

Math 330**Syllabus****Fall 2016**

Professor Cindy McCabe Office: D354 Science Building Phone: 715-346-2085 Email: cmccabe@uwsp.edu www.uwsp.edu/mathsci	Office Hours 10:00-10:50am Mon, Th, Fri 8:00-8:50am Tuesdays 9:00-9:50am Wednesdays <i>or by appointment</i>	Class meets Mon, Wed, Fri 1:00 – 1:50pm CCC 111
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Text (rental): *Linear Algebra and Matrix Theory*, 2nd Edition, by Gilbert & Gilbert, published by Addison Wesley, ISBN 978-0-534-40581-6. Topics include most of Chapters 1 – 5 and selections from Chapters 7, 8, and 10.

Calculators: Daily access to a graphing calculator is required. Sharing is not permitted. Recommended calculators are the TI-83+ or TI-84. Computers, phones, and calculators with a “QWERTY” keyboard are not allowed during exams or quizzes.

Prerequisites: Math 213: Intro to Linear Algebra and
Math 300: Intro to Proof with Real Analysis

General Course Learning Outcome: Students will be able to think and communicate better mathematically through the study of linear algebra, including mathematical proofs.

Specific Topics:

- A review of solving systems of linear equations by multiple methods and determining how many solutions a system has
- A review of determining linear independence or dependence and the span of a set of vectors
- Dimension, rank, and nullity
- Abstract vector spaces and subspaces (including isomorphic vector spaces)
- Standard bases for subspaces
- Matrices of transition
- Linear transformations and changes of bases
- Characterizations of invertible matrices and of diagonalizable matrices
- Review of eigenvectors, eigenvalues, and similar matrices
- Real Quadratic Forms
- Writing mathematical proofs and communicating conclusions and justifications using mathematical notation and language and using English sentences (This includes the use of mathematical terminology and theorems.)

Desire to Learn (D2L): Homework assignments, grade information, and other class announcements can be found on the web in Desire to Learn (D2L)

<https://uwsp.courses.wisconsin.edu/d2l/home>.

To access D2L, use your regular campus logon ID and password, and then click on our course: INTERMEDIATE LINEAR ALGEBRA...MATH 330...

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Evaluation: Final course grades will be determined by the following:

- 120 points for in-class quizzes (three quizzes worth 40 pts each)
- 45 points for in-class work, sometimes done in groups (highest 15 scores)
- 66 points for weekly homework assignments (highest 11 scores)
- 100 points for Exam 1 (in-class on Friday, Oct. 14)
- 100 points for Exam 2 (in-class on Friday, Nov. 18)
- 130 points for the comprehensive Final Exam (Wed. Dec. 21, 8:00 – 10:00am)

Total: 561 points for this course

Course Grades at or above	93.3	90	86.7	83.3	80	76.7	73.3	70	66.7	60	% Points
	524	505	487	468	449	430	411	392	374	336	
will receive at least a grade of	A	A -	B +	B	B -	C +	C	C -	D +	D	

I reserve the right to exercise discretion in raising a student's grade if the final weighted average does not appear to reflect the quality of a student's work (for example, because of one low exam score early in the course). I will not use discretionary judgments to lower a student's final grade.

Almost every day, a list of **homework** exercises will be assigned. Full homework assignments will be collected approximately once each week (often on Monday). This is meant to be formative assessment, so written comments will be given and homework grades (out of 6 points each) will mostly be based on evidence of thoughtful completion of the assignment.

There will be **in-class work** each week, sometimes done in groups. Some days you will need to bring in text exercises for class discussion. This work will be worth 3 points each time. Your highest 15 scores will be part of your semester grade. This is also meant as formative assessment, so grades here will be based on evaluations of *satisfactory work, some significant contributions, or little to no significant contribution*.

Each homework set, in combination with the in-class work we do, will be a *minimal* list of items which you need to understand in order to do well in this course. This work is extremely important, so make sure you stay on top of it and ask questions on whatever you don't understand. The effort you put into your homework and in-class work, and into studying them after completion, will have a big impact on your semester grade through the improved quiz and exam scores that it produces.

Three regular **quizzes** and three **exams** are listed in the schedule on the next page. Please note these dates now so that you can plan for them in advance.

I do not anticipate other graded items, but if any arise, they will be announced in class and the course points will be adjusted.

For Help:

- 1) Ask questions as they arise. Come to see me before or after class, stop by during my office hours, or schedule an appointment with me for another time. One of the great parts of my job is working with conscientious students!
- 2) Also, tutoring services may be available through the Tutoring-Learning Center in LRC 018. Some of their services are listed at <http://www.uwsp.edu/tlc/Pages/CA-tutoring.aspx>.

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Weekly Schedule – Fall 2016

Week	Planned focus for discussion each week	Friday Exams and Quizzes
1. Sept. 5 – 9	Chapter 1	
2. Sept. 12 – 16	Chapter 1	
3. Sept. 10 – 23	Chapters 2 & 3	
4. Sept. 26 – 30	Chapter 3	Quiz 1
5. Oct. 3 – 7	Chapter 3	
6. Oct. 10 – 14	Chapter 4 & Review	Exam 1
7. Oct. 17 – 21	Chapter 4	
8. Oct. 24 – 28	Chapter 4	
9. Oct. 31 – Nov. 4	Chapter 5	Quiz 2
10. Nov. 7 – 11	Chapter 5	
11. Nov. 14 – 18	Chapter 5 & Review	Exam 2
12. Nov. 21 – 23	Chapter 7	<i>No class Th/Fri</i>
13. Nov. 28 – Dec. 2	Chapters 7 & 8	
14. Dec. 5 – 9	Chapters 8 & 10	Quiz 3
15. Dec. 12 – 16	Chapter 10 & Review	

Final Exam: Wednesday, Dec. 21, 8:00 – 10:00am

Attendance is expected at every class meeting. It is the student's responsibility to make prompt arrangements for finding out what was missed and for making up any assigned work in the case of an absence. Quizzes and exams may not be made up unless arranged with the professor ahead of time, and then only for sufficient reason. If a dire emergency occurs, contact Professor McCabe as soon as possible to see if an exception is in order.

For information on **accommodations** available to students with disabilities, visit the Disability and Assistive Technology Center in room 609 of the Learning Resources Center (715-346-3365) or their website: <http://www.uwsp.edu/disability/Pages/default.aspx>.

All students are expected to know the UWSP Community **Rights & Responsibilities** and the **Student Academic Standards and Disciplinary Procedures** found by clicking on "Community Standards" at <http://www.uwsp.edu/dos/Pages/Information%20for%20Students.aspx>. This is part of the Dean of Students webpage at UWSP.

Incompletes: A grade of incomplete may be given when circumstances arise which are beyond the student's control, and the student is unable to complete the course, AND the student is passing when the circumstances arise.



