MATH 1090: Coll Alg Bus/Soc Sci Fall 2015
Course Syllabus

Instructor: Ziwen Zhu
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Lectures: T,H 10:45am-12:05pm, BU C 303

Office Hours: M 9:30am-10:30am, H 2:30pm-3:30pm

Course Web Page: http://www.math.utah.edu/∼zzhu/1090.html

Textbook: *Business Algebra*, 2nd Edition, by Kelly MacArthur, ISBN 9781465240989.
You can get purchasing information at `http://www.math.utah.edu/schedule/bookInfo/Math1090BookInfo.pdf`.

Important Dates:

- **Midterm 1:** Thursday, Sept. 17th (in class)
- **Midterm 2:** Thursday, Oct. 22nd (in class)
- **Midterm 3:** Thursday, Nov.. 19th (in class)
- **Final Exam:** Wednesday, Dec. 16th, 3:30pm - 5:30pm

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

Prerequisites: "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:

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

Tutoring Lab: T. Benny Rushing Mathematics Student Center (adjacent to JWB and LCB), Rm 155
M - Th 8 am - 8 pm
F 8 am - 6 pm
(closed Saturdays, Sundays and holidays)
They are also offering group tutoring sessions.
If you're interested, inquire at the Tutoring Lab. `http://www.math.utah.edu/ugrad/tutoring.html`

Private Tutoring: University Tutoring Services, 330 SSB (they offer inexpensive tutoring). There is also a list of tutors at the Math Department office in JWB233.

Computer Lab: Also in the T. Benny Rushing Mathematics Student Center, Room 155C.
M - Th 8 am - 8 pm
F 8 am - 6 pm
Link to computer lab is `http://www.math.utah.edu/ugrad/lab.html`

Grading: The grades will be calculated as follows:

Weekly Homework	15%
Quizzes	10%
Midterm 1	15%
Midterm 2	15%
Midterm 3	15%
Final Exam	30%
Total	100%

Each part of your grades will be posted on Canvas. I will do my best to update the grades in time and keep everything accurate. However, I would encourage you to check your own grades on a regular basis so that you can contact me immediately if there are questions or mistakes about your grades.

Homework:

- I will collect homework during the first class of each week, i.e. Tuesday. All of the homework assigned the previous week is due at that time. If for any reason you are not able to turn in your homework on Tuesday, you can turn it in on Thursday. However, your homework score for that week will be discounted by 10%. I will NOT accept homework more than a week late.
- Homework is picked from the book. The homework is graded only for completeness. If you do every assigned problem, you will get full credits. There are keys to all the homework problems in the book. It is your responsibility to check yourself for correctness and understand how to do these problems. If you have questions, try to utilize all the resources mentioned above such as tutoring center and office hours.
- Your final homework score will be the average of each week's homework score.

Quizzes: : During the course we will have two short quizzes. The first one will be in the second week. It is about topics in the review section. If you don't do well in that quiz, you might need extra efforts throughout the semester to pass the course. The other quiz will be about properties of logarithms after Chapter 4 is presented in class. You will not be allowed to use a calculator during these quizzes.

Midterm: There will be 3 midterms. Each midterm will focus on material presented in class since the last midterm.

Final Exam: We have a departmental final for this course. It will occur on Wednesday, Dec. 16, 2015, from 3:30 pm to 5:30 pm. The time is NOT negotiable. It is your responsibility to schedule accordingly so that you can make the final. The location is to be announced. The final will cover all topics presented in class.

Grading Scales: The grade scale will be the usual: A (93-100), A- (90-92), B+ (87-89), B (83-86), B- (80-82), C+ (77-79), C (73-76), C- (70-72), D+ (67-69), D (63-66), D- (60-62), E (0-59).

ADA: 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 (CDS), 162 Olpin Union Building, 581- 5020 (V/TDD). CDS will work with you and me to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDS.

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`

Other Policies:

- Please silence your technology during the class. Computers or labtops are NOT allowed in class.
- You are allowed to bring a scientific calculator, but not a programmable or graphing one. You can still use them to do your homework if you want, but since they wont be allowed on midterms or on the final, it might not be a good idea to do so.
- You need to have a valid email address registered with Campus Information System. I will send emails to the class and expect you to be responsible for receiving that information.
- there will be no make-ups or retakes of quizzes and exams. Should it happen that you cannot make the test, please communicate with me IN ADVANCE and provide necessary justification of extenuating circumstances. In that case, I can work out a fair solution to the problem.
- If you have questions about any exam grade, or you want to appeal the grading of the exam, you must bring it to me within one week of the exam. After that, you will have to live with whatever grade you got.
- 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.
- I reserve the right to make any change in course policy mentioned above in the syllabus. If a change is needed, I will announce the change to the class and send a class-wide e-mail.