MATH 1324 COURSE SYLLABUS
Mathematics for Business & Social Science
Section 23430 or 93404
SPRING 2015
Instructor: Sharon Jackson
Math/Science Department Office Location: Brookhaven College Room K142
Virtual Office Hours: Mon - 12:00 - 1:00 PM & Wed- 10:00 AM - 11:00 AM
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TEXT: Finite Mathematics with Applications in the Management, Natural, and Social Sciences, 11th edition
Lial, Hungerford, Holcomb and Mullins
ISBN: 0321946561

CATALOG DESCRIPTION: This is a Texas Common Course Number. This a Core Curriculum course selected by the colleges of DCCCD.
Prerequisites: 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).
Topics from college algebra (linear equations, quadratic equations, functions and graphs, inequalities), mathematics of finance (simple and compound interest, annuities), linear programming, matrices, systems of linear equations, applications to management, economics, and business. (3 LEC)
This course is the prerequisite for MATH 1425.

Student 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.

MATH 1324 is a Tier I 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 I. The Quantitative Reasoning category promotes the application of mathematics to increase your ability to solve “real-world” problems. When you are quantitatively literate, you can use logic and critical thinking in new way. www.dcccd.edu/core
Core Objectives:
MATH 1324 is part of the *Mathematics* Foundational Component Area 020.

i. Courses in this category focus on quantitative literacy in logic, patterns, and relationships.

ii. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

iii. MATH 1324 develops the following Core Objectives:

   - **Critical Thinking (CT)** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
   - **Communication (COMM)** - to include effective development, interpretation and expression of ideas through written and visual communication
   - **Empirical and Quantitative Skills (EQS)** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

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.

INSTITUTIONAL POLICIES

DROP/WITHDRAWAL POLICY: Withdrawing from a course is a formal procedure which YOU must initiate; the instructor cannot do it for you. You may withdraw from a class in either the Admissions office or Advising Center. If you stop attending or are unable to complete this class and you do not withdraw before the official drop date, **February 28, 2015**, you will receive a performance grade, usually a grade of "F." Students sometimes drop a class when help is available that would enable them to continue. Please discuss your plans with the instructor if you feel you need to withdraw.

https://www1.dcccd.edu/catalog/ss/oep/dw.cfm?use_nav=acad_info&loc=econ

STOP BEFORE YOU DROP

For students who enroll in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your college counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated six non-exempt drops, you cannot drop any other courses with a "W." Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges.

https://www1.dcccd.edu/coursedrops

FINANCIAL AID STATEMENT: Failure to attend classes could result in a loss of Financial Aid (FA). If you are receiving any form of financial aid, you should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.
INTERNATIONAL STUDENTS: Students on an F-1 visa cannot withdraw from classes without jeopardizing their official status. If you are on an F-1 visa, you MUST NOT withdraw from any class without the permission of an International Student Advisor in the Multicultural Center, in Room S-136 or at 972-860-4192.

RELIGIOUS HOLIDAYS: A student shall be excused from attending classes, or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this provision may not be penalized for that absence and shall be allowed to take an examination or complete an assignment within a reasonable time after the absence.

ADA STATEMENT: If you feel you may need special assistance or accommodation (such as help with taking notes, extra time on tests, etc.) because of any type of physical disability or learning difference, please contact the Special Services office in Room S124 or at 972-860-4673.

ACADEMIC INTEGRITY: Scholastic dishonesty is a violation of the Student Code of Conduct and is punishable as stated in college policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. The purpose of the Student Code of Conduct is to provide guidelines for the educational environment of the Dallas County Community College District. This environment views students in a holistic manner, encouraging and inviting them to learn and grow independently. Such an environment presupposes both rights and responsibilities. For more information, refer to the DCCCD Student Code of Conduct (https://www1.dcccd.edu/catalog/ss/code.cfm).

We, the Math Department of BHC, take issues of dishonesty very seriously. If a student is caught violating any policy of the Testing Center, or an instructor's own policy for their particular class, the following consequences will be enforced: The minimum penalty a student will receive is a zero for the assignment/exam and the maximum penalty will be to receive an F for the course and/or academic suspension.

