

MAT 194 Precalculus
Summer Start 2015
MTWTh 8:00 – 10:25 AM
Ernie Davis 202

Instructor: Thembinkosi P. Mkhathshwa
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Office hours: MW 10:30 AM – 11:30 AM, or by appointment

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Please inform me of any problems that you have with this course. Problems not satisfactorily resolved with me should be brought to the attention of the course supervisor without delay.

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 the Carnegie Library on the first floor of Carnegie Hall. Entrance to the library is through the southeast corner of the building

WebAssign: You will need to 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 blackboard**). 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 continue using 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.

Attendance: This is **not** a distance learning class. You are expected to attend all lectures and not only when it’s convenient for you to do so. **Missing class can significantly reduce your chances of success in this course.**

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.

Electronic Devices: all electronic devices other than graphing calculators (cell phones, laptops, tablets, iAnything) should **be turned off** and put away during class. Calculators on cell phones are not to be used in class, on tests, or on quizzes.

Homework: Homework for the entire semester is listed on the homework schedule at the end of the syllabus. Due dates for the on-line portion (WebAssign) are posted on-line. 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. **I will not grant extensions to complete WebAssign homework except in cases of sicknesses in which case a doctor’s report should be provided.**

Quizzes: A short in-class quiz will be given every Monday at the beginning of class unless it is the first day of the semester or an exam day. There will also be online algebra quizzes that will be assigned on a weekly basis. The due dates for these quizzes will be posted on WebAssign.

Class Preparation: You are expected to read the appropriate section of the text 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 online homework problems. Because of time limitations, I can only address a few in class and more perhaps during office hours! **The only way to learn mathematics is to do mathematics!**

Final Examination: Your final examination will take place during a two-hour block on Thursday, August 13th between 8:25 AM and 10:25 A.M. The venue for the final exam is the same as the our regular lecture room. You are required to take the final examination during the appointed examination block and, in the absence of an exam conflict, at the scheduled time. **DO NOT MAKE PLANS TO LEAVE CAMPUS BEFORE 10:25 A.M. on August 13, 2015.**

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

Exams (3)	45%
Final Exam	15%
Homework	20%
Online and in-class quizzes	20%

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

Letter Grade	Overall Grade	Letter Grade	Overall Grade
A	93 - 100	C+	76 - 79
A-	90 - 92	C	73 - 75
B+	86 - 89	C-	70 - 72
B	83 - 85	D	60 - 69
B-	80 - 82	F	0 - 59

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. Making arrangements with ODS takes time. Do not wait until just before the first test.

Religious Observance Policy: SU'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.

Tentative Exam Dates:

I will not give make-up exams except in cases of sicknesses in which case a doctor's report should be provided.

Exam #1: Wednesday, July 15, 2015

Exam #2: Monday, July 27, 2015

Exam #3: Thursday, August 6, 2015

DEADLINES FOR SUMMER START 2013

FIRST DAY OF SSII – July 6, 2015

ADD CLASS – July 8, 2015

PASS/FAIL OR AUDIT – July 9, 2015

FINANCIAL DROP – July 13, 2015

ACADEMIC DROP – July 28, 2015

WITHDRAWAL DEADLINE – August 6, 2015

LAST DAY OF CLASSES – August 14, 2015

Homework Problems

Chapter 1

section 1.1

On-line: #9, 15, 26, 36, 37

Practice problems: #1, 10, 11, 12, 13, 14, 18, 31

Section 1.2

On-line: #4, 12, 16, 1XP1, 1XP2

Practice problems: #S9, S10, 5, 9, 10, 11, 22-26

Section 1.3

On-line: #9, 10, 11, 12, 14, 15, 20, 27, 28, 1XP3

Practice problems: #1, 3, 5, 26

Section 1.4

On-line: #16, 17, 18, 19, 20, 22, 25, 27, 38, 41, 47

Practice problems: S9, S10, 1, 3, 5, 7, 29, 34, 43

Section 1.5

On-line: #17, 18, 19, 1XP4, 1XP5

Practice problems: #2, 3, 13, 14, 15, 20, 23, 31

Chapter 2

Section 2.1

On-line: #S9, S10, 2, 3, 16, 17, 20, 21, 2XP1

Practice problems: #1, 18, 19, 21, 22, 27, 29, 30, 31

Section 2.2

On-line: #27, 34

Practice problems: #S2, S4, 2, 3, 21, 23, 24, 25, 29

section 2.3

On-line: #7, 10, 15, 16, 2XP2
Practice problems: #1, 3, 4, 8, 9, 13, 24

Section 2.4

On-line #8, 10, 36
Practice problems: 4, 5, 6, 7

Section 2.5

On-line: #9, 10
Practice problems: #3, 8, 11, 12, 18, 19, 20, 24

Chapter 3

Section 3.1

On-line: #8, 9, 14, 15, 16, 24, 30, 33, 5XP2, 5XP3, 5XP4
Practice problems: #25, 28, 32, 34

