Texas A&M University

MATH 166

Topics in Contemporary Mathematics II

Fall 2013

Section 505

MWF 12:40-1:30pm HELD 107

Instructor: Craig Gin

Office: Blocker 610A

Note: My office is difficult to find. You must enter Blocker 610 and go around the corner to the left.

Office Hours:

• MW 2:00 - 3:00pm
• R 10:30-11:30am
• I’m also available by appointment in special circumstances

E-Mail Address: cgin@math.tamu.edu

(Check your neo email account every day. This will be a major line of communication between the student and the instructor. I will send urgent announcements and important information via email. You are responsible for any information sent via email. When you send an email, please include your full name, course number (166), and section number.)


(Check the web page regularly. I will post exam information, class announcements, important information, class notes, and daily schedule on the web page. There will also be links to important cites, such as WebAssign.)

Texts: Included in the course fees is access to WebAssign as well as an eBook version of the text through WebAssign. If you would like to purchase a hard copy version of the text:


Calculator Policy: You will be required to bring to class every day either a TI-83, TI-84 (Plus or Silver Editions are fine), or TI-Nspire (non-CAS version). You may not use any calculator that is able to perform symbolic math, such as a TI-89. You will also be required to reset memory before each exam. If there are any programs that you want to keep for personal use, you will want to save them to your computer so you can reload them after the class is completed.

Student IDs: You must bring your student ID to every class.

Course Description and Prerequisites: CREDIT: 3. Finite mathematics, matrices, probability and applications. Prerequisites: High school algebra I and II and geometry. Credit will not be given for more than one of MATH 141 and MATH 166.

Learning Outcomes: See end of syllabus for a complete list.

Grading Policy:

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Exam I</td>
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<td>Exam II</td>
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<td>Exam III</td>
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<tr>
<td>Final Exam</td>
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<tr>
<td>Quizzes</td>
<td>15%</td>
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<tr>
<td>In-Class Assignments</td>
<td>5%</td>
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<tr>
<td>WebAssign Homework</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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A = 90% and above
B = 80% and above
C = 70% and above
D = 60% and above
F = less than 60%

At the end of the semester, you will get the grade you earned, according to the distribution above. No exceptions.

Exams: There will be three in-class exams and a comprehensive final exam. You must bring a valid form of I.D. to every exam (i.e., student ID or Driver’s License). Tentative dates for the in-class exams is as follows:

Exam I September 20
Exam II October 18
Exam III November 15

The final exam will be given on MONDAY, DECEMBER 9, 10:30am-12:30pm HELD 107.

Quizzes: Quizzes will be given regularly, typically on Fridays that are not exam days. They may be in-class or take home. Quizzes must be done completely on your own. You may use the resources listed in the directions of the individual quiz. You must show all of your work to obtain full credit. I will drop your lowest quiz grade at the end of the semester.
In-Class Activities: There will be about one in-class activity every week. The purpose of these is to provide you an opportunity to practice a concept soon after it is taught. There will be no make-ups for in-class activities. I will drop your lowest activity grade at the end of the semester. If you miss an activity due to a University excused absence and provide the appropriate documentation, the assignment missed will not be included in your in-class assignment grade.

WebAssign Homework: Homework will be due on Thursday nights. Since the homework is done at your convenience, there will be no make-ups or extensions on homework. The homework assignments will not be re-opened at the end of the semester. I will drop your lowest two individual homework grades. If you have questions on the homework, please visit me during office hours or go to help sessions. (Information on Help Sessions will be posted on the Departmental Webpage.)

http://www.math.tamu.edu/courses/eHomework/

Posting of Grades: All grades will be posted on WebAssign.

Attendance: I strongly encourage you to attend and participate in every lecture. You must arrive and be fully prepared for class by the class start time. You are expected to stay the entire class time, unless you notify me prior to class. If you miss class due to a University excused absence and have proper notification, you will be able to hand copy notes during my office hours. Having an exam for another class is not a University excused absence, so plan your schedule accordingly.

Make-Up Policy: No make-ups will be given without written evidence of an official University excused absence. (See University Student Rules.) According to Section 7.3 of the University Student Rules, for an absence to be considered excused, “the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident or emergency) the student must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class.” In addition (and also in accordance with University Student Rules), a written excuse must be presented upon return to class. Specifically, in the case of illness too severe or contagious to attend class or in the case of injury, students are required to obtain a confirmation note from a health care professional affirming date and time of a medical office visit regarding the illness or injury and confirming the need of the absence (with permission to verify) before a make-up will be given. The Texas A&M University Explanatory Statement for Absence will NOT be accepted. An absence for a non-acute medical service does not constitute an excused absence. Students with an official University excused absence are permitted to make up work only for the dates of the absence.

