Marshall University MTH 329 Syllabus

Course Title/Number	Elementary Linear Algebra MTH 329 - Section 201 - CRN 4146 - Credits 3
Semester/Year	Spring 2017
Days/Time	MW 3:00 pm - 4:15 pm
Location	Smith Hall 509
Instructor	Dr. JiYoon Jung
Office	Smith Hall 742D
Phone	(304) 696-3285
E-Mail	jungj@marshall.edu
Office Hours	12:45 - 02:00 pm on Mon Tue Wed Thu or by appointment I am always happy to answer questions or talk about the course material any time. Just send me an email or stop by my office, Smith Hall 742D.
Tutoring Services	In addition to office hours, there are three free tutoring options for students in Math 329. The math tutoring lab will be open this semester during the following hours: - Smith Music 115: Monday-Thursday 10am-4pm, Friday 10am-12noon - Smith Hall 620: Monday-Thursday 5:00pm-6:30pm http://www.marshall.edu/math/tutoringlab.asp. The University College offers appointment-based tutoring in in the Communications Building. Please consult their web page for additional information. http://www.marshall.edu/math/tutoringlab.asp.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/. Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Dismissal/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment

Course Description: From Catalog

Systems of linear equations, matrices and determinants, vector spaces, linear transformations, eigenvalues, eigenvectors, and applications.

PR: ACT Math 27, or SAT Mathematics (before Mar. 16) 610, or SAT MATH SECTION SCORE 630, or IST131, or (MTH122 and MTH127), or (MTH122 and MTH130), or MTH132, or MTH229

Required Texts, Additional Reading, and Other Materials

- Linear Algebra with Applications (Second Printing) by Jefferey Holt (**ISBN:** 9780716786672)
- You should bring your calculator, paper, and a pen or pencil to every class meeting.
- Students are required to have a scientific or graphing calculator during the course.
- You must have internet access at your residence. Check your official MU email account daily.

MU Online: It is important to visit MU Online regularly for up-to-date information about the course. It hosts all the course materials including announcements, handouts, assignments, and reading materials. Although I will make my best effort to announce everything in class, it is your responsibility to keep up to date with assignments on MU Online.

Attendance Policy

Students are expected to attend each class. **Every three unexcused absences will be subject to a full letter downgrade until a student reaches an "F".** There will be no credit for the daily quiz you missed unless you have an excused absence. To obtain an excused absence, please go to the Dean of Students' Office in the MSC. **Students must notify the instructor by phone or e-mail prior to an exam if they cannot take a scheduled exam.** Students must present a serious reason for missing any exam. Makeup exams will be given to students outside of class time at the convenience of the instructor.

Course policies

Cheating or plagiarism is a serious offense and will not be tolerated. It will be thoroughly investigated, and might lead to failure in the course or even to expulsion from the university. **If you are late to class,** if you leave class early, if you are disruptive, if you are sleeping, reading the newspaper, working on other homework, **surfing the internet** or for any other reason are not actively engaged in activities related to math class, **you will not receive credit for participating in class that day.** I expect that you will not only attend class, but that you will participate in class. If you do not respect yourself, other students, or the instructor during class, you may be asked to leave class.

Objectives of Course: The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

Course student learning outcomes	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
use linear systems to model a range of problems and interpret the implications of the choice of solution strategies	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
solve systems of equations by hand and through the use of technology	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
work with matrices to organize data, solve linear systems, and apply results to applications and linear transformations	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
manipulate vectors, both graphically and algebraically in order to address applications in areas like geometry, physics, and engineering	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
develop the concepts of spanning sets and linear independence	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
determine eigenvalues and eigenvectors	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
understand the basic concept of orthogonality in higher dimensions	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes
communicate conclusions and connections using appropriate notation and vocabulary	Discussions, group work, board work, low-stakes writing, homework, in-class exercises, and chapter reviews	In Class Exam based on Quizzes

Course Schedule/Course Requirements/Due Dates

January 09 – February 10:

I. Solving systems of linear equations, II. Matrices, III. Determinants, IV. Euclidean Space

February 13– March 17:

IV. Euclidean Space, V. Subspaces, VI. Vector Spaces, VII. Linear Transformations

March 20– March 25:

Spring Break – Classes dismissed

March 27– April 28:

VII. Linear Transformations, VIII. Eigenvalues and Eigenvectors, IX. Orthogonality, X. Applications

- **Exam 1** on Monday, January 30, 2016 from 03:00 until 04:00 pm
- **Exam 2** on Monday, February 20, 2016 from 03:00 until 04:00 pm
- **Exam 3** on Monday, March 13, 2016 from 03:00 until 04:00 pm
- **Exam 4** on Monday, April 10, 2016 from 03:00 until 04:00 pm
- **Final** on Monday, May 01, 2016 from 03:00 until 04:00 pm

Grading Policy

You will be able to obtain a maximum of 500 points in this class, divided as follows:

- Exams (400 points): There will be four in-class exams and one final exam (80 each). These exams will focus on the topics discussed in class and in the homework. **Homework will be assigned on MU Online after each lecture session.** You can bring questions about homework problems to class, office hours, or the tutoring lab. **The Final exam will be comprehensive.**

- Participation Quizzes (100 points): There will be five participation Quizzes (20 each). These daily quizzes will focus on the topics discussed in class. You will be graded on a credit / no-credit basis, with credit for completing the quiz with a reasonable effort.

- The **total number of points you earn** will be divided by the **total number of points possible** to determine your final percentage. At the end of the semester, your overall letter grade will be assigned on the following scale:

A: 90 – 100% B: 80 – 89% C: 70 – 79% D: 60 – 69% F: Below 60%