REPEATING THIS COURSE: Each college of the DCCCD charges additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and continuing education/workforce training courses will result in additional tuition being charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts included courses taken at any of the DCCCD colleges since the Fall 2002 semester. https://www1.dcccd.edu/catalog/ss/oep/third_attempt.cfm?loc=econ
CLASSROOM EXPECTATIONS & COURSE LOGISTICS

Attendance: Attendance is an important part of your success. Although you will not receive a formal grade for attendance it will be very difficult to complete the course successfully without completing the corresponding lessons before attempting to do any of the homework assignments.

Study Expectations:
Additional time off line, reading the textbook, doing assigned review work, studying for exams and quizzes, is also expected. It has been observed that taking a class at the college level requires 2-3 hours outside of class for every credit hour for the course per week. This means that since this is a 3 credit hour course that is completed in 8 weeks therefore, you are expected to spend 12-18 hours studying for this course. This calculation doesn't include the time spent watching the video presentations which is an additional 3 hours per week. In a typical week you may spend:

- 6-8 hours reading each assigned section from the textbook, watching the section videos, taking notes, reviewing animation activities or additional tutorials.
- 2-4 hours completing graphing calculator tutorials (depends on level of experience)
- 12-18 hours doing homework, review assignments, or taking quizzes and tests.

The time you spend each week studying for the course and completing the activities will depend on the length and difficulty of each section and how quickly you can master the objectives. It will also depend on your knowledge level of the material/objectives being presented.

Announcements & Student-Instructor Communication
My main communication with the class will be made by posting announcements on the announcements page in the MyMathLab classroom or via email. Announcements will be posted regularly by the instructor (at least once a week). All students are responsible for checking the Announcements Page at least twice a week. These announcements may contain review material, tips, lecture notes, reminders, updates, and other important information that you will find necessary and useful for the course. You are responsible for the information that is given in these announcements.

Your main communication with your instructor will be via email. To ensure a prompt response when emailing your instructor you must include your full name (first and last) in the body of the email and write the course for which you are enrolled (MATH 1324) and the section number in the subject line of all email correspondences. I should respond to your email within 24 hours Monday through Thursday. If I don’t respond to your email within 48 hours (Monday - Thursday) then please call my office number and leave a message. Emails sent after 12:00 PM on Friday will be answered by Monday of the following week. Any emails that are sent without the requested information in the subject line will result in a longer response time, typically 48 hours or more.

For a more immediate response, it is best to email me during Virtual Office Hours. This is the time that I am available to answer questions via email or chat room.
Virtual Classroom/Environment Expectations:
Whether you've taken an online course before or are enrolled in your first one, you'll soon discover that an online course has a unique culture and etiquette. Unlike popular social media, such as Facebook or Twitter that you may already be using in your daily life, online course etiquette more closely resembles that of a traditional, on-campus course. Below you will find some guidelines you can follow to help you be successful in your online course.

1) Interacting with People, not a Computer
In an online course, you may find fewer opportunities for face-to-face interaction between you, your instructor, and your classmates. Since most of your interaction will be text-only, you won't be able to pick up on “cues” such as body language, facial and vocal inflection, or the discussion's changing pace. This has the potential for people to misunderstand another's writing.
Give your writing a respectful “tone,” whether you are agreeing or disagreeing with another person's posting. When you read e-mail or online discussions, make sure you understand the other person's message. A confrontational reply to a message you've misunderstood can drag a conversation down for everyone. If you don't understand, ask the writer for clarification with language you’d use in the classroom. Think about how you’d react if someone wrote you the way you’re writing your message.

2) Read Before You Write
Spoken conversations are continuous process of talking and listening. When you walk up to friends in conversation, you listen awhile to pick up what's being talked about before you join in. It's good etiquette online, too. Even if it's conversation you contributed to previously, new posts by others may have introduced new questions and taken the discussion in new directions. This also prevents repetitions of thoughts that have already been expressed.

3) Read Before You Submit
In general, discussion posts and e-mail should be as concise as possible while still making your message clear. Write a draft and before you click the submit button, read your message aloud, to yourself or to someone else. This can help you find awkward phrasing, correct mis-spelling, or maybe see a clearer way to compose your message.
Avoid language that is humorous (although some humor may be appropriate), angry, sarcastic, or offensive. Remember that your readers won't have those cues mentioned above and could misunderstand you. If you feel particularly strongly about a point, it may be best to write your message first as a draft and then review it before posting in order to remove any strong or ambiguous language.

