Course Supervisor: Dr. Moira McDermott   **Email:** momcderm@syr.edu   **Office:** 313E Carnegie

- Your **instructor's** contact information appears on a supplement to this syllabus. Please inform your **instructor** of any problems that you are having with the course. Problems that are not satisfactorily resolved with your instructor should be brought to the attention of the **course supervisor** immediately.

Course Description: Analytic geometry, limits, derivatives, maxima-minima, related rates, graphs, differentials, exponential and logarithmic functions, mean-value theorem, L'Hospital's rule, integration. For science majors. MAT 295 may not be taken for credit after successful completion of MAT 286.

Course Objectives:
As a result of the learning experiences provided in this course, the student should be able to:

- Explain and define the limit of a function at a point, continuity at a point and differentiability at a point
- Explain the use of L'Hospital's Rule and apply it to appropriate limit problems
- State and show uses of the Mean Value Theorem
- Compute the derivatives of polynomials, rational functions, & composite algebraic functions, & trigonometric functions, natural logarithmic and exponential functions
- Differentiate implicitly
- Apply the techniques of differential calculus to the problem of curve sketching
- Apply differentiating techniques to find velocity & acceleration to solve related rate & max/min problems
- Define the anti-derivative of a function & define the Riemann integral
- Interpret the relationship between antidifferentiation & differentiation
- State and apply the Fundamental Theorem of Calculus
- State the important properties of the integral
- Solve problems involving antiderivatives and areas
- State and use the Mean Value Theorem for Integrals

Textbook & WebAssign: Stewart, James, *Essential Calculus: Early Transcendentals*, 2nd Edition; Cengage Learning. You also need a WebAssign access code for submitting online homework. **All students are required to have a WebAssign access code.** This code includes access to the electronic textbook. There are several ways to buy it.

Option	ISBN	Cost	Duration of access
SU Bookstore "Redshelf eBook"	9781337772228	$147.06	730 days
SU Bookstore package: physical textbook and WebAssign access code	9781133425946	$325.00	730 days
Cengage 10-month code ("multi-term access")	9781337772235	$125.00	10 months
Cengage 5-month code ("single-term access")	9781337772198	$100.00	5 months
Cengage Unlimited: access to all Cengage eBooks and online homework	none	$119.99	4 months

To purchase access through Cengage, go to https://cengage.com and enter an ISBN in the search box. The site will offer both the Cengage Unlimited option and the Digital Platform option described above.

Access Code is different from Class Key (also called "course key"). You will get a Class Key from your instructor. Entering the Class Key on https://webassign.net will let you enroll in the class and do the homework. There is a 14-day grace period before an Access Code is required. After you enroll in a WebAssign section, it will automatically offer the three Cengage options listed above: Cengage Unlimited, multi-term, and single-term access.

Calculator Policy: MAT 295-296-397 students are expected to complete the calculus sequence without the use of a calculator. Calculators will not be permitted on quizzes or exams.

Course Format: The course format is 2-3 lectures per week (depending on your section) and one recitation per week. The primary instructor will introduce the new material in lecture and the recitation instructor will answer questions on the course material and homework problems and help you review material for exams. Homework will be done on WebAssign and graded automatically. In almost every week there will be a quiz. Quizzes and exams are given either during recitation, in class, or online, to be determined by the instructor.

Class Attendance and Participation: You are expected to attend and participate in lecture and recitation. If you miss a class, it is your responsibility to obtain notes for that class from another student and to find out about any announcements your instructor made during class.

Syracuse University's Attendance Policy: Attendance in classes is expected in all courses at Syracuse University. It is a federal requirement that students who do not attend or cease to attend a class be reported at the time of determination by the faculty that the student never attended or stopped attending the class. Faculty will use Early-Semester Progress Reports and Mid-Semester Progress Reports in Orange SUccess to alert the Registrar and Financial Aid Office of non-attendance. For online students, attendance is determined by active participation in online sessions and by the completion of homework, quizzes, and exams. For more information visit: https://registrar.syr.edu/students/non-attendance/

Students may contact their home school/college Dean's Office or the Case Management staff in the Dean of Students Office when they are absent from class for an extended period of time (48 hours or more). The Case Management staff will require documentation for the absence and will utilize Orange SUccess to send notifications to faculty to verify that documentation has been received for the stated absence. For absences lasting less than 48 hours, students are encouraged to discuss academic arrangements directly with their faculty. Additional information may be found at Dean of Students Office: Absence Notifications.

