Math 166: Topics in Contemporary Mathematics II   **Fall 2012**

INSTRUCTOR: Joe Kahlig
OFFICE: 640D Blocker
E–MAIL ADDRESS: kahlig@math.tamu.edu
WEB ADDRESS: http://www.math.tamu.edu/∼joe.kahlig/
OFFICE HOURS: Monday 1:30-3:30
     Tues., Wed., Thurs: 3pm-4:15pm
     Friday: 1:30pm-3:00pm
     other times by appointment

RESOURCE MATERIALS: The textbook and electronic homework access were paid for by your course fees. See my webpage on how to access the Web Assign site.
My homework problem sets(with solutions) can be found on my webpage.

CATALOG DESCRIPTION: Finite mathematics, matrices, counting principles, probability and applications, and finance. Prerequisites: High school algebra I and II and geometry. Credit will not be given for more than one of MATH 141 and 166.

CALCULATOR POLICY: This course **REQUIRES** a TI-83/TI–84 graphing calculator. You are not allowed to share calculators during quizzes or exams. You may use another calculator, provided that it does not give you an unfair advantage over your classmates. **The only calculator programs allowed are those I give out during class.** All other programs must be erased from the calculator. Using a calculator that is not approved or having programs(or notes) on the calculator will be considered a case of Scholastic Dishonesty and will be dealt with in that manner.

GRADING POLICY:

3 Exams @ 20% each	60%		A = 87-100
Homework	15%		B = 77-86
Final Exam	25%		C = 67-76
Total Points	100%		D = 57-66
			F = 0-56

EXAMS: There will be three in-class exams and a comprehensive final. **I will not curve your test grades.** Once an exam is returned, I will not give a makeup for that exam. If you believe that you have a valid reasons for receiving a makeup after the exams have been returned, then talk to me. Any question regarding grading/scoring must be done within one week of the return of the exam or no change to the grade will be made.

Tentative Exam Schedule

Exam 1:	Week 4	Exam 3:	Week 12
Exam 2:	Week 8	Final Exam:	Wednesday, December 12 from 8am-10am

HOMEWORK: Homework for this course will consists of electronic homework assignments as well as some written assignments. At least one homework assignment will be dropped at the end of the semester. Working together on these assignments is ok. However, copying from other students is considered cheating.

The electronic homework will be worked and submitted in the WebAssign system. Due dates for the electronic homework can be found in the webassign system. Directions on how to log into this system can be found on my webpage. After a homework assignemnt is due, you will have the option of requesting an one-day extension. There will a penalty if you chose to have an extension.

The written homework will be posted on my web page along with the due date. Written assignments will not be accepted late.

ATTENDANCE, ABSENCE, and MAKEUP WORK POLICIES:

• Attendance is strongly encouraged. You will only be allowed to makeup quizzes and exams for a university excused absence(see the University Student Rules for a list of the excused absences). Proof must be shown before any makeup is allowed.

• Note: I will not accept the **Explanatory Statement for Absence from Class** form as sufficient written documentation of an excused absence. If you miss for an illness, then you need a note from a medical professional stating that you should not be in class on that day. For non-medical absences, ask me what proof is required to verify that it is excused.

• The last day to Q-Drop this class is **November 2**.

WEEK IN REVIEW: I have a on-line week in review for my regular math 141 course and math 166 course. These reviews will cover most of the material that we cover in this class. The department will hold a week in review for the regular math 166 classes. The time and location can be found on my webpage.

WEB PAGE: A tentative schedule for this course may be found on my web page along with all the written homework and take-home assignments. Solutions to the exams, quizzes, and written homeworks will be posted in a timely manner. The web page also contains links to additional resources. In addition to my web page, I will be communicating important information using your university e-mail account. Be sure to regularly check this account for messages.

A.D.A. POLICY STATEMENT: 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 the Department of Student Life, Disability Services in Cain Hall or call 845-1637.

COPYRIGHT POLICY: The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, in-class materials, review sheets, and additional problems sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

SCHOLASTIC DISHONESTY: *An Aggie Does Not Lie, Cheat, or Steal or Tolerate Those Who Do.* The Aggie Code of Honor will be enforced in this course. For the purpose of this course, cheating will be defined as (but not limited to) access or use of unauthorized material during exams and quizzes, collaboration between students during exams, quizzes or assignments for which group work is not allowed, perusal of another student's work during exams and quizzes, copying other student's work or allowing other students to copy you work on any assignment, quiz or exam, and having unauthorized programs or other information stored on calculators when these calculators are accessible during an exam or quiz.

For additional information about Aggie Honor System consult http://www.tamu.edu/aggiehonor/

SCHOLASTIC DISHONESTY WILL NOT BE TOLERATED.

LEARNING OBJECTIVE/OUTCOMES: Students should be able to demonstrate an understanding of the material as covered during lectures and demonstrate ability to use these concepts on exams, quizzes and homeworks.

The students will learn about logic and truth tables.
The students will learn about linear functions and their applications in mathematical models.
The students will learn to translate a word problem into a mathematical system of equations or inequalities.
The students will solve a system of equations and interpret the solutions.
The students will learn about matrices and their operations.
The students will learn about the Leontief Input-Output Model.
The students will learn the graphical method to solve a linear programming problem.
The students will learn an algebraic approach to solve a linear programming problem.
The students will learn about simple interest, compound interest and annuities.
The students will learn about sets and set operations.
The students will learn about Venn diagrams.
The students will learn different counting methods: multiplication principle, combination, and permutations.
The students will learn about probability and its applications.
The students will learn conditional probability.
The students will learn about random variables and expected value.
The students will learn statistics: mean, median, mode, standard deviation,..
The students will learn the binomial distribution.
The students will learn the normal distribution.
The students will learn about Markov chains and regular Markov chains.
The students will learn about Game theory and mixed game strategy.