Instructor: Dr. Yunrong Zhu Office: PS 328B Phone: 282-3819 E-Mail: zhuyunr@isu.edu

Spring 2018

Room: PS 306

Course Website: MOODLE Office Hours: MW 1:00 pm - 2:00 pm, or by appointment

**Textbook:** Linear Algebra and Its Applications, Fifth Edition, by David C. Lay et al. published by Pearson 2016. We are going to cover most of Chapters 1-6 of the textbook.

**Prerequisites:** MATH 1170 Calculus I (Passed with C- or better).

Course Objectives: This is an introductory course on theoretical and computational linear algebra. The topics include linear systems, matrix algebra, linear independence, linear transformations, vector spaces, determinants, eigenvalues/eigenvectors, and orthogonalization. The overall goal is to develop the understanding of the basic concepts of matrices and their operations, vector spaces, linear transformations, methods of solving systems of linear equations, methods of computing eigenvalue/eigenvectors.

Homework: The homework problems will be posted on MOODLE, and will be collected each week at the end of Friday's class. The written homework must be neatly organized and the arguments should be easy to follow. Arrange the papers in correct order and staple all the sheets. NO later homework is accepted for any reason, and any missing assignment will be 0. Your three lowest scores will be dropped.

**Quizzes**: In class quizzes and worksheets will be given throughout the semester. The questions on the quizzes will be based on the homework, worksheet problems and examples shown in class. You must be present in the class to take the quizzes or worksheets, and **NO make-up** will be given for any reason. Your two lowest quiz scores will be dropped.

**Exams**: There will be three in-class exams with the tentative schedule as follows:

Exam #1: Monday Feb. 5, On Chapter 1-2 Exam #2: Monday Mar. 12, On Chapter 3-4 Exam #3: Monday Apr. 16, On Chapter 5-6

The Comprehensive Final Exam will be held on Wednesday, May 2, 10:00am-12:00pm. You must take the exam at the scheduled time. You are allowed to use one hand-written  $3'' \times 5''$  notecard (both sides) for all the exams.

**Makeup Exams**: There will be NO make-up exams. Exceptional and well-documented circumstances will be considered on an individual basis. Any missed exam will be 0.

Calculators: The calculator and other electronic devices are **NOT** allowed in the quizzes and exams. Using such devices or other form of unauthorized materials during an exam amounts to cheating.

**Grading**: Students course grade will be based on HW, quizzes, three in-class midterm exams, and the final exam. There will be NO "extra credit" work. The weights are distributed as follows:

15% HW+ 10% quizzes+ 45% Midterm Exams + 30% Final.

A+	93% and above	С	73% - 76%
A-	90%-92%	C-	70% - 72%
В+	87%-89%	D+	67% - 69%
В	83%-86%	D	63% – 66%
В-	80%-82%	D-	60% – 62%
C+	77%-79%	F	59% and below

A student who earns a failing grade via course work (exams, homework, etc.) and has unexcused absences that total more than 30% of class meetings will receive a grade of "X".

Academic Integrity and Dishonesty: Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is expected of all individuals in academe. Academic dishonesty in any form is unacceptable. Academic dishonesty includes, but is not limited to, cheating and plagiarism. All Idaho State University Policies regarding ethics and honorable behavior apply to this course (see http://www2.isu.edu/policy/4000/index.shtml).

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. Free tutoring is available from the Math Center in the Student Success Center, Rendezvous 327 in Pocatello and CHE Room 220 in Idaho Falls. Information is available at http://www.isu.edu/success/math/index.shtml.

**ADA Policy**: Idaho State University is committed to providing equal opportunity in education for all students. If you have a diagnosed disability or if you believe you have a disability (physical, learning, hearing, vision, psychiatric) that might require reasonable accommodation in this course, please contact the Disability Services Center, Rendezvous Building, Room 125 (282-3599) http://www.isu.edu/disabilityservices.