**MATH 141 Syllabus**  
Spring 2014  
Section 505: TR 3:55-5:10pm MPH 204

**Instructor Information:**  
*Instructor:* Benjamin Aurispa  
*Office:* Blocker 247E  
*Math Dept Phone:* (979) 845-3261

*Office Hours:* Mondays and Wednesdays 1:30-3:30pm, or by appointment  
*E-mail:* baurispa@math.tamu.edu. Please include your name and section number in any email you send me.  
Check your TAMU email account daily, because this is where class emails will be sent. You are responsible for any announcements made through email.

*Webpage:* www.math.tamu.edu/~baurispa – Check regularly for announcements and important information, as well as for lecture notes, a daily schedule, and other helpful links.

**Catalog Description:** Math 141: Business Mathematics I. (Credit 3) Linear and quadratic equations and applications; functions and graphs, systems of linear equations, matrix algebra, applications, linear programming, probability and applications, statistics.  
*Prerequisites:* High school algebra I and II and geometry. Credit will not be given for more than one of Math 141 and 166.

**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 new car or house.

**Required Materials:**  
*Textbook:* Finite Mathematics for the Managerial, Life, and Social Sciences, 10th Ed, by Tan. You paid for an electronic version of this textbook (eBook) through the online system WebAssign when you paid your course fees. Information on how to access your eBook can be found under the “Student Information Page” at http://www.math.tamu.edu/courses/eHomework. You are welcome to purchase a physical copy of the textbook or a loose-leaf copy of the text if you prefer, but this is not required.

*Calculator:* A TI-83, TI-84 (Regular, Plus, or Silver editions), or a TI-Nspire (non-CAS with an 84 faceplate) is required for this class. If you want to use a calculator other than these, it may NOT perform symbolic mathematics and you must have my permission. Bring your calculator to class every day since we will be using them frequently and you may need it for a quiz. Calculators will be allowed on exams, but ALL memory must be reset and cleared before each exam. Having any unauthorized programs or applications on your calculator or the use of any unauthorized type of calculator (such as the TI-89) during exams or quizzes will be considered a case of academic dishonesty and reported to the Aggie Honor Council.

**Course Policies:**  
*Grading:*  

<table>
<thead>
<tr>
<th>Weight</th>
<th>Final Grade Ranges</th>
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<tbody>
<tr>
<td>Homework:</td>
<td>10%</td>
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<tr>
<td>Quizzes:</td>
<td>15%</td>
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<tr>
<td>3 In-Class Exams: 3 @ 17% each:</td>
<td>51%</td>
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<tr>
<td>Final Exam:</td>
<td>24%</td>
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Due to FERPA privacy issues, I cannot discuss grades over email or phone. If you have a question about your grade, please come see me in person.

*Exams:* There will be 3 in-class exams during the semester. Bring your Texas A&M student ID and your cleared calculator to all exams. The tentative material and dates for the exams are given below. For a list of scheduled makeup exam times (provided you have a University-approved absence), see the Makeup Policy on the next page.

**Exam 1:** Thursday, February 6 (Sections 1.3-1.4, 1.Q, 2.1-2.5)  
**Exam 2:** Thursday, March 6 (Sections 3.1-3.3, 6.1-6.4, 7.1)  
**Exam 3:** Thursday, April 10 (Sections 7.2-7.6, 8.1-8.4)

*Final Exam:* The final exam will be cumulative. The day and time of the final exam are determined by the university.  
*Section 505:* Tuesday, May 6, 1-3pm, MPH 204
Graded Homework: Graded homework assignments will be primarily done online, but may include the occasional written assignment. Online homework will be done in WebAssign. Access to WebAssign was included in your course fees. Other important information such as how to log in, how to access and take assignments, and the Student Help Request Form can be found at http://www.math.tamu.edu/courses/eHomework. I suggest you bookmark this page and visit it before you log in to WebAssign each time.

Suggested Homework: Math cannot be learned by watching someone else do math. It requires a lot of practice. On my webpage there is a list of suggested homework. I STRONGLY suggest that you do these problems for more practice in addition to the online homework. They will not be collected, but doing them to help you learn the material is very important.

Quizzes: There will be quizzes given throughout the semester and may be announced or unannounced, in class or take home, so please keep up with the material. I will drop at least one quiz grade at the end of the semester.

Make-up Policy: Make-up exams and quizzes or late homework will NOT be allowed unless a University approved reason is given to me in writing. Notification before the absence is required when possible. Otherwise, you must notify me within 2 working days of the missed exam, quiz, or assignment to arrange a makeup. See University Student Rules for more guidelines. In all cases where an exam/quiz/assignment is missed due to an injury or illness, whether it be more or less than 3 days, I require a doctor’s note. (Note: Providing a fake or falsified doctor's note is considered academic dishonesty, will be reported to the Aggie Honor Council, and will result in an F* in the course.) I will not accept the “University Explanatory Statement for Absence from Class” form. Further, an absence due to a non-acute medical service or appointment (such as a regular checkup) is not an excused absence.

