

Syracuse University, Summer Start 2014
MAT 194: Precalculus

Course Instructor: Claudio DiMarco
Office: Archbold 105B
Lecture Hours: 08:00 am-10:25 am (MTWTh)
Lecture location: Newhouse 2 340
Office Hours: 11:30 am-12:30 pm (MTW)
Email: cdimarco@syr.edu

Course Supervisor: Professor Andrew Vogel
Office: 229F Physics Building
Email: alvogel@syr.edu

Course Description:

This course is designed to prepare you for success in the study of calculus. Using graphical, numerical, and symbolic representations, you will investigate the basic properties of many elementary functions, including linear, quadratic, polynomial, exponential, logarithmic, trigonometric, and rational. These functions and their applications will be the core focus of the course. You will engage in applied problem solving in collaborative group settings using graphing technologies. A second but equally important aim of this course is for you to refresh and retain the algebra skills necessary to succeed in your next math course. There will be weekly assignments and quizzes that will address these skills. Class time will not be devoted to your preparation for these quizzes.

Prerequisites for Course:

Students should be competent in the use of high school level algebra. Students should have successfully completed a unit on trigonometry at the high school or college level. A student cannot receive credit for MAT 194 after receiving a grade of C or better in any calculus course. Students **MUST** earn a grade of C- or better in MAT 194 in order to meet the prerequisites for taking MAT 295 Calculus I.

Materials:

(1) Textbook: Connally, E., Hughes-Hallett, D., Gleason, A. M., et al. (2011). Functions modeling change: A preparation for calculus(4th ed.). Hoboken, NJ: John Wiley & Sons, Inc. Also available as a custom edition.

(2) TI-84 or TI-83+ graphing calculator. This may be purchased at a variety of local stores and may be purchased at the Syracuse University Bookstore; you may also be able to buy a used calculator from a student on campus. The calculator may be used on all homework, tests and the final exam. You should bring your calculator with you to class and during exams. Notes can be stored in your calculator and may be used on the tests and final exam. The use of a symbolic calculator (such as the TI-89 or the TI-Nspire with CAS) will not be allowed on quizzes or exams.

(3) Optional: Student Solutions Manual. This book is available on 2-hour reserve from Carnegie Library on the first floor of Carnegie.

WebAssign:

You must create your WebAssign account at www.webassign.net in order to submit your on-line homework. You will "self enroll" into this section of MAT194 by using the following class key: **will be**

posted on course website. You should set up your account using your SU username and email address. Please do this today!

You will also need to enter an “access code” to use WebAssign. If you purchase a *new* textbook at the SU bookstore, it will come with an access code. If you purchase a new textbook elsewhere or a used textbook, you will need to purchase your access code separately. This can be done on-line with a credit card through WebAssign or you can purchase an access code at the SU bookstore.

Getting Help:

Your instructor will be available during regular office hours, by appointment, and via email. In addition, the Mathematics Department offers regular free math clinics. Students are encouraged to take advantage of the help offered in the Math Clinic and in the Calculus Clinic. The location and schedule of the clinic will be posted outside the Math Department office (Carnegie 215) and on the Math Department website at math.syr.edu.

Homework Group:

You will be assigned to a “homework group.” You are strongly encouraged to contact the members of your homework group for assistance in solving problems.

Electronic Devices:

Any electronic device other than a graphing calculator must **be turned off** and put away during quizzes and exams. Calculators on cell phones are not to be used during tests or quizzes.

Homework:

Homework for the entire semester is listed on the homework schedule at the end of the syllabus. Due dates for the WebAssign (online) portion are posted on WebAssign (online). Non-Webassign homework will not be collected or graded. You are responsible for the material in the non-WebAssign homework problems. It is *essential* to do all the homework assignments in a timely fashion. An additional document will be distributed concerning homework policy. You are required to comply with the course policies listed on the syllabus and on that additional document.

Quizzes: A short quiz will be given every Monday and Thursday unless it is the first day of the semester or an exam day. **No makeup quizzes will be given under any circumstances.** Your lowest two quiz grades will be dropped. If you miss a quiz, you will get zero credit for that quiz.

Class Preparation:

You are expected to read the appropriate section of the textbook prior to the class in which that material is discussed. You should try to work through the examples in the text. After the class presentation, you should re-read the material and work through all of the assigned problems. I will occasionally take a few minutes at the beginning of class to address questions arising from the assigned homework problems. Because of time limitations, I can only address a few! **The only way to learn mathematics is to do mathematics!**

Exams: There are three exams. Each exam will be given during class. **No makeup exams will be given under any circumstances.**

Exam 1: 14 July

Exam 2: 24 July

Exam 3: 7 August

Grading: Your final grade in this course will be based on your performance on exams, the final exam (which is cumulative), WebAssign, and quizzes. The relative weight assigned to each is designated as follows.

Exams	3 at 20% each
Homework	20%
Quizzes	20%

Your course grade will be assigned based on the following percentages.

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

Academic Integrity: The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see <http://academicintegrity.syr.edu>.

