Math 201 - Calculus I
Sections 2/2B and 3/3B
Fall 2014

Basic Information:

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Instructor:	Dr. Nathan Reff
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Office:	Albert W. **Brown** Building: **297** (FOB)
Phone:	(585) 395-5675
Office Hours:	MW 11:00-12:00, 3:50-4:50,
	or by appointment , or see if I am in!
Course Web Page:	http://www.acs.brockport.edu/~nreff/MTH201/
Course Meetings:	Section 2 and 2B: MWF 2:30-3:40 in Holmes 216
	Section 3 and 3B: MW 5:05-6:50 in Holmes B6
Text:	*Calculus Early Transcendentals*, 6th *Ed.*
	by Stewart (ISBN: 978-0495011699)

INFORMATION ABOUT THIS COURSE:

Prerequisite: Precalculus (MTH 122). A solid understanding of precalculus is essential to succeed in this course. Please see me as soon as possible if you are concerned about your background.

Course Catalog Description: *Covers limits and continuity; derivatives and integrals of algebraic, trigonometric, exponential, and logarithmic functions; and applications of the derivative.*

Course Goals and Objectives: The major goal of this course is to understand differentiation and integration and to apply these concepts to solve real-world problems. The central focus of the course is the study of functions because of their ability to approximate and model real-world problems. In the first part of the course we will concentrate on functions, limits and continuity. In the second part of the course we will build on these by studying derivatives and applications involving rates of change. In the third part of the course we define the integral of a function and how this is used with problems involving accumulation and areas. In the final part of the course we will study the Fundamental Theorem of Calculus and see how it connects the previous three parts into a beautiful and remarkable result.

After completing this course students should be able to:

- Graph and algebraically manipulate functions.
- Use a variety of techniques to evaluate and interpret limits.
- Define and describe continuity in multiple ways ways.
- Define and interpret the derivative of a function in several different ways.
- Find the tangent line to a given curve at a specified point.
- Use a variety of techniques to evaluate derivatives and antiderivatives.
- Numerically approximate the definite integral of a given function.
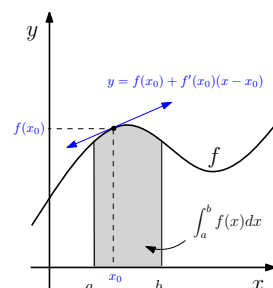
- Apply the Fundamental Theorem of Calculus. Furthermore, students should understand why this result is so fundamental and how it bridges the two major themes of calculus I together.
- Apply the differentiation and integration techniques to real-world problems. In particular, students should be able to solve a variety of related rates, optimization and curve sketching problems.

HOW YOUR GRADE WILL BE DETERMINED:

Grade Distribution: Your final grade will be determined as follows:

Homework, Labs and other Coursework	10%
Quizzes	10%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Comprehensive Final Exam	20%

You also have the opportunity to earn additional participation points. Participation points can be earned by answering questions, asking relevant questions, working well with your group, etc. Coming to class is expected and will not get you these participation points alone. I would like everyone to be a part of the classroom discussions.

Borderline cases can be adjusted up or down based on your attendance, class participation, homework, and trends. For example, a pattern of steady improvement is good, but a weak final exam is bad.

If at any time you think there is an error in your computed grade on an assignment please bring this to my attention the day the work is returned to you.

Grade Conversion:

A	93−100	B	83−86	C	73−76	D	63−66
A−	90−92	B−	80−82	C−	70−72	D−	60−62
B+	87−89	C+	77−79	D+	67−69	E	0−59

Please see the Mathematics Department Guidelines for Student Evaluation here: `http://www.brockport.edu/math/MATH_DEPT_GUIDELINES_FOR_STUDENT_EVALUATION.pdf`.

Homework: Homework problems will be posted

on the course website: `http://www.acs.brockport.edu/~nreff/MTH201/`.

Homework problems will come in 2 forms:

1) **Book problems**: These problems will come right out of your text. You must complete these problems and bring your solutions to the next class day. Every week you will turn in these problems to be graded. The purpose of the book problems is to make sure you are writing out clear step-by-step solutions to prepare you for answering questions on quizzes and tests.

2) **Addition problems**: I will write and assign problems which will generally be more challenging. These problems will be collected with the book problems.

No late homework will be accepted!

Please make sure your homework is *neat* (legible, not torn out of a spiral bound notebook, etc.) and *stapled* when you turn it in. Treat your homework as if it is a professional document that you would submit in a future workplace. It is *very* important that you keep working on problems throughout the course. There is an old saying that "math is not a spectator sport" and there is definitely a lot of truth to this. I recommend working individually and also with other classmates (but make sure you are turning in your own work!). If you are working on a problem and get stuck, make a note of it, bring your work and **ask questions**. I encourage *everyone* to come to office hours!