Provided the above policies are met, you will be allowed to make up a missed exam during one of the scheduled makeup times listed below. According to student rules, you are expected to attend the scheduled makeup unless you have a University-approved excuse for missing the makeup time. Note: For those exams with two makeup times, you are expected to attend the earlier time unless you have a University-approved excuse.

Scheduled Makeup Exam Times:
Exam 1: February 7: 4:55-5:45pm BLOC 102; February 10: 7:45-9:30pm BLOC 102
Exam 2: March 7: 4-5:45pm BLOC 102; March 17: 7:45-9:30pm BLOC 102
Exam 3: April 14: 7:45-9:30pm BLOC 102

Grade Appeals: If you believe an error has been made in grading, you have until the next class period after the exam, quiz, or assignment has been handed back to let me know. Otherwise, you must accept the grade you received.

Classroom Respect: Please refrain from using electronic devices other than your calculator during class. Texting and playing on your phone or computer distracts not only you, but also those around you. If you would like to use a laptop or iPad during class to take notes with, please ask for permission prior to doing so.

Copyright: All printed handouts and web-materials are protected by US Copyright Laws. No multiple copies can be made without written permission by the instructor.

ADA Policy: The American 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, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

Academic Integrity Statement: Cheating and other forms of academic dishonesty will not be tolerated. Please do not compromise your integrity for the sake of temporary benefits.

Aggie Honor Code: “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 more information on academic integrity, see the Honor Council Rules and Procedures at http://www.tamu.edu/aggiehonor.
Other Sources of Help:

Help Session and Week in Review: Help sessions are come-and-go times where you can ask questions and get help with your homework from the student Help Session leaders. Help Sessions meet throughout the week. For more information, see the link on my webpage. The Week in Review is a weekly session led by an instructor to review the topics of the previous week and to provide additional examples. On exam weeks, the Week in Review will be an Exam Review. This semester there will be two Week in Reviews each week. See the Week in Review links on my webpage for days/times/locations and also to print off the problem sets.

Videos: Within WebAssign under the Announcements section, you will see a link to videos for each section that we cover. There is also a link to additional streaming videos of example problems on my webpage.

TA: The teaching assistant for this class will be assisting me in office hours and holding additional office hours at other times. The times and locations of the extra TA office hours will be posted on my webpage.

Additional Resources: There are old Week in Reviews, a Make Your Own Sample Test link, Calculator Tutorials, and Extra Practice Problems all linked on my webpage.

Note: As with any math class, it is very important that you keep up with the material and that you do not fall behind. Please don’t hesitate to ask questions in class, to come to my office hours, locker 247r to send me an e-mail. My goal is not to cram information into your head, but to help you learn. If you are not understanding the concepts, please ask for help. Don’t wait until the day before an exam to try and grasp the material. There are Week in Reviews and Help Sessions regularly, as well as my office hours, streaming videos, and other materials online. Please take advantage of these resources.

Tentative Schedule: (A more detailed Daily Schedule can be found on my webpage.)

Week 1 – 1.3 (Linear Models for Business Applications), 1.4 (Intersection of Lines), 1.Q (Quadratic Functions)
Week 2 – 1.Q, 2.1 (Systems of Linear Equations), 2.2 (Gauss-Jordan Elimination; Solving Systems), 2.3 (Solving Systems with No Solution or Infinitely Many Solutions)
Week 3 – 2.3, 2.4 (Matrices), 2.5 (Multiplication of Matrices)
Week 4 – 2.5, Review, EXAM 1 (1.3-1.4, 1.Q, 2.1-2.5)
Week 5 – 3.1 (Graphing Systems of Linear Inequalities), 3.2 (Formulating Linear Programming Problems), 3.3 (Graphical Solution of Linear Programming Problems)
Week 6 – 6.1 (Sets), 6.2 (Venn Diagrams), 6.3 (Multiplication Principle)
Week 7 – 6.3, 6.4 (Permutations and Combinations), 7.1 (Experiments, Sample Spaces, and Events)
Week 8 – 7.1, Review, EXAM 2 (3.1-3.3, 6.1-6.4, 7.1)
SPRING BREAK
Week 9 – 7.2 (Basic Probability), 7.3 (Rules of Probability), 7.4 (Counting Techniques and Probability)
Week 10 – 7.5 (Conditional Probability and Independence), 7.6 (Bayes' Theorem)
Week 11 – 8.1 (Random Variables and Probability Distributions), 8.2 (Expected Value, Statistics), 8.3 (Variance and Standard Deviation), 8.4 (Binomial Probability)
Week 12 – 8.4, Review, EXAM 3 (7.2-7.6, 8.1-8.4)
Week 13 – 8.5 (The Normal Distribution), 8.6 (Applications of the Normal Distribution), 5.1 (Simple and Compound Interest)
Week 14 – 5.2 (Annuities), 5.3 (Amortization and Sinking Funds), Review
Week 15 – No Class
Finals – Comprehensive Final Exam on Tuesday, May 6, 1-3pm, MPH 204