MATH 1341 SECTION 17 (FALL 2019)
CALCULUS 1 FOR SCIENCE AND ENGINEERING

Instructor:	Robert Chang
Email:	hs.chang@northeastern.edu
Office Hours:	MW 3:00–4:00 p.m. at 534 Nightingale Hall; appointments are welcome

Lectures:	MWR 1:35–2:40 p.m. at 043 Snell Library
Website:	https://www.northeastern.edu/rchang/2019f1365

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Office Hours:	TBA
Recitations:	TBA

Textbooks. *Worldwide Differential Calculus* and *Worldwide Integral Calculus* by David B. Massey. Both are utilized in this course; the latter is used also in the sequel, Math 1342. It is absolutely not required that you purchase a printed textbook; a PDF version suffices.[1]

Course content. Students completing the course should be able to recognize and use the concepts and methods of calculus when they occur in their disciplines.

- Differentiation: limits, derivation rules, applications (e.g., optimization);
- Special functions (the exponential function, logarithm, trigonometric functions) and their derivatives;
- Integration: antiderivatives, integration by substitution, the definite integral, the Fundamental Theorem of Calculus.

Grading policy. Suggested exercises are posted weekly, but no homework is collected.

- **In-class Quizzes (40%)**

  There are seven quizzes for 25 minutes each, to be administered on:

  > **Thursday:** Sept. 12, Sept. 19, Oct. 3, Oct. 17, Nov. 7, Nov. 21;
  > **Monday:** Dec. 2.

  The problems for quizzes are always similar and often identical to those from the list of suggested exercises. The two lowest quiz scores are dropped. Any missed quizzes are counted in the dropped worst scores, and there are no make-up quizzes.

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[1] The PDF is priced at $14.95 each, compared to $39.95 for the black-and-white soft-back printed version. The former contains links at the beginning of each section to one or more free video lectures by Professor Massey on the contents of that section. It also features hyperlinks for easy cross-referencing.

- **In-Class Midterm (20%)**
  There is one closed-book in-class exam on Wednesday, October 23.

- **Final Exam (40%)**
  A two-hour final exam is administered some time between December 6 and December 13. Do not make travel plans that may conflict with the exam.

Academic Integrity and Honesty. Academic dishonesty is not tolerated and results in a failing grade. All incidents are reported to the Office of Student Conduct and Conflict Resolution (OSCCR). See here for detailed policies.

Academic Resources. The Mathematics Department Tutoring Center is at 540B. Nightingale Hall. This peer tutoring is free. Peer Tutoring appointments can be booked via myNortheastern under TUTORING.[2] The College of Engineering also provides tutoring for calculus. The PDF textbook contains links at the beginning of each section to video lectures on the contents of that section; these can also be accessed directly on YouTube: differential calculus sequence and integral calculus sequence.

Attendance. Attendance is expected. The course moves very fast; it is possible to fall behind in a single day. If you miss class for any reason, make an immediate attempt to contact the instructor or another student to discuss what you missed and how to catch up. It is your responsibility to be aware of any changes the instructor may make to the syllabus as they are announced in class. Students are responsible for all information given when they are absent.

Calculators. You may need access to a graphing calculator equivalent to TI-82, TI-83, TI-84, TI-85 or TI-86. Some functions on the TI-89 or 92 or other calculator (symbolic differentiation/integration) are not allowed on quizzes or exams: consult your instructor about this policy if you have one of these.

College of Science Policies. See here for the current College of Science Academic Course Policies.

Final Exam Conflicts. Only two finals at the same time or three in one day constitute a University recognized legitimate reason to be excused from taking the final at the scheduled

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[2]Although you can walk in, it is really best to sign up in advance. Tutoring requests are scheduled by students in real-time and confirmed by email. You are encouraged to schedule your appointments in advance; for example, it is recommended that next-day appointments be booked by 9:00 p.m. the previous day. You can, however, always check the schedule to see if there are any available times up to two hours ahead of time. It is expected that tutoring services in the Mathematics Department Tutoring Center will begin the week of September 16th. A partial schedule will likely be available before then, and any updates on the availability of peer tutoring before September 16 will be announced in class. See here for more information.

time. Students with such a conflict should complete a Final Exam Conflict Form, available on the Registrar's website. Missing the final exam results in a failing grade.

Letter Grades. Letter grades are determined numerically by your average as follows:

$$100 \geq \texttt{A} > 92, \quad 92 \geq \texttt{A-} > 89, \quad 89 \geq \texttt{B+} > 86, \quad 86 \geq \texttt{B} > 82,$$
$$82 \geq \texttt{B-} > 79, \quad 79 \geq \texttt{C+} > 76, \quad 76 \geq \texttt{C} > 72, \quad 72 \geq \texttt{C-} > 69,$$
$$69 \geq \texttt{D+} > 66, \quad 66 \geq \texttt{D} > 62, \quad 62 \geq \texttt{D-} > 59, \quad 59 \geq \texttt{F} \geq 0.$$

Reporting Concerns. If you have a concern about the course or the instructor that is not or cannot be resolved by speaking with the instructor, the next step is to speak with the Course Coordinator. If the Course Coordinator does not settle the matter, please contact the Teaching Director, Professor Robert McOwen, 445 LA, 617-373-5678, r.mcowen@northeastern.edu.

TRACE Participation. Every student is expected to complete the Teacher Rating and Course Evaluation (TRACE) survey at the end of the semester.

Withdrawal and Incomplete. Withdrawal is done through the Registrar by the announced deadline. (Last day to drop without a W grade is September 24; last day to drop with a W grade is December 5.) Instructors are only permitted to give "Incomplete" under very limited circumstances. The student must have completed at least 75% of the course material and must have a C or better grade at the time.

Students with Disabilities. Students who have disabilities who wish to receive academic services and accommodations should follow the standard Disabilities Resource Center (DRC) procedures.

Title IX. The University strictly prohibits sex or gender discrimination in all university programs and activities. Information on how to report an incident of such discrimination (which includes sexual harassment and sexual assault) is located here.