Other than assigned problems you should be reading the text every day and keeping up with the pace of the course. Keep in mind that it your responsibility to read each section before an exam.

Labs: We will have a few lab assignments during the semester. The college has many site licenses including Maple and Mathematica, which can downloaded here: `https://software.brockport.edu/`.

Classwork: Group worksheets and other classwork may be assigned during the lecture.

Quizzes: There will at least one quiz each week (except when there is an exam). Quizzes will usually cover lecture material and homework problems. The questions may even be taken directly from the homework set, or minor perturbations of the homework problems. Quizzes may be announced or unannounced. There will be no make up quizzes. **The lowest two quizzes will be dropped if you are present and attempt every quiz**.

Tests: There will be 3 exams during the semester. The tentative test dates are as follows:

Exam 1	September 17	(The **course drop deadline** is September 23, 5PM).
Exam 2	October 22	(The **course withdraw deadline** is October 31, 5PM).
Exam 3	November 19.	

Please see the course website for more details. Tests will be more challenging than the quizzes so you need to study accordingly. However doing the homework and reviewing the quizzes is the best way to prepare yourself.

Extra Credit: I will not be giving anyone individual extra credit. This way everyone has the same advantage in the course.

COURSE ETIQUETTE, POLICIES AND ADDITIONAL RESOURCES:

Classroom Etiquette: Please turn off cell phones, laptops and other electronic devices during class.

Quiz/Exam Policy: No calculators, cell phones, computers, mp3 players, slide rules, abaci, Addiators, Napier's bones, Difference/Analytical Engines, Pascalinas, Antikythera mechanisms, etc. may be used. In other words I want you to only use your brain and the hard work you put into this course to earn your grade. You may not talk to each other in the classroom while other students are working, even if you are done. Please keep your eyes on your own paper. Do not look at notes, books, etc. while working. Work through the problem on your own and you will

do fine (and save us both a lot of trouble).

Academic Dishonesty: Academic dishonesty of any kind will not be tolerated. It is disrespectful to the College, your classmates and to me. Any form of academic dishonesty will be dealt with severely. The College at Brockport: SUNY Policy on Academic Dishonesty (675 The Policy on Student Academic Dishonesty) can be found at `http://www.brockport.edu/hr/resources/chapters/675policystudentacademicdishonesty.htm`.

Excused Absences: As outlined in The College at Brockport: SUNY Attendance Policy absences will be excused for (a) documented illnesses, (b) official representation of the College, (c) death of a close relative, (d) religious holiday, and (e) other circumstances beyond the control of the student. Excuses for official representation of the College must be obtained from the official supervising that activity or event. Students whose unexcused absences exceed 15 percent of the scheduled classes and laboratories may receive a lowered grade or failure at the instructors discretion. The full policy can be found here: `http://www.brockport.edu/policies/docs/attendance_policy.pdf`

If you cannot attend one of the exams you should submit a written reason for your absence **in advance** of the exam date. I would appreciate knowing at least 3 days in advance if you are going to miss a class. In emergency situations please send me an email as soon as possible. The decision to allow make-up exams will be made on a case by case basis, but proper documentation is always necessary. No make-up exams will be given without advance notice (unless it is an emergency). If you miss a quiz, exam or final with an unexcused absence, you will receive a 0 for that particular assignment.

Attendance Policy: You are expected to attend and be a part of every class meeting. I will keep a record of your attendance, participation and preparation. Excessive absences will noticeably affect your final grade (as mentioned in the excused absences section above). This course will move rather quickly so I suggest you only miss class for a good reason (meaning an excused absence).

Disability Statement: Students with documented disabilities may be entitled to specific accommodations. The College at Brockport's Office for Student with Disabilities (OSD) makes this determination. Please contact the Office for Students with Disabilities at (585) 395-5409 or `osdoffic@brockport.edu` to inquire about obtaining an official letter to the course instructors detailing any approved accommodations.

The student is responsible for providing the course instructors with this official letter. Faculty work as a team with the Office for Students with Disabilities to meet the needs of students with disabilities.

Tutor Services/Requests: Please take advantage of office hours or email me if you have any questions. I am more than happy to help out!

The Student Learning Center (SLC) also provides a large number of free services for all students, including tutoring in all content areas. The SLC is located in Cooper Hall Room B-10 and their website can be found here: `http://www.brockport.edu/~slc/`.

Disclaimer: I reserve the right to make changes to this syllabus without prior notice.