

LINEAR ALGEBRA SYLLABUS

MICHAEL BUTROS

FALL 2016

COURSE INFORMATION

Section Number: 58349

Course Number and Title: Math 231 - Linear Algebra

Lecture Days and Times: Monday - Wednesday 3:55 - 5:20 PM

INSTRUCTOR INFORMATION

Name: Michael Butros

Office: Science Building - Room 45

Office Hours:

Monday and Wednesday 12:40 - 2:10 PM and Tuesday 9:30 - 11:00 AM

Phone: 760.245.4271 Ext. 2506

E-mail: BUTROS@ME.COM

Instructor's Page: <https://www.butros.info>

Moodle's Page: <https://www.butros.info/bmoodle>

IMPORTANT DATES:

Semester Begins: August 29, 2016

Labor Day Holiday: September 5, 2016

Veteran's Day Holiday: November 11, 2016

Thanksgiving Holiday: November 24-25, 2016

Semester End: December 17, 2016

GENERAL CLASS INFORMATION:

Textbook: Linear Algebra with Its Applications by David Lay. (Optional)

There is an online component to this class through the Moodle course management system.

Students will also be required to do some work using the SageMath Computer Algebra System.

Course Description: Prerequisite: Math 226 or H226 with a grade of “C” or better, or concurrent enrollment in Math 226. An Introduction to linear algebra that compliments advanced courses in calculus. Topics include systems of linear equations, matrix operations, determinants, vectors and vector spaces, eigenvalues and eigenvectors, and linear transformations. With orthogonality, inner product spaces, and numerical methods if time permits. CSU, UC

Student Learning Outcomes:

Upon completion of the course the student can:

- Use techniques of Linear Algebra to solve systems of linear equations
- Apply eigenvalues and eigenvectors to problems of dynamical systems

Course Content:

The following topics will be covered in lecture

- Linear Equations in Linear Algebra
- Matrix Algebra
- Determinants
- Vector Spaces
- Eigenvalues and Eigenvectors
- Orthogonality and Least Squares

Attendance Policy: Regular attendance to lecture is strongly recommended.

Grading Policy:

The grading for this class will consist of the following components:

Component	Percentage of Final Grade
Moodle Quizzes	10 %
Sage	10 %
Worksheets	10 %
Exams	60 %
Final	10 %

The final grade will be earned according to the following scale:

Total Percentage	Final Grade Earned
90 - 100 %	A
80 - 89 %	B
70 - 79 %	C
60 - 69 %	D
0 - 59 %	F

IMPORTANT NOTE: Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact Disabled Student Program & Services as soon as possible to ensure that such accommodations are implemented in a timely fashion.

Authorization from DSPS is required before any accommodations can be made.

CLASS CONDUCT POLICIES:

- Anyone caught cheating will receive a grade of “F” for the course, in addition, I will pursue the strongest disciplinary action available at the college.
- Only those registered for the class are allowed in the classroom during lectures and labs
- It is expected that the sound features on all cell phones will be turned off before class or lab begins. If you have to answer a call or a text message, then you should leave the classroom and return when your call or message is done.
- You are encouraged to work in groups on homework and practice problems, but each student should turn in their own work.
- All assignments and exams are to be completed on the assigned due dates. There will be no make up homework assignments, quizzes, or exams. It is your responsibility to inform the instructor if you are going to be absent on a day when an assignment or exam is due.
- You are encouraged to ask questions.