Grading Policy: Your course grade will be computed as a weighted average using the following percentages:
Exams	54% (3 exams each 18%)
Quizzes/Homework/Participation*	28%
Final Exam	18%

*Note: It is up to your instructor how the 28% for quizzes, homework, and participation will be allocated. For more information, please refer to your instructor's section-specific course policies.

Grading Scale: Your letter grade will be determined as follows:
Score	Grade	Score	Grade	Score	Grade	Score	Grade	Score	Grade
93 – 100 %	A	90 – 92 %	A-	87 – 89 %	B+	83 – 86 %	B	80 – 82 %	B-
77 – 79 %	C+	73 – 76 %	C	70 – 72 %	C-	65 – 69 %	D	0 – 64 %	F

Exams: Three exams will be given during the semester. They will be given during recitation OR during class with the precise dates announced by your instructor.

- Exam #1: Week of March 1
- Exam #2: Week of April 5
- Exam #3: Week of May 3

There will be **no make-up exams**, even in the case of an emergency. A missed exam counts as a zero unless a valid excuse from a physician or the Dean's Office is presented to your instructor and accepted. With an acceptable written excuse, a missed exam score will be replaced with the percentage earned on the corresponding subsection of the final exam.

You are not permitted to use any outside materials, resources (including human beings), or electronic devices (including but not limited to calculators, mobile phones, smartwatches, etc.) on the exams. Any violation of this policy is a violation of the university's academic integrity policy.

Final Exam: The final exam is comprehensive and will be given during a two-hour block on **Thursday, May 20, 2021** between 8:00am – 2:30pm. The exact time will be announced by your instructor later in the semester. The final exam is worth 18% of your grade. The date is already set by the university, so please do not make other plans on the date of the final exam. If a student has a conflict with another final exam, the student must contact their instructor at least two weeks in advance in order to have it resolved.

Homework: The best way to learn the material in a mathematics class is to practice! It is essential for students to complete all of the homework assignments. Many of the homework assignments will be completed using WebAssign and some problems will be written (and assigned from the textbook). Your instructor may require some or all of the written homework assignments to be handed in and graded. Completing all the homework problems is the best way to practice and prepare for quizzes and exams.

Quizzes: Quizzes will be administered during most weeks, with some possible exceptions. Please refer to your instructor's schedule for exact dates of quizzes. **No make-up quizzes will be given. Calculators are not permitted on quizzes.**

Help: Be proactive about your success in the course! If you need help, there are resources available to help you.
- Your lecture and recitation instructor will be available to answer questions during office hours.
- Help is also available at the Calculus Help Center. http://math.syr.edu/undergraduate/math-help.html
- Center for Learning and Student Success (CLASS) also offers Free Group Tutoring Sessions for MAT 295. Information is available at http://class.syr.edu/.

Stay Safe Pledge: Syracuse University's Stay Safe Pledge reflects the high value that we, as a university community, place on the well-being of our community members. This pledge defines norms for behavior that will promote community health and well-being. Classroom expectations include the following: **wearing a mask that covers the nose and mouth at all times, maintaining a distance of six feet from others, and staying away from class if you feel unwell**. Students who do not follow these norms will not be allowed to continue in face-to-face classes; repeated violations will be treated as violations of the Code of Student Conduct and may result in disciplinary action. As masks are required at all times, students are not allowed to eat or drink in class.

Mental Health: Mental health and overall well-being are significant predictors of academic success. As such it is essential that during your college experience you develop the skills and resources effectively to navigate stress, anxiety, depression and other mental health concerns. Please familiarize yourself with the range of resources the Barnes Center provides (ese.syr.edu/bewell) and seek out support for mental health concerns as needed. Counseling services are available 24/7, 365 days a year, at 315.443.8000.

Faith Tradition Observances Policy: Syracuse University's religious observances policy, found at https://policies.syr.edu/policies/university-governance-ethics-integrity-and-legal-compliance/religious-observances-policy/, recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students should have an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors no later than the end of the second week of classes for regular session classes and by the submission deadline for flexibility formatted classes. Please inform your instructor if you will need to miss one of the "Additional Class Meetings" due to religious observance.

