

INSTRUCTOR INFORMATION

Name	Heather Ramsey
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Course Page	To access materials and information for this course, please login to http://ecampus.tamu.edu
Office hours	Wednesdays 4pm-5:30pm in BLOC 624 Thursdays 5:20pm-6:45pm in BLOC 506A
BMTA hours	Mondays 3:10pm-6:10pm in BLOC 605AX Tuesdays 2:30pm-3:30pm in BLOC 506A Wednesdays 3:10pm-5:30pm in BLOC 624 Thursdays 2:30pm-3:30pm in BLOC 506A
Help Sessions	http://www.math.tamu.edu/courses/helpsessions.html
Week in Reviews	http://www.math.tamu.edu/courses/weekinreview.html

CLASS TIMES

- 141-505: TR 3:55pm-5:10pm MPHY 203

CATALOG DESCRIPTION

Finite Mathematics (Credit 3) Linear equations and applications; 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 140, 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: You will be required to purchase access to the online homework system, WebAssign. The fee for this is \$94, **which includes access to both the online homework and an electronic copy of the textbook**. Thus, you are not required to purchase a hard copy of the textbook, although you have the option to purchase a custom loose-leaf copy of the textbook (which should be bundled with an access code to WebAssign) through the local bookstores. However, this option is more expensive. 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 homework 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.

SUGGESTED HOMEWORK

Mathematics cannot be learned and fully understood by simply watching someone else do it. It must be practiced by working many, many problems. In addition to graded homework, I STRONGLY recommend that you keep a notebook in which you work the problems from the suggested homework list found at the end of this syllabus and at http://www.math.tamu.edu/courses/math141/141suggested_homework.pdf. The problems listed are found in your online textbook in eCampus. It would be best for you to work these suggested homework problems after a topic is covered in class, but before trying the graded homework.

It is imperative that you work many different problems in order to help you be fully prepared for exams.

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. You will be required to purchase access to the homework. For more information and to log in please go to <http://www.math.tamu.edu/courses/eHomework>.

EXAMS

There will be three in-class exams. **All questions on exams will be multiple choice and/or true/false. No partial credit will be given.** You must bring your student ID and approved calculator to each exam. Calculators will be checked before or during each exam. If there are any programs, notes, or formulas on your calculator which I did not give you, the occurrence will be considered scholastic dishonesty. The tentative exam schedule is as follows:

Exam 1: Thursday, February 9, 2017

Exam 2: Thursday, March 9, 2017

Exam 3: Thursday, April 13, 2017

Because of the nature of our classroom, all students will be asked to stay for the entire exam period, even if they finish early. Also, students will only be given 65 minutes to complete the exam to allow time before the exam starts to fill in Scantrons and after the exam finishes to collect all papers.

FINAL EXAM

The final exam will be comprehensive. **All questions on the final will be multiple choice and/or true/false. No partial credit will be given.** The final exam schedule is as follows:

Section	Class Time	Final Exam Date and Time
141-505	TR 3:55pm-5:10pm	Monday, May 8 th , 1pm-3pm

If it will benefit you, your final exam grade will replace your lowest midterm exam grade. Please note that this benefit will only occur if you have taken all three midterm exams. Only one exam grade will be replaced, even if your lowest score was the same on two exams.

GRADING POLICIES

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

Activity	Date	Percentage
Exam I	2/9/17	20%
Exam II	3/9/17	20%
Exam III	4/13/17	20%
Homework	Weekly	15%
Final Exam	5/8/17	25%
TOTAL		100%

Any questions concerning the grading of homework or an exam must be presented to me within one week of the

return of the assignment. Otherwise the grade will not be changed. I will be posting grades during the semester on eCampus. Please go to <http://ecampus.tamu.edu> to login.

