

# MATH 213

Fall 2017

## Introduction to Linear Algebra

MTWR      4:00 - 4:50      SCI A201

**Instructor:** Dr. Susan Talarico

**Office:** SCI B127

**Phone:** 346-4976

**Email:** stalaric@uwsp.edu

**Office Hours:** T, W 1:00 – 1:50

R 2:00 – 2:50

*\*or by appointment \**

**Text:** Linear Algebra and its Applications, (5th edition), by Lay, Lay & McDonald

**Prerequisite:** Math 121

**Calculator:** A calculator capable of performing matrix operations is required for this course. The Math Dept. recommends the following Texas Instruments models: TI-83, TI-86. The policy of the Math Dept. does not allow the TI-92 unless special permission is obtained. You may not share a calculator on a quiz or exam. You may not use a cell phone's calculator on a quiz or exam. The use of smart phones and computing devices capable of remote transmission is not allowed during any exam or quiz. Bring your calculator to class daily.

### Course Outline:

Chapter 1: Linear Equations in Linear Algebra

(1.1 - 1.5, 1.7-1.9)

Chapter 2: Matrix Algebra

(2.1 - 2.3)

Chapter 3: Determinants

(3.1 - 3.3)

Chapter 4: Vector Spaces

(4.1 - 4.2)

Chapter 5: Eigenvalues and Eigenvectors

(5.1 - 5.3)

Chapter 6: Orthogonality and Least Squares

(6.1-6.3, 6.5, 6.6)

Additional topics may be covered or assigned as out-of-class reading assignments.

**Attendance Policy:** Attendance is expected at each class period. It is your responsibility to obtain notes and information from missed class time. Any arrangements for make-up quizzes or exams must be made before the scheduled quiz/exam time.

**Evaluation:** There will be a total of 600 pts. for the semester.

**Exams:** (270 pts = 45% total)

There will be 3 exams, each worth 15% of your course grade.

Tentative dates:

Thursday, September 5th

Thursday, November 2nd

Thursday, November 30th

Make-up exams will be available only in very special cases and will be handled on an individual basis. Arrangements in such cases must be made prior to the examination.

**Quizzes:** (100 pts = 17%)

There will be 11 quizzes given (on Thursdays), each worth 10 pts.

The 10 highest scores will be used for grading purposes. Quiz 1 will be on September 14th.

**Homework:** (80 pts = 13%)

With each section, HW exercises will be assigned. These will be collect approximately once each week and selected exercises will be graded. Your success in learning the material presented requires that you complete each assignment and do not fall behind. We will use class time to go over some of your questions regarding the assignments. We will not, however, have enough class time to answer all questions that arise. The Math Help Room is a potential resource for extra math help (see below). Your textbook and classmates are also valuable resources as are my office hours.

**Final Exam:** (150 pts = 25%)

The final exam is comprehensive.

Final Exam time: Tuesday, December 19, 5:00 - 7:00 pm

**NOTE:** You may not leave the classroom while taking a quiz or exam, including the final exam.

**Grading Scale:**

Course letter grades will be based on the scale below, with + and - marks within each range:

- A: 90 - 100
- B: 80 - 89
- C: 70 - 79
- D: 60 - 69
- F: below 60

I may adjust this scale down if the class average warrants. I will not make the scale any higher. I may use discretion to raise a student's final course grade if her/his final grade does not reflect the quality of her/his course work (for example, from a low exam score early in the course). I will not, however, use such discretion to lower a student's grade.

**Math Help Room:** The Math Help Room is the math tutoring lab located in SCI A113A. It is staffed by students (math majors) prepared to help students with math questions through Calc II, although usually some tutors have had 213 and can help you! It is free of charge and you need not make an appointment.

**HOURS:** M-R 9-4 and 7-9 p.m. This opens on Monday of the 2nd week of classes.

**Rights & Responsibilities:** You are expected to be fully aware of your rights and responsibilities as a UWSP student.

In accordance with UW system policies, Math 213 is dedicated to a *safe, supportive and non-discriminatory environment for all persons regardless of age, race, religion, gender, sexual orientation or disability.*

Relevant websites:

UWSP Community Bill of Rights and Responsibilities:

<http://www.uwsp.edu/dos/Documents/CommunityRights.pdf>

In particular, this includes the UWSP Student Academic Disciplinary Procedures:

<http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap17.pdf>

Information concerning accommodations made as per Section 504 of the Rehabilitation Act or the Americans with Disabilities Act can be found at:

<http://www4.uwsp.edu/special/disability/> .

In particular, to request any accommodations of this type, relevant to this class, discuss the matter with the Disability Services Office. Information and contact information may be found at:

<http://www4.uwsp.edu/special/disability/ToQualifyforDisabilityServicesProcedure/> .

