## Instructor Information

| Name | Janice Epstein |
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| Office | BLOC 245D |
| Phone number | Math Department: 845-3261 |
| E-mail | j-epstein@tamu.edu |
| Office hours | Posted at http://www.math.tamu.edu/~epstein/16aMath141/ |
| Help Sessions <br> Week in Reviews | $\underline{\text { http://www.math.tamu.edu/courses/helpsessions.html }}$ |

## Class times

- MATH 141508 M 03:00 PM-04:15 PM
- MATH 141509 M 04:30 PM-05:45 PM
- MATH 141510 M 06:00 PM-07:15 PM
- MATH 141511 W 03:00 PM-04:15 PM
- MATH 141
- MATH 141
512 W

04:30 PM-05:45 PM
C E 222
CE 136
CE 222
CE 007
CE 203

- MATH 141

513 M 12:45 PM-02:00 PM
BLOC 148

- MATH 141

514 W 12:45 PM-02:00 PM
BLOC 148

- MATH 141516 W

02:20 PM-03:35 PM
BLOC 148
BLOC 148

- MATH 141517 M 09:35 AM-10:50 AM CE 136


## Catalog Description

Business Mathematics I (Credit 3) Linear and quadratic equations and applications; functions and graphs, systems of linear equations, matrix algebra and applications, linear programming, probability and applications, statistics. No credit will be given for more than one of Math 141 and Math 166. Prerequisites: High school algebra I and II and geometry.

## LEARNING OUTCOMES

This course is focused on quantitative literacy in mathematics found in both business and everyday life. 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.


## TEXtbook

Finite Mathematics for the Managerial, Life, and Social Sciences, 11th Edition, by Tan
Note: When you registered for this class you paid for an electronic version of the textbook and access to your computer homework. Thus, you are not required to purchase a hard copy of the textbook. You have the option to purchase a custom loose-leaf copy of the textbook through the local bookstores. For more information go to http://www.math.tamu.edu/courses/eHomework and click on "Student Information Page".

## Calculator Policy

A TI-83, TI-83PLUS, TI-84, TI-84PLUS, or TI-Nspire Non-CAS (with an 84 faceplate) is REQUIRED. These are the only types of calculators that you are allowed to use on quizzes and exams. You must bring your calculator to every class period. NOTE: It is considered a violation of the Aggie Honor Code to have any programs, notes, etc. in your calculator that have not been approved by your instructor.

## Computer Homework

There will be a graded computer homework assignment for each section we cover in-class. These assignments will be taken on the WebAssign computer system. For more information and to login please go to http://www.math.tamu.edu/courses/eHomework

## Grading Policies

A (90-100\%), B (80-89\%), C (70-79\%), D (60-69\%), F (0-59\%)

| Activity | Date | Percentage |
| :--- | :--- | ---: |
| Exam I | Feb. 12 at 4:30 PM | $15 \%$ |
| Exam II | Mar. 11 at 4:30 PM | $15 \%$ |
| Exam III | Apr. 15 at 4:30 PM | $15 \%$ |
| Computer Homework | Weekly | $10 \%$ |
| Quizzes | Weekly | $10 \%$ |
| Class Activities | Weekly | $5 \%$ |
| Videos | Weekly | $5 \%$ |
| Final Exam | May 6 at 6:00 PM | $25 \%$ |
| TOTAL |  | $\mathbf{1 0 0 \%}$ |

## ATTENDANCE AND MAKE-UP POLICIES

Attendance is mandatory and may affect your grade. No assignments, quizzes, or exams will be excused without an official, written, University Excuse. You must notify me in advance to ensure the right to a make-up. If advance notice is not possible (i.e. sudden illness), you MUST contact me within TWO working days of the missed exam; otherwise, you forfeit the right to a make-up. An absence for a nonacute medical service or regular check-up does not constitute an excused absence. For more information please go to http://student-rules.tamu.edu/rule07. Please note that I will NOT accept the Explanatory Statement for Absence from Class form as sufficient written documentation of an excused absence.

If you have a University approved absence for missing an exam, you will be expected to make up your exam the following Monday morning. Only if you have a University approved absence for the day of the exam and the following Monday will you be allowed to have other arrangements made. You must discuss (email is fine) the need for a make-up exam with me before going to a scheduled time.

## Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu .

## AcADEmic Integrity

"An Aggie does not lie, cheat, or steal, or tolerate those who do." Upon accepting admission to Texas A\&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit http://aggiehonor.tamu.edu/

## Class Format

This course is a hybrid with all the lectures online at http://www.math.tamu.edu/~epstein/15cMath141/16a Video Links.htm|
To verify you have watched these videos, you will answer questions in WebAssign while viewing the videos. Class meets once per week with an undergraduate teaching assistant. During the weekly meetings you will have class activities and a quiz.

## Tentative weekly schedule

| WEEK OF | TOPIC | SECTIONS |
| :---: | :---: | :---: |
| 1/18 | Linear functions and Mathematical models | 1.3, 1.4 |
| 1/25 | Quadratic functions, systems of linear equations <br> *Note that this section is not located in the textbook. Please see the supplemental handout. | 1.Q*, 2.1, 2.2 |
| 2/1 | Systems of linear equations, matrix arithmetic | 2.3, 2.4, 2.5 |
| 2/8 | Review, Exam 1 (1.3,1.4, 1.Q, 2.1-2.5) |  |
| 2/15 | Graphing systems of linear inequalities, Linear Programming problems | 3.1, 3.2, 3.3 |
| 2/23 | Sets, Counting, Multiplication principle | 6.1, 6.2, 6.3 |
| 2/29 | Multiplication principle, Permutations, Combinations, Experiments, Sample spaces, and Events | 6.3, 6.4, 7.1 |
| 3/7 | Review, Exam 2 (3.1-3.3, 6.1-6.4, 7.1) |  |
| 3/14 | SPRING BREAK |  |
| 3/21 | Definition and rules of Probability, Counting techniques in probability | 7.2, 7.3, 7.4 |
| 3/28 | Conditional probability, Independence, Bayes' Theorem | 7.5, 7.6 |
| 4/4 | Distributions of random variables, Expected Value, Variance, Standard Deviation | 8.1, 8.2, 8.3 |
| 4/11 | Binomial Distribution, Review, Exam 3 (7.2-7.6, 8.1-8.4) | 8.4 |
| 4/18 | Normal distribution, Finance | 8.5, 8.6, 5.1 |
| 4/25 | Finance | 5.2, 5.3 |
| 5/2 | Review for Final Exam, Final Exams |  |