ATTENDANCE AND MAKE-UP POLICIES

Attendance is mandatory and may affect your grade. No make-up homework assignments or exams will be given without an official, written, University Excuse (falsification of documentation is a violation of the Aggie Honor Code). 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 assignment/exam; otherwise, you forfeit the right to a make-up. An absence for a non-acute 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 according to the Math Dept. Make-up Schedule that can be found at <http://www.math.tamu.edu/courses/makeupexams.html>, starting with the first option for each exam. Only if you have a University approved absence for the day of the exam and the previous makeup day will you be allowed to use the later options or 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.

OTHER CLASS POLICIES

- **Required Materials for Class:** Bring your approved calculator, student ID, a pencil, and a printed copy of the class lecture notes for the appropriate sections of material to class each day. Lecture notes will be posted in eCampus. You will also be required to submit four gray TAMU scantrons by the fourth class day.
- **Email Policy:** Check your TAMU email account EVERY day. You are responsible for any information I send via email. Also, because of privacy rights, I cannot discuss grades via email or over the phone.
- **Cell Phone/Laptop Computer Policy:** As a courtesy to me and your classmates, all cell phones, laptop computers, tablets, and other electronic devices must be OFF and put away during every class period.

EXTRA HELP AND PREPARING FOR EXAMS

- **Your Instructor:** I want each and every one of my students to be successful in this class. Please feel free to ask questions in class. If you need more help, come by to see me during office hours. Remember, I am here to help, but I cannot do that if I don't know that there is a problem.
- **BMTA:** Our class will have a Business Math Tutorial Assistant. This tutorial assistant will be offering additional help at times outside of my office hours and other provided help hours. Times and places for these additional hours of help are as follows: Mondays 3:10pm-6:10pm in BLOC 605AX, Tuesdays 2:30pm-3:30pm in BLOC 506A, Wednesdays 3:10pm-5:40pm in BLOC 624, and Thursdays 2:30pm-3:30pm in BLOC 506A.
- **Your Classmates:** Get to know your classmates. Form study groups and work on suggested problems outside of class.
- **Week-in-Review:** There are Week-in-Review (WIR) sessions conducted by an instructor each week. Each review is open to all Math 141 students to review the topics of the previous week and to provide additional examples. The days, times, and places of these reviews will be posted on my website, in eCampus, and will be announced in class, once they are determined. Additionally, this information can be found at <http://www.math.tamu.edu/courses/weekinreview.html>. Additional sets of old Week-in-Review questions with solutions are linked on my departmental website, <http://www.math.tamu.edu/~ramsey/>.
- **Practice:** In order to succeed in this course, it is essential that YOU practice extra problems ON YOUR OWN. See the suggested homework list for the textbook and additional Week-in-Review problem sets linked on my website. Even if you are not able to attend WIR sessions, you can still use the provided problems for practice. I highly recommend that you practice problems DAILY. Mathematics cannot be learned by simply watching someone else do it.
- **Help Sessions:** Help sessions are an opportunity for you to ask questions and get help with your homework. These sessions are come-and-go, i.e., you can come at any point during the help session and leave whenever you want. The schedule for help sessions can be found at on the Math Department's website at

<http://www.math.tamu.edu/courses/helpsessions.html>.

- **Calculator Help:** Step-by-step written keystroke directions are available on my website for all the calculator functions in the course.

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, please 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/>.

Storing formulas or unauthorized programs in your calculator is also an act of scholastic dishonesty and will not be tolerated. Using or having an unapproved program or any formulas stored in your calculator during an exam will result in a zero on the exam. Also, sharing calculators during an exam will result in a grade of zero for all parties involved.

Having a cell phone out during any graded assignment will result in an automatic zero, and you will be reported to the Aggie Honor Office for academic dishonesty.

