Syllabus for Math 230, Calculus III

Welcome!

I am Dr. Robert Kreczner, and I will be your teacher. I am delighted to welcome everybody to Math 230, Introduction to Linear Algebra, Spring 2021. This is a virtual course, and we will be meeting via Zoom on, Tuesdays, Wednesdays, Thursdays, and Fridays, 2:00 pm to 2:50 pm. I am confident you will enjoy learning the course material, and I am also sure you will complete the course successfully.

What is Expected from You

What is expected from You:

- 1. Participate in all Zoom meetings unless having explicit excuse from me.
- 2. You should have wi-fi, and your computer should be equipped with a microphone and camera.
- 3. Do all posted assignments, quizzes, homework, exams, discussions, etc., before or on the specified due date.
- 4. Be able to convert your handwritten assignments to pdf files, for example, using your phone.
- 5. Check Canvas at least once a day, Monday through Friday.

Contacts and Information about the Teacher

- Name: Dr. Robert Kreczner
- · To contact me please use only this email: rkeczne@uwsp.edu
- Important: When sending me an email, please include Math 227 in its subject line.
- · You can also set up a Zoom meeting with me

Office Hours

Monday, Tuesday, Thursday, Friday, 3:00 pm to 3:50 pm. During this time you can reach me via Zoom. If the time is not convenient, you may set up a different time with me.

Here is a link to Zoom office hours:

Join Zoom Meeting

https://uwsp.zoom.us/j/98039370862?pwd=MEpiRlpUYkFzOUJ5ZmZLWC8rdWV5dz09 &

Meeting ID: 980 3937 0862

Passcode: 234799

Textbook

Linear Algebra And Its Applications, Fifth Edition, David C. Clay, Steven R. Lay, Judi J. McDonald

Homework Assignments and Exams

- A homework assignment will be given every week. It will be posted every Monday, and it will be due Sunday. The problems will be taken from the covered sections in the textbook.
- · Weekly exams will be due every Wednesday.

What We will Study

Description:

Topics in linear algebra; systems of linear equations, Gauss-Jordan elimination, linear combinations and linear independence, linear transformations, vector spaces and subspaces, matrix algebra, determinants, bases of nullspaces and column spaces, eigenvalues and eigenvectors, inner products and orthogonal projections with selected applications.

Prerequisites:

MATH 226 ≥

General Course Goals:

To gain a basic understanding of linear algebra concepts in $\mathbb{R}n$. To be able to think and communicate better mathematically through the study of linear algebra, including some introductory work with mathematical proofs.

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, 2.8-2.9)

Chapter 3: Determinants (3.1 - 3.3)

Chapter 4: Vector Spaces (4.1 - 4.7)

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.

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 smartphones and computing devices capable of remote transmission is not allowed during an exam or quiz. Bring your calculator to class daily.

Grading Policy

Homework Assignment 25%, Weekly Exams 70%, and attendance of virtual Zoom classes 5%

Name:	Range:			
А	100%	to	94	%
A-	< 94%	to	90	%
B+	< 90%	to	87	%
В	< 87%	to	84	%
B-	< 84%	to	80	%
C+	< 80%	to	77	%
С	< 77%	to	74	%
C-	< 74%	to	70	%
D+	< 70%	to	67	%
D	< 67%	to	64	%
F	< 64%	to	0	%