

Welcome to Math 213-01 – *Introduction to Linear Algebra*.

My name is Prof. Rohm; I will be your instructor for this course.

I have posted a copy of my current schedule and contact information on D2L. You can also find more information about me at

- <http://www.uwsp.edu/mathsci/Pages/faculty/dRohm.aspx>
- <http://www4.uwsp.edu/math/drohlm>

Here is the most recent catalog description for the course:

MATH 213. Introduction to Linear Algebra. 4 cr. 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. Prereq. Math 121.

Although Math 213 is a fairly straight-forward computationally-centered mathematics course, there are many new definitions and techniques which you will have to learn. A complete copy of the syllabus for this course has been posted on D2L. This includes a schedule for examinations and grading criteria for the course.

As a new or continuing UWSP student, you should be fully aware of your rights and responsibilities as a UWSP student. You can find these in the UWSP Community Bill of Rights and Responsibilities at

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

UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (the library) as soon as possible.

<https://www.uwsp.edu/disability/Pages/default.aspx>

The DATC can also be contacted at 715-346-3365 or DATC@uwsp.edu.

Thank you for reading this. I look forward to collaborating with you this semester as a member of the Pointer Community.

Fall 2018

Math 213-01

12:00 MTRF
CCC 304

Instructor: Dale M. Rohm
Office: Sci D356

Office Hours: 11:00-2:00 Wednesday,
or by appointment.

Phone: (715)346-3798 e-mail: drohm@uwsp.edu
url: <http://www.uwsp.edu/mathsci/Pages/faculty/dRohm.aspx>

Text: Lay, Linear Algebra and its Application, 5th ed.
ISBN 978-0-321-982384 Url: www.pearson.com

Course Description:

MATH 213. Introduction to Linear Algebra. 4 cr. Topics in linear algebra; matrix algebra, systems of linear equations, Gauss-Jordan elimination, determinants, vector spaces, linear independence and bases, linear transformations, eigenvalues and eigenvectors; selected applications. **Prereq:** 121.

Math 213 is a one-semester comprehensive introduction to the topic of linear algebra suitable for students majoring in mathematics, the physical or natural sciences, economics or quantitative social sciences. This material serves as a prerequisite for further study of systems of differential equations, abstract matrix algebra, and multivariable statistics.

Technology Policy: A calculator capable of matrix computations is extremely useful for this course. Based upon students' experiences, I recommend at least the TI-83 or TI-84. I reserve the privilege of designating some or all questions of an examination or quiz as "non-calculator". When permitted, only one calculator may be used during any quiz or test. Sharing of calculators is prohibited.

Some assignments, quizzes, or exams may contain problems requiring computer use completed **outside** of the classroom. Use of a computing device capable of remote transmission, including smart-phones, is expressly prohibited during any **in-class** assessment of this course. Turn your phones off or place them in airplane mode before any in-class examination or quiz.

There are times during lectures when taking an image of the board or screen might be valuable, you are welcome to do so. **However texting or browsing during lecture is rude and distracting, don't do it. Please refrain from audible alerts during class by using vibrate modes.**

Evaluation and Grading: Your course grade will be determined by your performance on three examinations and approximately six quizzes given during the semester, and a comprehensive Final Exam. Those scores will be scaled according to the percentages shown below and totaled to give a numerical score. Final letter grades will be awarded according to the following curve.

<u>Grade Item</u>	<u>Weight</u>	<u>Percentages</u>	<u>Minimum Grade</u>
Examination I	25%	90-100	A-
Examination II	25%	75-89	B-
Quizzes	25%	60-74	C-
Final Exam	25%	50-59	D

I reserve the right to raise a student's grade if it is my determination that numerical scores are not reflective of that student's actual comprehension, but I will never give a grade lower than that determined by the stated criteria.

Attendance Policy: I will not give “make-up”, “retake”, or “extra-credit” examinations, unless arranged prior according to university procedures. Alternate or make-up examinations for religious or university-related accommodation require prior approval. The only exceptions are for legitimate medical or personal emergencies.

There is no easier way to earn an unsatisfactory grade in a university-level mathematics course than to skip class or fail to complete assigned exercises. Attendance is expected at every class meeting. If you must miss class for university activities or personal reasons, it is your responsibility to promptly contact me in writing and make up assigned work.

Each week I will give a list of suggested problems. Although you will not normally have to hand in this homework, your responsibility as a student is to seriously attempt to complete these problems. When you identify difficulties, it is also your responsibility to seek help from your textbook and classmates, me electronically or during office hours, and available tutors.

Course Schedule: The dates for examinations are given below. All quizzes will be announced at least one class day before being given.

The first portion of the course covers ideas related to the study of systems of linear equations using matrix algebra. The single most important concept is Gauss-Jordan Elimination. Most questions in linear algebra are ultimately answered by setting up and solving the correct system of linear equations. This material is found in Chapters 1 and 2 of your textbook.

Examination I: Friday, Oct. 5.

The second portion of the course uses matrices to investigate the linear structure of subspaces of \mathbb{R}^n . This material includes Chapter 3 and selected sections of Chapters 4 and 5.

Examination II: Friday, Nov. 9.

The final portion of the course completes Chapter 5 and topics related to orthogonality as found in Chapter 6. **Final Examination: Wednesday, 10:15-12:15, on Dec. 19.**

The last day to add/drop a 16-week class is Wednesday, Sept. 13.

The last day to drop a 16-week class with a "W" grade is Friday, Nov. 9.