom on its due date prior to the beginning of your assigned class period. If your absence is unexcused on a test or quiz day, you will NOT have the opportunity to make it up! Also, it is important to note that UC grades 1000-level math classes on the NP scale. At the end of the semester, students who have not earned at least a C-, indicating that they are ready for the next course, are assigned the grade of NP, signifying “not proficient.” An NP is not a punitive grade (it does not affect your grade point average as an F would.) If you earn an NP (Not Proficient) as your final course grade, you must retake the course to earn credit and move on to the next course. Students with the NP might have earned enough points for a D+, D, or D- grade. These students can request a change in their grade from NP. It is important to consider that D grades will affect your GPA and might affect your academic standing. Contact your academic advisor for help deciding whether to request this change, and/or if you have questions about the effect of the NP in your academic program.