Late Work Policy: Late work will not be accepted without a University excused absence. The definition of late work is any assignment not in my possession once collected from the class as a whole.

Grade Questions: You have two business days from the time any assignment is returned to resolve any grade questions. You should retain all returned work through the end of the semester to compare the grade assigned to the grade recorded in WebAssign. I cannot discuss grades via email or phone.

Academic Integrity Statement:

An Aggie does not lie, cheat or steal, or tolerate those who do.

I further refer the student to the Honor Council Rules and Procedures on the web at

http://aggiehonor.tamu.edu/

In addition to the above, any quiz or assignment grade that is given a grade of zero as a result of cheating will NOT be dropped at the end of the semester.

Students with Disabilities: 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, in Cain Hall, Room B118, or call 845-1637. For additional information visit

http://disability.tamu.edu

Classroom Etiquette: During class I will stay focused on teaching you mathematics, so please stay focused on learning the mathematics being taught. This means you should stay awake throughout the class, you should not be reading a newspaper or materials from another course, you should refrain from discussion not related to class and you should not leave class early unless you have cleared it with me first. If I feel you are being disruptive or disrespectful during class, you may be asked to leave. You should never have a cell phone out or turned on during class. No unapproved electronic devices are allowed in the classroom. If I hear or see your cell phone out, I may ask you to leave the classroom and you will therefore not be able to complete any in-class assignments.
Sources of Help:

• **Office Hours:** I am here to help, but I won’t know if you have a question unless you ask! I encourage you to ask questions both in and out of class, come to office hours, and talk to me. The more you participate, practice, and attempt to understand, the more successful you will be.

• **Class Notes:** An outline of notes will be posted prior to class each day. It will be helpful to print these out and bring them to class. You should review your notes after class to make sure you understand everything covered and note any questions you may need answered before the next class. I will NOT post completed notes after class. If you miss class due to a University excused absence, you may hand copy the notes during my office hours. The notes are also designed to be a primary help for homework as well as a primary review for exams.

• **Your Classmates:** Form study groups! Ask each other for assistance. Work together to understand the material.

• **Week-In-Review (WIR):** There will be one Week-In-Review session held by Jaclyn Kessler every week starting the second week of classes. Each review is open to all MATH 166 students and reviews the topics covered during the previous week of classes. The times and locations will be posted on the course’s webpage, as well as announced in class.

• **Help Sessions:** Help sessions are an opportunity for you to ask questions and get help with your homework. The help sessions are led by undergraduate students. The dates and times will be posted on the departmental web page, as well as on my own.

• **Practice:** It is essential that you practice as many problems as you can. In addition to the quizzes, in-class activities, and WebAssign homework, there are suggested homework problems.

**Copyright Policy:** All printed materials disseminated in class or on the web are protected by Copyright laws. One copy (or download from the web) is allowed for personal use. Multiple copies or sale of any of these materials is strictly prohibited.

**Tentative Schedule:**

- Week 1: L.1-L.2, 1.1
- Week 2: 1.1-1.4
- Week 3: 1.4-1.6
- Week 4: 1.7, Review, Exam I (L.1-L.2, 1.1-1.7)
- Week 5: 2.1-2.2
- Week 6: 2.3-2.4, 3.1
- Week 7: 3.1-3.3
- Week 8: 3.4, Review, Exam II (2.1-2.4, 3.1-3.4)
- Week 9: F.1-F.3
- Week 10: F.4, Intro to Systems, 4.3-4.4
- Week 11: 4.4, 5.1-5.2
- Week 12: 5.3, Review, Exam III (F.1-F.4, 4.3-4.4, 5.1-5.3)
- Week 13: M.1-M.3
- Week 14: G.1-G.2
- Week 15: Review
- Week 16: Final Exam (Comprehensive)

**Learning Objectives:** This course is focused on quantitative literacy in mathematics found in everyday life. Upon successful completion of this course, students will be able to:

- Understand and apply the rules of logic and sets.
- Recognize patterns in order to understand the principles of probability and counting and apply these concepts to a variety of problems; for instance, finding the probability of drawing a particular hand from a deck of cards.
- Identify types of random variables and be able to calculate probabilities and statistics for these random variables.
- Apply the concepts of finance to everyday experiences, such as paying off mortgages and saving for retirement.
- Understand matrices and their relationships to applications including solving systems of linear equations and solving problems involving Markov processes and game theory.

**Things I Hope You Get From This Course:**

- Learn mathematical tools that will be useful in your life
- Develop deductive reasoning skills as well as the ability to grasp abstract concepts
- Have an opportunity to practice basic mathematical skills
- Realize that math is really fun