Brazosport College
Syllabus for: Math 1324 Finite Math
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Office hours: M-TH 8:30-9:00, 11-12:00, 2-3:30

Course Description

The student will learn applications of algebra, including linear systems, matrices, linear programming, probability, statistics, and interest calculation.

Course Outcomes

Upon completion of the course, the student will be able to:

1. Compute accrued compound interest earned by a lump sum investment.
2. Find the future value of an ordinary annuity.
3. Find the present value of an ordinary annuity.
4. Solve a system of equations.
5. Perform matrix multiplication.
6. Find the inverse of a square matrix.
7. Solve a linear programming problem graphically.
8. Solve a linear programming problem with the simplex method.
9. Solve an application using linear programming.
10. Apply permutations and combinations to counting problems.
11. Compute probability using addition and multiplication rules.
12. Solve a problem using conditional probability.
13. Measure the center of a set of data.
14. Compute the expected value of a discrete random variable.
15. Calculate the probability of an event

PREREQUISITES

Completion of 0407 or 0408, or of Algebra II in high school, or of College Algebra, or the consent of the instructor and department head.

TEXTBOOK

Triola, Mario, <u>Elementary Statistics Using Excel</u>, 4th edition, Addison-Wesley, 2011.

This is a calculator-required class. The TI 83 or 84 are common and are fine, but any scientific calculator is also fine if you have another model you prefer.

This class will also require Microsoft Excel to complete some of the homework. You can use a lab computer on campus, all of which have Excel loaded, or your home computer. If your home computer does not have Excel or Microsoft Office (which contains Excel) you can download and use Open Office, an open source spreadsheet similar to Excel (similar does not mean identical; if you use Open Office you should also download the instruction book, in some cases the keystrokes will be a little different for Open Office).

LAB REQUIREMENTS
       None

STUDENTS WITH DISABILITIES
       Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979-230-3236, for further information.

ACADEMIC HONESTY
       Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information, this is available online at http://www.brazosport.edu, click on the link found on the left side of the homepage.

ATTENDANCE AND WITHDRAWAL POLICIES
       Attendance is taken each class day but is not part of your grade. This is not a developmental math class, I am not required to drop you if you stop coming to class, and very likely will not drop you if you do so; if you stop coming and fail to drop it is therefore very likely you will make an F. If you know you will be missing class let me know by either phone or e-mail.

       The last day to drop this semester is March 28.

       Please come to class on time. Walking in late every day is rude. Also, please turn off your cell phone before class, or, if you need to be accessible, switch to vibrate or some other method which won't disturb us all when it rings, and leave the class to answer the phone.

       Don't text in class, don't listen to an mp3 player in class, don't play with any sort of electronic entertainment in class. If you play with your phone in class I'll kick you out. If we're working on the computer and you are checking facebook or your email in another window I'll kick you out.

       Come to class. It's very hard to pass a class like this if you don't attend. Really.

COURSE REQUIREMENTS AND GRADING POLICY

The grade ranges are:
- A: 90 -100%
- B: 80 - 89%
- C: 70 - 79%
- D: 60 - 69%
- F: Below 60%

My grading method is:
- 4 tests worth 15% each
- Final exam worth 20%
- A number of quizzes, which together are worth 20%

I collect all the homework at the end of the semester, when you take the final exam. I then grade your final and calculate your course grade. If you are within 1.5 points of the next letter grade, I look carefully over your homework. If it appears to me that you have made a good effort at the homework throughout the semester, I will bump you to the next letter grade. If you have done, say, about half the homework, I might bump you a maximum of .8 or so points. If you have done no homework, you get exactly what your course average indicates.

I will be happy to return your homework to you after I have turned grades in.

TESTING

As stated above, we will have four tests and a final exam. Each test will use one class period. I anticipate allowing you to have one page of notes to refer to during each test, though I reserve the right to adjust this policy.

We will have quizzes most days we don't have tests. I often allow you to work with another student on a quiz, or to refer to your book or to other resources. Please don't confuse my quiz standards with my testing standards.

You may do test corrections on **one** test during the semester. The rules for test corrections are:

- The corrections are due two days after you get the test back. I will not take them late.
- Corrections may not be done on the test, they must be on separate pages stapled to the back of the test
- The standard for grading the corrections is **higher** than the standard for grading the tests. You have longer to do the corrections, and have help in the Math Lab and from other sources. To get credit the corrections must be **perfect.**
- I reserve the right to ask you to come in and explain part or all of your corrections to me after you hand them in. You may get help with the corrections, but you have to work the problem yourself, and you have to understand the answer. Your goal should be to convince me that if you took the test now you would make a 100.
- If you do the corrections perfectly I will give you half the points you missed on the test back. So, if you made an 80 on the test, you missed 20 points. If your test corrections are perfect, you would get 10 of those back. Now you would have a 90 on the test.

- If your test corrections are, for example, 70% correct, I will give you 70% of half the points you missed back.
- It is not practical to do test corrections on the last test of the semester. You won't have time, so don't save your corrections for that test.

MAKE-UP POLICY

           If you miss a test and do not have a verifiable excuse, you get a zero. With a verifiable excuse, I will either write you a make up test or, in some very unusual cases, allow your final grade to count as the missing test grade. Make up tests are usually somewhat harder than the original test was, since I used up all the "obvious" questions on the original test, and the average grade on make up tests is lower than the average grade on tests taken in class. It's to your advantage to take the test with the rest of the class.

        I do not allow you to make up quizzes, but I do drop your lowest quiz grade. You should expect to have about ten quiz grades by the end of the semester.

OTHER STUDENT SERVICES INFORMATION

        Information about the Library is available at www.brazosport.edu/~lib/Information.htm or by calling 979-230-3310.

        Information about study skills and tutoring for math, reading, writing, biology, chemistry, and other subjects is available in the Learning Assistance Center (LAC), see www.brazosport.edu/~lac or call 979-230-3253.

        To contact the Math Department call 230-3225.

        The Student Services provides assistance in the following:

Counseling and Advising	979-230-3040
Financial Aid	979-230-3294
Student Activities	979-230-3355

        To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979-230-3266.