Students with Disabilities: Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. There may be aspects of the instruction or design of this course that result in barriers to your inclusion and full participation in this course. I invite any student to meet with me to discuss strategies and/or accommodations (academic adjustments) that may be essential to your success and to collaborate with the Center

for Disability Resources (CDR) in this process. If you would like to discuss disability-accommodations or register with CDR, please visit their website at https://disabilityservices.syr.edu. Please call (315) 443-4498 or email disabilityresources@syr.edu for more detailed information. CDR is responsible for coordinating disability-related academic accommodations and will work with the student to develop an access plan. Since academic accommodations may require early planning and generally are not provided retroactively, please contact CDR as soon as possible to begin this process.

Academic Integrity: Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The university policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same written work in more than one class without receiving written authorization in advance from both instructors.

Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the university's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice. The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level. For more information and the complete policy, see http://class.syr.edu/academic-integrity/policy/.

All academic integrity expectations that apply to in-person quizzes and exams also apply to online quizzes and exams. In this course, all work submitted for quizzes and exams must be yours alone. Discussing quiz or exam questions with anyone during the quiz or exam period violates academic integrity expectations for this course.

Using websites that charge fees or require uploading of course material (e.g. Chegg, Course Hero) to obtain exam solutions or assignments completed by others and present the work as your own violates academic integrity expectations in this course.

Use of Student Work: In compliance with the federal Family Educational Rights and Privacy Act, registration in this class is understood as permission for assignments prepared for this class to be used anonymously in the future for educational purposes.

Use of Class Materials and Recordings: Original class materials (handouts, assignments, tests, PowerPoint slides, etc.) and recordings of class sessions are the intellectual property of the course instructor. You may download these materials for your use in this class. However, you may not provide these materials or recordings to other parties (for example, web sites, social media, other students) without permission. Doing so is a violation of intellectual property law and of the student code of conduct.

Orange Alert: Orange Alert, Syracuse University's crisis notification system, uses text messages, phone, and email alerts to provide rapid notification and instructions to members of the University community in the event of a critical incident in progress. Critical incidents could include an individual who is considered armed and dangerous, a hazardous materials incident, an explosion, or any other event in which there is an immediate threat of physical harm or death to campus community members. We recognize that faculty may consider activated cell phones as an interruption to their class. However, the public safety department recommends that faculty members leave their own cell phones on vibrate in order to receive text messages about a potential emergency situation. It is also recommended that faculty designate several

class members to leave their cell phones on vibrate in order to receive notifications in the event of a critical incident. ORANGE ALERT contact information for students, faculty, and staff is drawn from the MySlice online information system; please keep your contact information current. **In the event of an emergency**

- Phone emergency line from on-campus: 711
- Phone emergency line from off-campus: 315.443.2224
- Phone emergency line from cell phone providers ATT/Verizon/Nextel: #78

For complete details on emergency procedures, visit: http://emergencyguide.syr.edu/.

Important Dates:
- Financial Aid/Academic Drop Deadline: Monday, March 1
- Last day to withdraw without a grade penalty: Friday, April 30
- Last day of class: Friday, May 14
- Final Exam: Thursday, May 20

Tips for Success: Be proactive about your success in the course.
- Do not procrastinate!
- Attend every class and recitation (or participate remotely).
- Ask questions whether it is during class, recitation, office hours, at the math help center or via email to your instructor.
- Form a study group! Working together will help you and others better understand the course material as you can work through different difficulties and offer each other clarifications on concepts.

Tentative Weekly Schedule: Please see your instructor for more detailed information on the weekly schedule, assignments, and assessments.

Week	Sections Covered	Week	Sections Covered
Week #1 – Week of Feb 8	1.3, 1.4	Week #8 – Week of Mar 29	3.7, 4.1
Week #2 – Week of Feb 15	1.4, 1.5, 1.6	Week #9 – Week of Apr 5	4.2, 4.3, Exam #2
Week #3 – Week of Feb 22	1.6, 2.1, 2.2	Week #10 – Week of Apr 12	4.5
Week #4 – Week of Mar 1	2.3, 2.4, 2.5, Exam #1	Week #11 – Week of Apr 19	4.7, 5.1
Week #5 – Week of Mar 8	2.5, 2.6, 2.7	Week #12 – Week of Apr 26	5.2, 5.3
Week #6 – Week of Mar 15	2.7, 2.8, 3.3	Week #13 – Week of May 3	5.3, 5.4, Exam #3
Week #7 – Week of Mar 22	3.3, 3.5, 3.7	Week #14 – Week of May 10	5.5, Review