

Math 183 – Elements of Modern Mathematics **Syllabus for Fall 2016**

Instructor and Supervisor: Professor Kari Shaw

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Office hours: Tuesday 1:00 – 1:45 & 3:30 – 4:30

Thursday 1:00 – 1:45 & 5:00 – 6:00

Course Description: This course is designed for students in the School of Management. The course will involve no calculus, and a thorough background in high school mathematics is the only prerequisite. The course has three main components: Linear Algebra, Probability & Statistics, and the Mathematics of Finance.

Textbook: Goldstein, Schneider, and Siegel (2010). Finite Mathematics and its Applications (3rd custom ed.) Pearson, Custom Edition for Syracuse University. The bookstore sells the textbook and WebAssign code together in a bundle. Since it is a new edition of the text, they are not sold separately. (Although the WebAssign code can be purchased separately online.) A WebAssign code is mandatory, since homework will be done using WebAssign. See below for detailed of instructions on how to register to WebAssign.

Calculator: This course involves extensive use of the TI-84 or TI-83 graphing calculator. Each student is required to have a TI-83/4 calculator. The calculator will prove to be an indispensable tool throughout the course, particularly in the Mathematics of Finance component. Since the TI-83/4 will be useful, if not essential, for virtually every topic, it is important to familiarize yourself with the calculator as soon as possible. Though the main techniques will be demonstrated in class, it is up to you to become proficient with the calculator on your own. The TI-83/4 is the only calculator that may be used on a test or the final exam. In particular, calculators on cell phones, TI-Nspire with/or without TI-84 keypad are not to be used on tests or quizzes. Use of any other brand calculator, or any another model of Texas Instruments in the exams or quizzes is forbidden and if you use a calculator that is not allowed, then your exam or quiz may be counted as 0. All electronic devices other than the calculator should be turned off and put away during class. **The use of any electronic device other than the TI-83/84 during an examination is strictly forbidden.**

Quizzes: There will be regular quizzes in your recitation section. Your TA will give you the quiz schedule. There will be no make-up quizzes. Your two lowest or missing quiz scores will be dropped.

Homework: Homework will be done online using WebAssign. You are required to purchase your entry code for this online system; it is bundled with the custom edition of the text. The first 14 days of WebAssign is free. The trial period (the grace period) will end on Monday, September 12. After this date you cannot access your homework without the access code. Each class day a set of WebAssign problems will be assigned. They will be discussed during recitation and will be due at 11:00 pm one week later. The instructions for how to initiate your WebAssign access are at the end of this document.

WebAssign Class Key: syr 6230 5750

Extension Policy: If you do not complete a homework assignment in the 7 days allotted you may request an extension on WebAssign. It will be automatically granted, giving you a total of 10 days to complete your problems. There will be no other extensions. No extensions will be granted beyond the 10 days. There is no other way to request extensions. Any problems submitted in the 3-day extension window will earn only 50% of their point value. Questions answered before the original due date are not affected and they are counted 100%.

Extra Credit Policy: You will receive 50% extra credit for correct answers submitted in the first 4 days an assignment is posted. Most problems will have 10 submissions allowed. **Submit your questions one by one. DO NOT submit the entire homework. If you submit the homework there is no way to go back and correct your work or submit the remaining questions.**

Grading Policy: Your grade will be based on the your performance on homework and quizzes, the two in-class tests, and the final exam, those grades being weighted as follows.

Exam 1	25%
Exam 2	25%
Final Exam	30%
Quizzes & Homework	20%

After numerical grades are combined as above, letter grades will be assigned as follows:

A	93 – 100 %	A-	90 – 92.9%	B+	87 – 89.9%	B	83 – 86.9%
B-	80 – 82.9%	C+	77 – 79.9%	C	73 – 76.9%	C-	70 – 72.9%
D	60 – 69.9%	F	0 – 59.9%				

TESTS: There will be two in-class tests and a comprehensive final exam. The final examination covers the entire course. The final exam will be given on Wednesday, December 14, during a two-hour period between 8:00 and 2:30, and at no other time. **Do not make plans to leave campus before 2:30 p.m. on Wednesday, December 14, 2016.** The exact time and location of the final will be announced later in the semester. Every student must take the exam at that time. There will be no exceptions. **No early final exams will be given.**

Exam I Thursday, October 6 (in class)

Exam II Thursday, November 17 (in class)

Final Exam Wednesday, December 14, in a 2-hour period between 8:00am and 2:30pm (exact time and place to be announced later). The use of any electronic device other than the TI-83/84 during an examination is strictly forbidden.

Note that the second test is the Thursday before Thanksgiving break. No early tests will be given. Do not make plans to leave early for Thanksgiving break before the test.

Important Dates:

- Add Deadline: Tuesday, September 06, 2016
- Financial Drop Deadline: Monday, September 19, 2016
- Academic Drop Deadline: Monday, October 24, 2016
- Withdrawal Deadline: Friday, November 18, 2016

Make-up policy: There will be NO make-up tests. For students with an EXCUSED absence, the final exam score will be substituted for the missing exam score. There will be NO make-up quizzes. Two quizzes may be missed without penalty.

Attendance and Class Preparation: Students are expected to attend every lecture and every recitation, and are responsible for any announcements made during lecture. Missing class is the most common reason for poor performance in the course. **If you miss a class, you are responsible for obtaining notes for that class from a student who attended. It is also your responsibility to find out about any announcements made in class.** Students should read the appropriate sections of the text before the class in which the material is presented. All cell phones should be silenced and put away during class.

