

Syllabus:

MATH 2203 Business Analysis I

Catalog Course Description

Algebraic functions, logarithmic functions, exponential functions, matrices and linear systems, and linear programming. Prerequisite: Satisfactory score on Mathematics Placement Test. Three lecture hours a week. Credit: Three hours.

Measurable Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- Logically find relationships among variables to formulate mathematical models for everyday applications, including business applications, such as cost, revenue, profit, supply and demand.
- Understand matrices and their applications, including solving systems of linear equations.
- Construct linear programming problems for various applications and solve using graphical techniques, including finding the optimal point(s) where a company minimizes its cost or maximizes its profit.
- Understand set terminology and its relationship to symbolic notation.
- Use Venn diagrams to model the relationship between sets and set operations, with applications to real-world problems.
- Understand the principles of probability and counting and apply these concepts to a variety of problems, such as finding the number of ways or probability of obtaining particular card hands.
- Identify types of random variables and calculate probabilities and statistics for random variables.
- Apply the concepts of finance to real-world situations, such as financing a car or house.

Each of the above student learning outcomes must be performed at an appropriate level as stated in each course assignment requirements, grading scale or rubric.

Major Course Assignments and Examinations

Average of 10 quizzes (15%)
Average of 3 exams (60%)
Cumulative final exam (25%)

Readings

Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences Thirteenth Edition, by Haeussler, Paul, & Wood.

Exams

The final exam schedule can be found at <http://www.twu.edu/academics/final-exam-schedule.asp>. Makeup exams will be given only in extreme emergency situations (as decided by the instructor).

Homework

All assigned homework problems should be worked (see last page of syllabus). The answers to the odd numbered exercises are located in the back of the book. The homework will not be picked up or graded. It is the student's responsibility to do the work and seek out answers to any questions. Feel free to form study groups; however, each student should attempt the problem first before seeking help from the group. The knowledge gained from these assignments will be what is quizzed and tested. Remember that the Math Lab is available to help you with questions, but they are not your personal tutoring service. As always, you may always drop by during office hours.

Grades

A: [90%, 100%); B: [80%, 90%); C: [70%, 80%); D: [60%, 70%); F: [0%, 60%)

Attendance

All students are strongly encouraged to attend class regularly and punctually. Responsibility for work missed because of illness or school business is placed upon the student.

Academic Dishonesty

Honesty in completing assignments is essential to the mission of the university and to the development of the personal integrity of the student. Cheating, plagiarism, or other kinds of academic dishonesty will not be tolerated and will result in appropriate sanctions that may include failing an assignment, failing the class, or being suspended or expelled.

Suspected cases in this course may be reported to Student Life. The specific disciplinary process for academic dishonesty is found in the TWU Student Handbook. Tools to help you avoid plagiarism are available through the TWU Libraries at <http://www.twu.edu/library/tutorial/plagiarism/player.html>.

Students with Disabilities

If you anticipate the need for reasonable accommodations to meet the requirements of this course, you must register with the office of Disability Support Services (CFO 106, 940-898-3835, dss@twu.edu) in order to obtain the required official notification of your accommodation needs. Please plan to meet with me by appointment or during office hours to discuss approved accommodations and how my course requirements and activities may impact your ability to fully participate.

Notes

- A calculator with a square root key is required. TI-83 is recommended.
- No food or drink is allowed in the classroom.