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TENTATIVE WEEKLY SCHEDULE FOR MATH 141

WEEK OF	TOPIC	SECTIONS
1/16	Linear Functions and Mathematical Models	1.3, 1.4
1/23	Systems of Linear Equations	2.1, 2.2, 2.3
1/30	Matrix Arithmetic, Setting up Linear Programming Problems	2.4, 2.5, 3.2
2/6	Review, Exam 1 (1.3,1.4, 2.1-2.5, 3.2)	
2/13	Graphing Systems of Linear Inequalities, Linear Programming Problems	3.1, 3.3
2/20	Sets, Counting, Multiplication Principle	6.1, 6.2, 6.3
2/27	Multiplication Principle, Permutations, Combinations, Experiments, Sample Spaces, and Events	6.3, 6.4, 7.1
3/6	Review, Exam 2 (3.1, 3.3, 6.1-6.4, 7.1)	
3/13	Spring Break – No Classes	
3/20	Definition and Rules of Probability, Counting Techniques in Probability	7.2, 7.3, 7.4
3/27	Conditional Probability, Independence, Bayes' Theorem	7.5, 7.6
4/3	Random Variables, Expected Value, Variance, Standard Deviation	8.1, 8.2, 8.3
4/10	Binomial Distribution, Review, Exam 3 (7.2-7.6, 8.1-8.4)	8.4
4/17	Normal Distribution, Finance	8.5, 8.6, 5.1
4/24	Finance	5.2, 5.3
5/1	Review for Final Exam, Final Exams (4/27 is our last day of class)	
5/8	Final Exams	

SUGGESTED HOMEWORK PROBLEMS FROM TEXTBOOK BY TAN (11TH EDITION):

SECTION	PROBLEMS
EXAM 1	
1.2 (REVIEW)	1, 3, 5, 9, 13, 15, 17, 19, 21, 23, 27, 31, 33, 39, 43, 45, 55, 57, 59
1.3	11, 13, 15, 21, 23, 35, 39, 47
1.4	3, 9, 13, 21, 25, 27
2.1	5, 7, 9, 11, 19, 23, 27, 31, 35, 37, 39
2.2	3, 7, 13, 15, 23, 29, 37, 49, 51, 59, 63, 67, 71, 73, 75
2.3	1, 3, 7, 9, 11, 19, 33, 37, 39
2.4	3, 7, 9, 11, 21, 23, 25, 35, 37
2.5	3, 5, 13, 17, 19, 21, 23, 27, 31, 37, 45, 57
3.2	1, 3, 7, 11, 17, 21, 23
EXAM 2	
3.1	1, 3, 5, 7, 9, 11, 13, 15, 17, 29, 31, 35
3.3	3, 5, 15, 23, 25, 29, 31, 35, 39, 45
6.1	9, 11, 15, 19, 21, 31, 33, 37, 39, 43, 49, 51, 65, 67, 71, 73, 75
6.2	3, 5, 7, 11, 15, 17, 21, 25, 33, 35, 43, 45
6.3	1, 3, 5, 7, 9, 11, 13, 19, 23, 29, 33, and Counting Handout 1
6.4	3, 13, 19, 33, 35, 37, 39, 45, 47, 49, 53, 57, 59, 67, 71, 73, 75, 77, and Counting Handouts 2 and 3
7.1	3, 9, 11, 13, 19, 21, 23, 25, 27, 29, 31, 37, 39
EXAM 3	
7.2	3, 7, 13, 17, 25, 27, 29, 31
7.3	1, 3, 5, 7, 9, 11, 13, 15, 19, 21, 23, 25, 41, 45
7.4	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41
7.5	1, 3, 5, 7, 9, 13, 15, 19, 21, 23, 37, 41, 43, 45, 51
7.6	7, 9, 13, 15, 17, 19, 23, 25, 29, 37, 43, 47, 49
8.1	1, 5, 7, 9, 19, 21, 23, 27
8.2	1, 3, 7, 13, 15, 17, 35, 39, 45
8.3	3, 5, 7, 9, 11, 13, 15
8.4	1, 3, 5, 17, 19, 23, 25, 35, 37, 45, 51, 57
NEW FOR FINAL	
8.5	3, 5, 7, 13, 15, 17, 19
8.6	1, 3, 5, 9
5.1	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 47, 53, 55
5.2	1, 7, 9, 13, 15, 19, 27
5.3	1, 7, 9, 15, 19, 23, 25, 29, 47, 49