Finding Help: Prof. Shaw and your recitation instructor will hold regular office hours. In addition, the Mathematics Department offers regular math clinics. These will start the second week of classes and will be held in Carnegie. A schedule of clinic hours will be available in the math office (215 Carnegie). You should see your recitation instructor or Prof Shaw for questions requiring explanations about problems, concepts etc.; such question cannot be taken care of by email.

Course-related problems. Please inform your TA or Prof Shaw of any problems you have with this course. Problems not satisfactorily resolved with your TA should be brought to the attention of the Prof Shaw without delay.

University and Math Department Policy Statements:**Academic Integrity Policy**

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. The presumptive penalty for a first instance of academic dishonesty by an undergraduate student is course failure, accompanied by a transcript notation indicating that the failure resulted from a violation of academic integrity policy. The presumptive penalty for a first instance of academic dishonesty by a graduate student is suspension or expulsion. 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. For more information and the complete policy, see <http://academicintegrity.syr.edu/>.

Disability-Related Accommodations

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, TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for 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.

Diversity and Disability

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal is to create learning environments that are useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, I invite any student to meet with me to discuss additional strategies beyond accommodations that may be helpful to your success.

Religious Observances Notification and Policy

SU religious observances notification and policy, found at <http://hendricks.syr.edu/spiritual-life/index.html>, recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays 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 regular session classes and by the submission deadline for flexibly formatted classes. For fall and spring semesters, an online notification process is available for students in **My Slice / StudentServices / Enrollment / MyReligiousObservances / Add a Notification**.

Learning Outcomes:

- The ability to select an appropriate mathematical model for a given real world problem;
- The ability to understand and enunciate the limitations of conclusions drawn from mathematical models;
- The ability to effectively use appropriate mathematical technology;
- A mastery of the basic properties of matrices and the ability to solve simple matrix equations;
- A mastery of the basic properties and formulas of probability and statistics and the ability to compute simple probabilities in a statistical setting and to interpret the results;
- A mastery of the basic formulas from the mathematics of finance and the ability to apply these formulas in a variety of settings that arise in personal finance.

How to succeed: Here are a few basic suggestions for how to succeed in this course.

1. It is absolutely essential that you understand how to solve the assigned homework problems and, more importantly, how and why the skills and techniques presented in the course are used in solving the assign problems. Quiz and exam questions will be similar to these problems.

2. Ask questions in lecture, recitation and/or at the clinic about anything that is not completely clear. Do not hesitate to bring questions to your instructors during office hours.
3. Every day, read and study the sections in the textbook covered in the lecture. Learning mathematics takes time! Read carefully and work through all the examples in complete detail. It can be helpful to try to work through an example on your own before reading the solution.
4. Stay caught up. Mathematical concepts build on each other cumulatively and you need to stay on top of the material at every stage. If you are having difficulty, do not expect that the problem will take care of itself and disappear later. Contact your course instructor or your recitation instructor immediately and discuss the problem!
5. Form a study group. Many students benefit from a study group to work through challenging problems and to review for exams. You should attempt the problems ahead of time by yourself and then work through any difficulties with your study partners. Explaining your reasoning to another student can help to clarify your own understanding.
6. You should expect to work hard. Do not get discouraged if you find some of the material very difficult. Be persistent and patient! If you follow the above suggestions, your experience in this course will be a rewarding one.

WebAssign Registration Instructions for MAT 183 Fall 2016

1. Go to www.webassign.net
2. Click on ENTER CLASS KEY.
3. Enter the class key by entering "syr" in the first box, 6230 in the second box, and 5750 in the third box; then click SUBMIT.
4. If you see "Instructor: Kari Shaw" and then click on YES, THIS IS MY CLASS.
5. Select I need to create a WebAssign account (if you do not have an account associated to your SU email from an earlier class or another semester. If you have an account associated to your SU account, then choose I already have a WebAssign account.)
6. Enter a user name and password of your choice. **NEVER CHANGE YOUR USERNAME!** (If you change your username, then the system duplicates your account and you may lose some of your homework).
Enter your name and Last Name.
Enter your SU email account [**Use your SU email account.** No gmail, yahoo, Hotmail, or any other account. I receive your scores according to your email address.] If you use any email not ending as @syr.edu, you may lose your homework scores.
Enter your SU Student ID.
Then click on "Create my Account".

7. The next page confirms your information, so click on LOG IN NOW.

8. You should be logged in now. Select one of the options:

-enter an access code (purchased with your textbook from the bookstore)

-purchase an access code online (if you do not have an access code)

-continue my trial period (only available until September 12)

Note that after September 12 the trial period will end and you will not be able to access your homework without an access code.

WebAssign Warnings:

*Submit each question individually. **Never** submit the entire assignment at once. If you submit the entire assignment even I do not have the ability to give you more attempts.

*If you see a green check mark next to a question you have submitted then your answer to that question is correct. You do not have to do anything further with that question.

*You can see your points per question and your total points at the top of the page under the "Extension Requests" & "Print Assignment" links. If you see your score, and it is correct, then you do not have to do anything else. Contact me only if there is an error in your score.

*If there are no explicit directions to enter the solution then enter your answer as a number: integer, decimal or fraction. Usually a fraction is the safest method. In particular, do not enter expressions like "5C(5,2)" or "1-35/2".

*If there are any explicit directions then follow the directions.

*Check that your email address is your Syracuse email and your ID number is correct. At the end of the semester I will import your grades and use them according to your Syracuse ID.

***NEVER** change your username. It creates a second account, instead of just changing your existing account.

*Note that all due times are 11:00 pm. That is local time in New York State. If you are in another state or country, check your time zone and submit your work according to NY time.

*In general, if you have trouble logging in, try the following:

-restart your web browser

-restart your computer/laptop

-use Firefox instead of other web browsers. In particular, if you have a Mac you should use Firefox instead of Safari.