4) Words are Forever
Once you submit your message, whether in e-mail or as a post to a blog or discussion group. It will be stored on servers “out there” for others to read. You won't be able to easily take back your words. Even if you intended it to be private, your message may, in fact, be public. A search engine might find it. It can be forwarded to people you never wanted to read it, or copied and posted in a context you didn't intend. You have no control over the way others might use it once it is public.
You do, however, have control over what you do-or don’t do- with other people’s messages. If someone writes you a private e-mail, respect that privacy.
Stay Organized

- Keeping a 3-ring binder/notebook is strongly suggested.
- Keep a copy of your course syllabus in your binder.
- Use dividers to divide into 3 sections for notes, homework, quizzes and tests.
- Show all steps for each homework problem and circle or highlight your final answer.
- Group homework assignments in chronological order by section.
- This organization technique will make it easy to find problems for reference if you have questions or concerns. It also makes it easy to reference when studying for quizzes and tests.
- Use the same technique to organize work for quizzes and tests.
- Notebook will serve as a customized study guide for the course.
- Keep a copy or record grades earned for each assignment in the course.
- Good idea to print your grades out on a weekly basis from the gradebook.

COURSE PROCEDURES & LOGISTICS

1. **GO TO CLASS.** All academic work and course content will be located in the MyMathLab classroom.
   - Check the Announcements Page to see if any new announcements have been posted.
   - Check the printed course calendar to see the sequential list of assignments to work on. There are several pre-assignments that need to be completed before you begin working on the unit assignments.
   - Complete a Lesson. Read through the corresponding pages of the section/lesson you are working on. You may find the multimedia textbook to be an interactive way to read through the lesson as there are links to the example videos and “You Try It” exercises. It is a good idea to rework the examples in your notes. If you are still having trouble with the concept, working the “You Try It” exercises before attempting to do the homework should be particularly useful.

2. **DO THE ASSIGNED HOMEWORK.** In the MyMathLab classroom you can access your homework assignments directly from the main menu.
   - Try to score at least 80% on each homework assignment.
   - Each assignment may include questions from the corresponding video lecture or animation activities.
   - Help Me Solve This, View an Example and technology links are Learning Aids that may be available to you as you complete the homework assignment.
   - Ask for Help! Email your instructor if after using these resources you still don’t understand.
   - Each homework assignment is a prerequisite of the other; therefore you will not be allowed to move on until you have completed the preceding homework and you will not be allowed to skip around.
   - You have the opportunity to complete the homework assignments as many times as you wish before the given deadline date.
   - Show your work for each problem in your notebook as you may need to reference it later.
   - Each assignment is not closed until after the corresponding test deadline has passed. Therefore, homework assignments may be completed late without penalty or you may go back and improve your score before taking the test, even though the assignment may be listed as “past due.”
3. **QUIZZES (If assigned).**
   - Hard deadlines so you must complete the quizzes on or before the given deadline date.
   - You will have 2 attempts on each chapter quiz. You must earn at least 80% on each corresponding homework assignment to unlock the second attempt.

4. **COMPLETE TEST REVIEW.**
   - Each test review is a prerequisite for the actual test and you must score at least 70% before you can take the actual exam.
   - Learning Aids are not available.
   - Do not use the review as the only means for studying for the exams. You should review your notes, chapter summary at the end of each chapter in your textbook.
   - If you are unable to earn 70% on the review assignment after 2 attempts you can review or rework the homework assignments.
   - Be sure to show all work for all problems worked in your notebook!

5. **TAKE THE TEST.**
   - Each test is locked until you earn at least 70% on the Test Review.
   - Pay close attention to the deadlines that have been provided on your course calendar.
   - You must be sure to take the exams on or before the deadline.
   - Each exam will be timed.
   - You will have 2-3.5 hours to complete the exam and you will only be able to take the exam one time.
   - Allot the appropriate amount of time to complete each exam and make sure that you will not be interrupted.

6. **TAKING THE FINAL EXAM.** The final exam is a comprehensive exam that can be taken online or using one of the computers in the Brookhaven College Math Lab or Student Computer Lab (J-Lab). You must score at least 60% on the final exam to pass the course with a C or better.

