SYLLABUS
Math 1493
Applications of Modern Mathematics
10:30 TTh, 101 Classroom Building North
Spring 2013

Professor:

Bruce Crauder   Office phone: 405-744-7978

e-mail: crauder@okstate.edu   Office: Life Sciences East 201

Office hours:

Mondays, Tuesdays, and Wednesdays from 1:30 pm— 2:30 pm, OR as announced in class;
OR e-mail lori.scanlan@okstate.edu, or call 744-7978 and make an appointment to see me.

Office Hours:

The purpose of office hours is to provide a time dedicated to helping you. You are welcome to utilize any office hours listed above. Just come by my office – you don't need to make an appointment for those times; for other times, please make an appointment and be sure to keep it. If you cannot keep a scheduled appointment, let Ms. Scanlan know at the above e-mail address.

MLSC General Tutoring:

The Math Learning Success Center is on the 4th floor of the Classroom Building and is available to you on Mondays noon – 9 pm, Tuesdays noon -- 9pm, Wednesdays noon – 6 pm, Thursdays noon – 9 pm, Fridays noon – 5 pm, and Sundays 1 pm – 5 pm. Check in at CLB 420.

MLSC Special Tutoring just for this class!

In addition to the general tutoring hours at the MLSC, there are also special tutoring hours just for Math 1493 students. Check in at CLB 420. These special tutoring hours are Mondays from 6:30 pm —8:30 pm and Wednesdays from 7 pm—9 pm.

Text:

Quantitative Literacy: Thinking Between the Lines, 1st edition, ISBN 978-1-4292-2328-7, by Crauder, Evans, Johnson, and Noell, available at the OSU Bookstore for $137.50 new, $108.00 used (there are lots of used ones at the OSU Bookstore).

Calculator:

You will need a decent calculator that does scientific-type calculation----not just +,-,x,/ but it should also be able to do ^ and preferably parentheses (and) also. Graphics calculators have very nice display screens, are easy to use, and are highly recommended. Calculators may be checked out (subject to availability) from the Math Department (MSCS 401) any workday from 8 am—5 pm.

Expectations:

You are expected to attend class prepared to learn. This includes more than simply attending class and bringing your book and calculator. I expect you to come to class having reviewed the material covered in the previous class, having read the text, and having questions related to the material or the homework. This preparation for class is essential so you can learn from the class and not just passively watch.

Classroom Etiquette:

The essence of etiquette is courtesy to your fellow students. Whether you are tweeting, texting, or just talking with your friend, you may be very distracting to others. Please turn off cellphones, iPods, etc during class.

Content:
This course treats various applications of mathematics, particularly practical applications. It is designed to be a general education mathematics course for majors that do not require further mathematics. It is intended to be self contained; it neither assumes any math background nor is it preparatory for further mathematics courses. The text covers many interesting topics, more than we can cover in one semester, including the following:

- Critical thinking – Chapter 1
- Analysis of growth – Chapter 2
- Linear and exponential change: comparing growth rates – Chapter 3
- Personal finance – Chapter 4
- Introduction to Probability – Chapter 5
- Statistics – Chapter 6
- Graph theory – Chapter 7
- Voting and social choice – Chapter 8
- Geometry – Chapter 9

Tests:
There will be four exams each worth 100 points. The dates for the exams are:

Exam I:	**Thursday, January 31st, during class**
Exam II:	**Thursday, February 28th, during class**
Exam III:	**Thursday, April 4th, during class**
Final Exam:	**Tuesday, April 30th, during the final exam period (10:00 – 11:50 am)**

These exam dates are fixed and will not change. Makeup exams will only be given in unusual circumstances and are at the instructor's discretion.

Homework:
There will be homework assignments most weeks. Homework is normally due on Thursdays at the beginning of class and returned to you on Tuesdays in class. Homework assignments will be posted on D2L (see below) and often emailed to you, normally the previous week. There will be 10 homework assignments each worth 20 points, so your total homework score will be out of a possible 200 points, that is, the same as two exams. Late homework may be marked but cannot count for your grade.

Attendance:
Attendance is very important in this class; indeed attendance is considered so important that I will add extra credit to your total homework score based on attendance. If you miss class due to illness or other obligations, please contact me to learn what was covered in class, although I cannot give you extra credit for the missed class. In particular, your attendance, or lack of attendance, cannot lower your grade; it can only raise your grade.

Grading:
You have the possibility of earning up to 600 points (4 x 100 = 400 points for the exams and 10 x 20 = 200 points for the homework). The following grades are guaranteed as minima: 90% A, 80% B, 70% C, and 60% D.

Online Classroom (OC, also known as Desire2Learn, or simply as D2L):
This syllabus, homework assignments, practice exams, and other communications will be posted on this class' D2L site. Be sure to use MATH 1493 SEC TH 001 and not the DS version. Also I will often send you email via the D2L system, so be sure you know how to access your OSU email address and that you do so often.

Personal Integrity:
In all matters of personal integrity, such as homework and tests, you are expected to ensure that work with your name on it is truly your own work. This includes homework done working with other students; your paper should ultimately be your own work. Cheating, of course, is not tolerated.