Text


Course Description

This is an introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory, symmetry and tiling, geometric growth, comparison of algorithms, codes, and data management.

Grading Policy

Classwork: 5%
Homework and/or Group Projects: 10%
Quizzes: 15%
Two exams each worth: 20%
Final exam: 30%

The scale for letter grades is as follows:

A: 90 and above
B: 80–89
C: 70–79
D: 60–69
F: below 60

Plusses and minuses will be used when appropriate. There will be no extra credit offered, nor curving or scaling of grades. If you have any questions about the grading of a particular assignment, you must contact me no more than one week after the day I return the graded assignments in class (whether you are present during that class or not).

Course Requirements

• Attendance: It is your responsibility to attend class. Attendance is mandatory. You are expected to come to class on time and prepared and to remain in class until you have been dismissed. If you arrive late, past 1:05pm, or leave early, before 2:50pm, you will receive a 0 on the quiz for that day. Before class begins, you should turn off cell phones and any other electronic devices so as to avoid any disruption to your classmates. As this class meets for only 7 weeks it is important that you are present for the each and every session.
• **Homework:** Homework will be assigned weekly and will be due at the beginning of class the following Monday. Submitted homework must be stapled (if more than one page), easy to read, and fringe-free. Late homework will not be accepted. You may work in groups, but each of you must hand in your own work in your own words. Solutions that correspond verbatim with those of your classmates will not be accepted.

• **Quizzes:** There will be also be daily quizzes. The lowest 2 quiz grades will be dropped at the end of the semester. No make-up quizzes will be offered. Note that if you miss a quiz and cannot present official documentation, then that will be the dropped quiz. If you arrive late to class you will not be given any extra time and if you miss the quiz entirely you will receive a 0. Again, no make-up quizzes will be given. Calculators are not allowed.

• **Exams:** There will be two 90 minute midterm exams, held during class time on the following Fridays: **November 7** and **December 5**. Exams are intended to be more in-depth than quizzes. Calculators are not allowed.

• **The FINAL EXAM is from 7:00-10:00 PM, Thursday, December 18.**

**Other Policies**

• **Excused Absences:** If you have an illness, accident, or family emergency that prohibits you from participating in any aspect of this course, you must have the Emergency Dean send me a letter to excuse you from your absence. You can contact the Emergency Dean at (217) 333-0050. For more information go to [http://www.odos.uiuc.edu/emergency/](http://www.odos.uiuc.edu/emergency/).

• **Cell Phones:** Cell phones are not permitted in class. You must silence them and put them away before the bell.

• **Academic Integrity:** All violations will be dealt with in accordance with University policy: [http://admin.illinois.edu/policy/code/article1_part4_1-402.html](http://admin.illinois.edu/policy/code/article1_part4_1-402.html). Infractions include, but are not limited to, submitting work that is not your own, using a calculator or ANY other electronic device during an exam. During exams, I will periodically write the time on the board.

• **Assistance:** Please do not hesitate to contact me if you need special assistance, or have questions or problems relating to this course.

**Final Words**

Learning math is an active process. This means that attending class, working out examples, asking questions, watching the videos, and taking the assignments seriously are crucial to succeeding in this class. You must be willing to learn from your mistakes and ask for help. Please seek help sooner rather than later, as the longer you put it off the harder it will be to improve your grade. **Best wishes for an enjoyable and productive semester!**