If for some reason you can’t log into [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com) or you experience slowness while doing your homework, you can use the MyMathLab Alternate Login. Go to [www.mathxl.com](http://www.mathxl.com). On the right hand side, click the link for the MyMathLab login (Do NOT login under the MathXL Established User). In the center of the page, you’ll see a place for you to enter your MyMathLab login name and password. Enter your MyMathLab login name and password click Enter MathXL. Then you can select the Homework and Tests menu under Student.

Please note this course has been designed for you to complete all of the assignments online. However, you must have access to a computer and the Internet. If problems persist with your computer or Internet service, you may be asked to come to campus to complete your assignments. Not having a working computer or access to the Internet will not excuse you from the assignments. There are two computer labs on the Brookhaven College campus for you to complete your assignments should your computer fail or you experience an interruption in service from your Internet Service Provider. You can complete your assignments using the computers in the Brookhaven College Math Lab (K-137) or in the student computer lab (J-122). If you experience continuous problems with your home computer that interferes with completing the assignments on time, you will be asked to come to campus or find a reliable source/computer/lab to complete the assignments.
EVALUATION PROCEDURES

Assessment of your performance will be based upon scores from exams, homework assignments, practice tests, discussion board and the final exam. Your final grade for MATH 1332 will be based upon the following scale:

- Homework Assignments: 10%
- Quizzes: 10%
- Tests (4 tests): 60%
- Comprehensive Final Exam: 20%

The final exam will include a problem that must be completed offline. You will receive instructions from your instructor on how to download and submit the work for this problem.

Averages are interpreted as follows:

- A: 90 - 100% (weighted average on all work)
- B: 80 - 89% (weighted average on all work)
- C: 70 - 79% (weighted average on all work)
- D: 60 - 69% (weighted average on all work)
- F: less than 60%

Grade reports are no longer mailed to students. You can log on to eConnect at www.econnect.dcccd.edu to check your official grade once the course has ended. Officially grades will be reported no later than 3 business days after the course has officially ended.

GRADE REPORTS: Final grade reports are not mailed to students. You may obtain your final grades online at https://econnect.dcccd.edu/ From the student menu, select "My Grades" under "My Personal Information." If you are not already logged in, you will be prompted to do so. Select the grade type you wish to review. Press the submit button and all grades for the selected grade type will be displayed.

TI Graphing calculator required. TI-84 PLUS calculator recommended. NO TI-89 OR TI-92 OR TI-Nspire.

Incomplete grades are given when an unforeseen emergency prevents a student from completing the work in a course. The division Dean must approve all "I" grades.

FERPA: The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. More information is available at https://www1.dcccd.edu/catalog/about/privacy.cfm

INSTRUCTOR’S RIGHT TO MODIFY: The instructor has the right to add, delete, or revise segments of this course syllabus.
**IMPORTANT DATES:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>January 19(M)</td>
<td>Martin Luther King, Jr Holiday</td>
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<td>January 20(T)</td>
<td>Classes Begin</td>
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<tr>
<td>February 2(M)</td>
<td>12th Class Day</td>
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<tr>
<td>February 19(R)</td>
<td>Conference Day - day and evening classes will not meet.</td>
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<tr>
<td>February 20(F)</td>
<td>Professional Development Day - Friday day classes will not meet. Friday evening, Saturday and Sunday classes will meet.</td>
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<tr>
<td>February 23(M)</td>
<td>Classes Resume</td>
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<td>February 28(S)</td>
<td>Last Day to Withdraw</td>
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<tr>
<td>March 9-13(M-F)</td>
<td>Spring Break - College buildings &amp; offices will be closed for the week.</td>
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<tr>
<td>March 16(M)</td>
<td>Classes Resume</td>
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<tr>
<td>April 3(F)</td>
<td>Holiday</td>
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<td>April 6(M)</td>
<td>Classes Resume</td>
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<tr>
<td>May 11-14(M-R)</td>
<td>Final Exams</td>
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<tr>
<td>May 14 (R)</td>
<td>Semester Ends</td>
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# MATH 1324-23420(93404) TENTATIVE COURSE CALENDAR

