

# Course Syllabus for Math 1090-006

**Instructor:** Stefano Filipazzi

**Class Time:** Mondays, Wednesdays and Fridays, 9.40 a.m. - 10.30 a.m.

**Class Place:** AEB 320

**Office hours:** Mondays, 12.00 p.m. - 1.00 p.m., JWB 221, and Fridays, 10.40 a.m. - 11.40 a.m., SFEBB 1182

**Hour at Tutoring Center:** Wednesdays, 12.00 p.m. - 1.00 p.m.

**Office location:** JWB 221

**E-mail address:** [filipazz@math.utah.edu](mailto:filipazz@math.utah.edu)

**Personal Web Page:** <http://www.math.utah.edu/~filipazz>

**Text:** *Business Algebra*, by Kelly MacArthur, 2nd edition, printed version ISBN 9781465240989, ebook ISBN 9781465208699. For purchase information, see <http://www.math.utah.edu/schedule/bookInfo/Math1090BookInfo.pdf>

**Course Information:** Math 1090, College Algebra for Business and Social Sciences, Section 006. It is a 3-credit semester course.

**Prerequisite:** “C” or better in (MATH 1010 OR MATH 1050 OR MATH 1080) OR Accuplacer CLM score of 60 or better OR ACT Math score of 23 or better OR SAT Math score of 540 or better.

**Course Description:** Functions and graphs, polynomial and rational functions, matrices, Gaussian elimination, exponential and logarithmic functions, growth, periodic and continuously compounded interest, arithmetic and geometric series, annuities and loans.

**Expected Learning Outcomes:** Upon successful completion of this course, a student should be able to accomplish the following tasks. Graph and analyze quadratic, exponential and logarithmic functions; solve quadratic, exponential and logarithmic equations. Understand what a mathematical function is and know how to use linear, quadratic, logarithmic and exponential functions to model real

world examples. Know how to solve a system of linear or quadratic equations that arise in business applications. Find solutions to linear programming problems, to maximize a function over a geometric region. Perform simple matrix algebra computations. Use matrices to solve systems of linear equations. Understand what an inverse function is and be able to find the inverse function, when it exists. Distinguish between simple and compound interest situations. Calculate future and present value of annuities, and know when to use which formula for the life application. Compute an amortization schedule and loan payments, such as automobile or mortgage payments.

**Tutoring:** T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Room 155, M-Th 8 a.m. - 8 p.m., F 8 a.m. - 6 p.m. (closed Saturdays, Sundays and holidays). It opens TBA. They are also offering group tutoring sessions. Visit <http://www.math.utah.edu/ugrad/tutoring.html> for more information. Alternatively, refer to University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB 233. Last academic year, a new tutoring center opened in the Business building SFEBB. See <http://undergrad.business.utah.edu/page/tutoring-schedule> for more information; the page will be updated soon.

**Computer Lab:** T. Benny Rushing Mathematics Student Center, Room 155C, M - Th 8 a.m. - 8 p.m., F 8 a.m.- 6 p.m. (closed Saturdays, Sundays and holidays). It opens Monday, August 24th. Visit <http://www.math.utah.edu/ugrad/lab.html> for more information.

**Grading:** The grades will be calculated as follows

Homework	10%
Midterm	25%
Midterm	25%
Midterm	10%
Final	30%

Note that there will be 3 midterms. Your lowest midterm score will count for 10% of your grade and your top two midterm scores will each count for 25% of your final grade. Your grades will be posted on Canvas. You can get there easily from the main University of Utah website [www.utah.edu](http://www.utah.edu). To log in, you use the same student ID and password that you use for Campus Information System. I do my best to update the grades on a regular basis and keep everything accurate. However, I would advise you to check your grades often to make sure there were no data entry mistakes. I am always happy to correct any mistakes I have made. You just need to let me know about them.

**Grading Scale:** The grade scale will be the usual:

A	A-	B+	B	B-	C+
[100, 93]	(93, 90]	(90, 87]	(87, 83]	(83, 80]	(80, 77]
C	C-	D+	D	D-	E
(77, 73]	(73, 70]	(70, 67]	(67, 63]	(63, 60]	(60, 0]