Students with Disabilities: If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call 315-443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. Do not wait until right before an exam. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

Religious Observance Policy: Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented among 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 are provided 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 before the end of the second week of classes. For fall and spring semesters, an online notification process is available through MySlice/StudentServices/Enrollment/My Religious Observances from the first day of class until the end of the second week of class.

Note: **No makeup exams or quizzes will be given under any circumstances.** If you miss an exam, and if you provide written documentation from a dean or a health care provider, then the relevant portion of the final exam will replace your missing exam. If you do not provide such documentation, then you will receive zero credit for the missed exam.

Homework Problems

Chapter 1

- Section 1.1 9, 15, 26, 36, 37, 1, 10, 11, 12, 13, 14, 18, 31
- Section 1.2 4, 12, 16, 1XP1, 1XP2, S9, S10, 5, 9, 10, 11, 22-26
- Section 1.3 9, 10, 11, 12, 14, 15, 20, 27, 28, 1XP3, 1, 3, 5, 26
- Section 1.4 16, 17, 18, 19, 20, 22, 25, 27, 38, 41, 47, S9, S10, 1, 3, 5, 7, 29, 34, 43
- Section 1.5 17, 18, 19, 1XP4, 1XP5, 2, 3, 13, 14, 15, 20, 23, 31

Chapter 2

- Section 2.1 S9, S10, 2, 3, 16, 17, 20, 21, 2XP, 1, 18, 19, 21, 22, 27, 29, 30, 31
- Section 2.2 27, 34, S2, S4, 2, 3, 21, 23, 24, 25, 29
- section 2.3 7, 10, 15, 16, 2XP2, 1, 3, 4, 8, 9, 13, 24
- Section 2.4 8, 10, 36, 4, 5, 6, 7
- Section 2.5 9, 10, 3, 8, 11, 12, 18, 19, 20, 24

Chapter 3

- Section 3.1 8, 9, 14, 15, 16, 24, 30, 33, 5XP2, 5XP3, 5XP4, 25, 28, 32, 34
- Section 3.2 7-14, 20, 21, 23, 16, p. 128 16, 18, 20, 22

Chapter 4

- Section 4.1 20, 24, 29, 32, 33, 35, 40, 44, 46, 49, 18, 50, p. 168 1, 2, 3, 82/15 4.2
- Section 4.2 1, 2, 6, 36, 39, 4, 8, 10, 15, 20, 26, 38, 43
- Section 4.3 16, 18, 40, 41, 423xP1, 3, 5, 11, 12, 13, 14, 26, 30, 37, 42, 43
- Section 4.5 9, 10, 11, 12, 3XP2, 3XP3, 1, 4, 5, 6

Chapter 5

- Section 5.1 14, 15, 16, 17, 19, 20, 40, 50, 52, 4XP1, 4XP3, 4XP4, 1, 3, 5, 7, 11, 34, 49
Section 5.2 39, 42, 44, 56, 57, 4XP: 9, 11, 14, 15, 16, 17, #4XP10, 4XP12, 4XP13, 53
Section 5.3 25, 1, 3-10, 13, 20, 26, 29, 30

Chapter 6

- Section 6.1 3, 27, 31, 40, 52, 53, 5XP5, 1, 2, 4, 6, 19, 20, 21, 22, 38, 39, 50
Section 6.2 S8, S10, 1, 14, 16, 18, 19, 20, 21, 26, 27, 42, 9, 10, 30, 33
Section 6.3 S4, 2, 8, 11, 12, 14, 20, 21, 28, 29
Section 6.4 1, 4, 12, S7, S8, 10, 15, 16, 20, 25, 26
Section 6.5 S10, 21, 23, 24, 3*, 13, 18, 22, 25

Chapter 7

- Section 7.1 12, 20, 21, 22, 23, 1, 10, 17, 18, 19, 243/29
Section 7.2 13, 24, 18, 19, 20, 21, 22
Section 7.3 4, 5, 6XP 1-8, 1, 2, 3, 6, 10, 22, 24, 26, 32, 34, 36

Chapter 8

- Section 8.1 1-15 odd, 21, 26, 27, 28, 29, 41, 47, 31, 33, 39, 46
Section 8.2 2, 3, 26, 27, 33, 40, 10, 13, 14, 15, 16, 17, 23, 28, 29, 31, 36, 39

Chapter 10

- Section 10.1 6, 20, 30, 46, 62, 20, 22, 23, 34, 36, 39, 40, 47, 49, 52, 54, 57, 63

Chapter 11

- Section 11.2 10, 12, 15, 6, 7, 8, 26, 27
Section 11.3 2, 3, 8, 12, 13a, 14, 18, 19, 20, 41, 43, 9, 23, 24, 26, 27, 28, 32
Section 11.4 9, 11, 22, 25, 26, 29, 2, 3, 8, 10, 12, 13, 15, 19, 20, 24
Section 11.5 5, 9, 13, 14, 42, 43, 1, 3, 15, 16, 17, 18, 22, 23, 24, 34, 35, 38