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC/SECTION(S)</th>
<th>DEADLINE</th>
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<tbody>
<tr>
<td>WEEK 1</td>
<td><strong>DAY 1 ASSIGNMENTS</strong></td>
<td>Day 1 Activities 01/20/15</td>
</tr>
<tr>
<td>01/19/15</td>
<td>Complete all items on the Getting Started Handout</td>
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<tr>
<td></td>
<td>Check in with your instructor</td>
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<td></td>
<td>Create a study plan for completing assignments</td>
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<tr>
<td></td>
<td><strong>UNIT I: FUNCTIONS &amp; GRAPHS (CH 3-4)</strong></td>
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<tr>
<td></td>
<td>3.1 Functions</td>
<td>3.1 Homework due 01/24/15</td>
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<td></td>
<td>3.2 Graphs of Functions</td>
<td>3.2 Homework due 01/24/15</td>
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<td>3.3 Applications of Linear Functions</td>
<td>3.3 Homework due 01/24/15</td>
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<td></td>
<td>3.4 Quadratic Functions and Applications</td>
<td>3.4 Homework due 01/24/15</td>
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<td><strong>UNIT II: MATHEMATICS OF FINANCE (CH 5)</strong></td>
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<td></td>
<td>5.1 Simple Interest and Discount</td>
<td>5.1 Homework due 02/14/15</td>
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<td></td>
<td>5.2 Compound Interest</td>
<td>5.2 Homework due 02/14/15</td>
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<td>5.3 Annuities, Future Value, and Sinking Funds</td>
<td>5.3 Homework due 02/14/15</td>
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<tr>
<td></td>
<td>5.4 Annuities, Present Value, and Amortization</td>
<td>5.4 Homework due 02/14/15</td>
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<td></td>
<td>Complete Test #1 Review (Remember you must have a score of 70% or higher to unlock the test)</td>
<td>Test #1 due 02/09/15</td>
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<td></td>
<td><strong>UNIT III: MATRICES &amp; LINEAR PROGRAMMING (CH 6-7)</strong></td>
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<td>6.1 Systems of Two Linear Equations in Two Variables</td>
<td>6.1 Homework due 02/21/15</td>
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<td>6.2 Larger Systems of Linear Equations</td>
<td>6.2 Homework due 02/21/15</td>
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<td></td>
<td>6.3 Applications of Systems of Linear Equations</td>
<td>6.3 Homework due 02/21/15</td>
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<td></td>
<td>6.4 Basic Matrix Operations</td>
<td>6.4 Homework due 02/21/15</td>
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<td>6.5 Matrix Products and Inverses</td>
<td>6.5 Homework due 02/21/15</td>
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<td></td>
<td><strong>UNIT IV: LINEAR PROGRAMMING</strong></td>
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<td>7.2 Linear Programming: The Graphical Method</td>
<td>7.2 Homework due 02/28/15</td>
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<td></td>
<td>7.3 Applications of Linear Programming</td>
<td>7.3 Homework due 02/28/15</td>
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<td>7.4 The Simplex Method: Maximization</td>
<td>7.4 Homework due 02/28/15</td>
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<td>7.5 Maximizations Applications</td>
<td>7.5 Homework due 02/28/15</td>
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<td>Complete Test #3 Review (Remember you must have a score of 70% or higher to unlock the test)</td>
<td>Test #3 due 03/02/15</td>
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## WEEK 7
**03/02/15**

**UNIT IV: SETS & PROBABILITY (CH 8 & 9)**

- 8.3 Introduction to Probability
- 8.4 Basic Concepts of Probability
- 9.1 Probability Distributions and Expected Value
- 9.2 The Multiplication Principle, Permutations, and Combinations
- 9.3 Applications of Counting
- 9.6 Decision Making

*Complete Test #4 Review (Remember you must have a score of 70% or higher to unlock the test)*

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<thead>
<tr>
<th>Homework due 03/07/15</th>
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<tbody>
<tr>
<td>8.3</td>
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<td>8.4</td>
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<td>9.1</td>
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<td>9.3</td>
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<td>9.6</td>
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<tr>
<td>Test #4 due 03/16/15</td>
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</tbody>
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**03/09/15**

**SPRING BREAK**

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**WEEK 8**

**03/16/15**

- Quiz for TestGen
- Study for Final Exam - complete Practice Final Exam

<table>
<thead>
<tr>
<th>03/18/15</th>
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<tbody>
<tr>
<td>FINAL EXAM DUE BY 03/20/15</td>
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</table>

Please note that the instructor reserves the right to modify this course syllabus, assignments, grading procedures, and other related policies as circumstances so dictate. Students will be notified via email of any changes that are to be made.