**Homework:** Homework will be assigned weekly and will be collected at the beginning of the first class of each week. All of the homework assigned the previous week is due at that time. I will accept ten late homework sections, up to two weeks late, throughout the semester for full credit. I will not accept homework more than two weeks late. I accept these late homework sections to allow for illness, oversleeping, etc.. This policy is meant to be flexible enough to cover all reasons and so do not ask for special favors in regards to the homework policy, unless the circumstances are extraordinarily severe. Homework will be graded both for completeness and correctness. As for completeness, every homework problem will be worth one point. In particular, note that no credit will be given for writing just an answer (even if it is correct), without any proof of work. As for correctness, from each homework assignment I will randomly pick two exercises, which will be graded in detail. The remaining assigned exercises will not be graded for correctness, so it is your responsibility to show proof of your work for credit and make sure you understand the problems and their solutions. The exercises graded for completeness will contribute to 7% of your grade, while the ones graded for correctness will contribute to 3% of the grade (for an overall 10% coming from the homework). Homework will be exercises taken from the book. There you can find all the answers to the problems. Thus, you have a good way to check your answers. If you have doubts about the homework, please come talk to me about it after class or during office hours. Notice that doing your homework is essential to succeed in a math class. Also, notice that there is no way to get an A in this course if you choose not to do any of the homework. On the other hand, turning in all of the homework can help your grade substantially. Last but not least, the way you present your work is important: if you do not staple your homework, or if your work is not legible, the grader will have the freedom to take off as many points as he/she considers appropriate.

**Quiz:** During the second week of class, we will have one short quiz about topics in the review section. You will not be allowed to use a calculator during the quiz. The score of the quiz will be added to the homework category. Also, during the semester I might plan other quizzes; if so, I will announce it in class and post

it on Canvas one week in advance.

**Midterms:** There will be three midterms. Midterms will take the entirety of one class period, and will focus on material presented in class since the last midterm. Further information about each midterm will be discussed in class the week before it.

**Reviews:** Before each midterm, we will have a review session. These reviews will not be during class time, since the schedule of the course does not permit it. Because of this, times and days of the reviews are already included in the syllabus, so that you can plan accordingly, if you want to attend them.

**Final Exam:** The final exam for this class is comprehensive and it will occur on Thursday, April 28, 2016, from 3.30 p.m. to 5.30 p.m., room JFB 103. Please, notice this is a departmental final (i.e. all sections of 1090 will take the very same exam at the same time). Hence, unless the presence of extremely serious circumstances, you will have to take the exam on that day and at that time. Therefore, please, plan your end of semester accordingly.

**Calculators:** You may find it helpful to have a graphing calculator for your own personal use. However, if I allow calculators on exams or quizzes, I will only allow scientific calculators (no graphing or programmable calculators will be allowed ever). Most of the time, you will not have the use of a calculator on assessments. This will be discussed more in class with each quiz and test.

**ADA Statement:** The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in some alternative format with prior notification to the Center for Disability Services.

**Student Responsibilities:** All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible

classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

<http://regulations.utah.edu/academics/6-400.php>

**Important Dates:**

- Classes begin: Monday, January 11
- Last day to add without a permission code: Sunday, January 17
- Last day to add, drop (delete), elect CR/NC, or audit classes: Friday, January 22
- Review for First Midterm: Wednesday, February 3, 4.30 p.m., room LCB 225
- First Midterm: Friday, February 5
- Review for Second Midterm: Monday, February 29, 4.30 p.m., room LCB 225
- Second Midterm: Wednesday, March 2
- Last day to withdraw from classes: Friday, March 4
- Review for Third Midterm: Wednesday, April 6, 4.30 p.m., room LCB 225
- Third Midterm: Friday, April 8
- Last day to reverse CR/NC option: Friday, April 22
- Classes end: Tuesday, April 26
- Reading day: Wednesday, April 27
- Final Exam: Thursday, April 28

**Miscellany:**

- Please silence your technology during the class.

- In the absence of extenuating circumstances, there will be no “make-ups” or “retakes” of any course material. Should it happen that you cannot be present the day one of the tests takes place, please let me know of your absence before the test takes place (or as soon as possible), and provide suitable justification. In this case, I will do my best to work out a fair solution to the problem before the exam occurs (or as soon as possible). Talking to me after the problem will be sufficient reason for me to allow you to get a zero on that test. I reserve the right to make alternate exams more difficult than the scheduled exam.
- If you believe that I made a grading mistake, come talk to me prior to one week after I had handed the assignment or exam back. No revisions or adjustments will be made after this time.
- I reserve the right to make a change in course policy. This syllabus is not a binding document. If a change is needed, I will announce the change to the class and send a class-wide e-mail.
- Working on homework problems in a group is a great way to learn mathematics! Sharing and copying answers verbatim is cheating, however. If you prefer to work in a group, great! Talk about the problems as much as you like, but please write up your own solutions.
- If you cheat on any homework, project, quiz or exam, I will automatically give you a zero for that grade. Depending on the severity of the cheating, I may decide to fail you from the class. In all cases of cheating, I will also report the incident to the Dean of Students. Additionally, if an international student cheats, I will also report the incident to the International Students Office.
- If you find yourself struggling with a concept, please come ask me and we can discuss it during office hours.