Mathematics for Business and Social Sciences
MATH. 1324. 62430
Spring 2018
12/11/17 – 1/5/18
MyMathLab course id: brock32805

Professor: Emily Brock
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Office Phone Number: 214-860-8634
Office Number: W221
Office Hours: by appointment
Meeting Days & Time: MTWRF SU (online)
Room Number: Online (mymathlab, ecampus)
Credit Hours: 3 Semester hours

Division: Science, Technology, Engineering, & Mathematics (STEM)
Office Hours: M – F 8:00 am – 5:00 pm
Office Phone: 214-860-8760
Office Number: W147

Course Description: The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

Course Pre-requisites: This is an entry-level course and is open to any student meeting TSI standards of college readiness (student must have appropriate assessment test score or have successfully completed DMAT 0310).

Course Materials/Supplies Needed
(OPTIONAL) SOLUTION MANUAL (9780321946775)
TI – 83 PLUS OR TI-84 PLUS OR OTHER SCIENTIFIC CALCULATOR.

THECB Learning Outcomes
Upon successful completion of this course, students will:
1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
5. Apply matrix skills and probability analyses to model applications to solve real-world problems.

Core Statement:
MATH 1324 is a Tier 1 course in the Quantitative Reasoning learning category. “Knowledge and skills that are important to your success in other college courses will be introduced and reinforced in Tier 1. The Quantitative Reasoning category promotes the application of mathematics to increase your ability to solve “real-world” problem. When you are quantitatively literate, you can use logic and critical thinking in new ways.” - Catalog of the Colleges of DCCCD

Core Objectives:
MATH 1324 develops the following Core Objectives:
Critical Thinking – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
Communication – to include effective development, interpretation and expression of ideas through written and visual communication.
Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Core Objective Development Statement:
MATH 1324 develops Critical Thinking, Communication, and Empirical and Quantitative Skills by requiring students to solve and analyze applications of various functions to management, economics, and business.

Course Outline:
Chapter 1 A Library of Elementary Functions
Chapter 2 Functions and Graphs
Chapter 3 Mathematics of Finance
Chapter 4 Systems of Linear Equations; Matrices
Chapter 5 Linear Inequalities and Linear Programming
Chapter 6 Linear Programming: Simplex Method (optional)
Chapter 7 Logic, Sets, and Counting
Chapter 8 Probability

Evaluation Procedures:
Final Exam: 25%
Test Average: 25%
Quiz Average: 20%
Discussion Board: 15%
Homework Average: 15%

Instructor Attendance Policy:
Students are expected to log into the course regularly. For a full-semester online course, regularly is defined as at least three times per week. For this class I would suggest logging on 5 to 7 days per week. A full-semester face to face class would meet 3 hours a week for 16 weeks. To be successful I recommend at least an additional 1 to 3 hours practice time for every hour of lesson time (3 to 9 additional hours for a total of 6 to 12 hours per week for 16 weeks). That comes to a total of 96 to 192 hours per semester. You have 26 days to complete this course. That averages to 4 to 8 hours per day, or 28-56 hours per week. If math does not come easy to you, you might need even more time. Please budget enough time for this class!
Grading Scale:
A: 90-100%
B: 80-89%
C: 70-79%
D: 60-69%
F: 0-59%

Late Work Policy: If a student cannot complete and submit an assignment on time they should contact the instructor. In general late assignments will lose 1% per day they are late.

Makeup Exam Policy: If a student misses a test deadline, they will be given a grade of 0. If a student wishes to take a test they missed or retake a test to improve their grade, they must have a certain minimum score (usually 80% - defined in MyMathLab) on the associated homework assignments.

Certification Procedures: (For Online Courses)
Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this online course, enrolling in my class in MyMathLab, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses. If your name on MyMathLab is different than the name I have for you in ecampus, please let me know. If I don’t know I may not certify you as being in attendance.

The withdraw date for this class is December 22, 2017.

Academic Dishonesty:
Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college.

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog.

Institution Policies: Institutional Policies relating to this course can be accessed from the following link: www.mountainviewcollege.edu/syllabipolicies for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Dishonesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan.).

Course Calendar
See due dates in MyMathLab