

## Matrix Algebra: MATH 308 O - Winter 2020

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**Office:** Padelford C-8K      **Course web page, via canvas:** <https://canvas.uw.edu/courses/1356682>

**Lecture:** Lecture is on Monday, Wednesday, and Friday, 12:30-1:20 in BNS 117. You are responsible for all information that is discussed during lecture. I may occasionally call on you during lecture to answer questions, so come prepared!

**Office Hours: Monday 130-230, Thursday 2-3.** I will always be in my office during office hours. If you can't make it, let me know after class or via e-mail and we can set up another time to meet.

**Text:** *Linear Algebra with Applications, Second Edition*, by Jeffrey Holt. Webassign is required for this course, and it comes with an electronic copy of the textbook.

**Course Objectives:** This course is motivated by the study of systems of linear equations. We will develop tools to solve linear problems, and discuss many real-world applications. At first glance, solving linear systems seems like an algebra problem – but we will see that it has a simple and beautiful geometric interpretation. This course is different from the 124/5/6 sequence, in that we will rely more heavily on abstract definitions and logical reasoning.

**Grading:** The weight for each part of the course is given below. (Midterm dates are tentative.)

Category	Weight
Webassign	10
Conceptual problems	10
Midterm 1 ( <b>Wednesday, Jan 29</b> )	25
Midterm 2 ( <b>Wednesday, Feb 26</b> )	25
Final Exam ( <b>Thursday, March 19, 2020, 830-1020, BNS 117</b> )	30
Total	100

**Homework:** This course has two types of homework: webassign, and conceptual problems. The first webassign assignment is due Thursday, Jan 16, the second on Jan 23, etc. Conceptual problems will be discussed during class (typically on Wednesdays), and one or two problems will be assigned to be turned in on Fridays. Late homework will not be accepted for any reason.

**Exams:** The midterms will be 50 minutes long and will be given at lecture. The final exam is cumulative. The date of the final is set by the university and is very unlikely to change under any circumstances, so you should plan your travel arrangements accordingly. During exams you are allowed one sheet of hand-written notes (8.5x11 inches, double sided), and a TI 30X IIS calculator: no other calculators are permitted. Cheating will not be tolerated.

**Make-Ups:** In case of observance of religious holidays or participation in university sponsored activities, arrangements must be made at least 1 month in advance for exams. You will be required to provide documentation for your absence. *Make-up exams will not be given.* If you miss an exam due to **unavoidable, compelling, and well-documented** circumstances, the other exams will be weighted more heavily.

**Holidays** We have two holidays this quarter: MLK day (Jan 20), and Feb 17 (Presidents day).

**Tips for succeeding in this class:**

**1. Homework is crucial:** Mathematics is not a spectator sport: to learn it, you have to do it. Reading the text and paying attention in lecture are just as important as thinking about the material on your own. When you are stuck or confused on a problem, don't immediately check your notes or ask a friend to find the solution: being stuck is where the most valuable learning can occur!

Try to adopt good work habits: look at the material within the first few days it is covered in class, so your mind can have time to ruminate on the difficult concepts. Absorbing mathematical ideas is like eating: it is better to have one meal of math each day, rather than five in one day, so you can digest properly. If you cram too much math the night before an exam, you are bound to puke it all up the next morning.

**2. Ask for help:** Most students will hit a wall at some point during the course. Some can't handle the large workload, while others find difficulty with specific concepts in the course. When these times arrive remember to ask for help. Come to me, ask your classmates for help, visit the student counseling center. These are just a few of your options. It is better to find help earlier rather than later. You are all smart enough to do well in this course: the question is whether or not you are determined enough.

**Resources:**

- A link to the class website can be found at: <http://www.math.washington.edu/~jfrichey/>  
You will find homework assignments, review sheets, grade information, a calendar for the term, and various bits of other useful information there, including past exams and quizzes, TA information, etc.
- The University of Washington is committed to providing access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450 (V), 206-543-6452 (TTY), 206-685-7264(FAX), or dso@u.washington.edu.
- The Student Counseling Center provides academic skills workshop on a variety of topics including stress management test anxiety and time management to help you succeed at the University of Washington. If any of these is an issue for you, check out the schedule of workshops at <http://depts.washington.edu/scc/studyskills.html>