Section 3.2

On-line: #7-14, 20, 21, 23
Practice problems: #16, p. 128 16, 18, 20, 22
review for Exam #1

chapter 4

Section 4.1

On-line: #20, 24, 29, 32, 33, 35, 40, 44, 46, 49
Practice problems: #18, 50, p. 168 1, 2, 3, 82/15 4.2 On-line: #1, 2, 6, 36, 39
Practice problems: #4, 8, 10, 15, 20, 26, 38, 43

Section 4.3

On-line: #16, 18, 40, 41, 423xP1
Practice problems: #3, 5, 11, 12, 13, 14, 26, 30, 37, 42, 43

Section 4.5

On-line: #9, 10, 11, 12, 3XP2, 3XP3
Practice problems: #1, 4, 5, 6

Chapter 5

Section 5.1

On-line: #14, 15, 16, 17, 19, 20, 40, 50, 52, 4XP1, 4XP3, 4XP4

Practice problems: #1, 3, 5, 7, 11, 34, 49

Section 5.2

On-line: #39, 42, 44, 56, 57, 4XP: 9, 11, 14, 15, 16, 17, #4XP10, 4XP12, 4XP13
Practice problems: #53

Section 5.3

On-line: #25
Practice problems: #1, 3-10, 13, 20, 26, 29, 30

Chapter 6

Section 6.1

On-line: #3, 27, 31, 40, 52, 53, 5XP5
Practice problems: #1, 2, 4, 6, 19, 20, 21, 22, 38, 39, 50

Section 6.2

On-line: #S8, S10, 1, 14, 16, 18, 19, 20, 21, 26, 27, 42
Practice problems: #9, 10, 30, 33

Section 6.3

On-line: #S4, 2
Practice problems: #8, 11, 12, 14, 20, 21, 28, 29

Section 6.4

On-line: #1, 4, 12
Practice problems: #S7, S8, 10, 15, 16, 20, 25, 26

Section 6.5

On-line: #S10, 21, 23, 24
Practice problems: #3*, 13, 18, 22, 25
review for Exam #2

chapter 7

Section 7.1

On-line: #12, 20, 21, 22, 23
Practice problems: #1, 10, 17, 18, 19, 243/29

Section 7.2

On-line: #13, 24
Practice problems: #18, 19, 20, 21, 22

Section 7.3

On-line: #4, 5, 6XP 1-8

Practice problems: #1, 2, 3, 6, 10, 22, 24, 26, 32, 34, 36

Chapter 8

Section 8.1

On-line: #1-15 odd, 21, 26, 27, 28, 29, 41, 47

Practice problems: #31, 33, 39, 46

Section 8.2

On-line: #2, 3, 26, 27, 33, 40

Practice problems: #10, 13, 14, 15, 16, 17, 23, 28, 29, 31, 36, 39

Chapter 10

Section 10.1

On-line: #6, 20, 30, 46, 62

Practice problems: #20, 22, 23, 34, 36, 39, 40, 47, 49, 52, 54, 57, 63

Chapter 11

Section 11.2

On-line: #10, 12, 15

Practice problems: 6, 7, 8, 26, 27

Section 11.3

On-line: #2, 3, 8, 12, 13a, 14, 18, 19, 20, 41, 43

Practice problems: #9, 23, 24, 26, 27, 28, 32

Section 11.4

On-line: #9, 11, 22, 25, 26, 29

Practice problems: #2, 3, 8, 10, 12, 13, 15, 19, 20, 24
review for Exam #3

Section 11.5

On-line: #5, 9, 13, 14, 42, 43

Practice problems: #1, 3, 15, 16, 17, 18, 22, 23, 24, 34, 35, 38
review for Final Exam