## SOUTHWESTERN COLLEGE Patrick Staley

## MATH 254 - INTRODUCTORY LINEAR ALGEBRA

Instructor: Patrick Staley Office: 390D Office hours: 11:00-11:50am Mon&Fri; 12:30-1:20pm Tue&Thur; 3:00-3:50pm Wed Website: <u>www.staley-classes.org</u> Email: <u>pstaley@swccd.edu</u> Telephone: 421-6700, ext 5521

Text: Elementary Linear Algebra Fifth Edition, by Ronald E. Larson and Bruce H. Edwards

Prerequisite: Math 251 (with a grade of C or better)\*

Class Hours: 8:00-9:15AM on Tuesdays and Thursdays in room 391

Course Description: An introductory course in linear algebra. The course is intended to encompass mathematical formalism, applications, and geometric intuition. Topics include:

Systems of Linear Equations Matrices Determinants Vector Spaces Inner Product Spaces Linear Transformations Eigenvalues and Eigenvectors

- Attendance Policy: Students are expected to attend all lectures. Students who miss excessive class time may be dropped. Attendance is taken with a seating chart so the seat you occupy at the second class meeting will be your assigned place for the semester.
- Homework: There will be homework due nearly every class period. Repeated failure to complete homework assignments will result in the student being dropped for non-performance.
- Graphing Calculator Required: Recommended calculator is the TI-84+. The TI-85 or TI-86 are also OK for this class. Calculators with symbolic algebra capabilities, e.g. TI-89 or TI-92, are not allowed for exams. Some of the exams are no-calculator exams. MATLAB may also be used.

Electronic Devices: During lecture please turn off all phones, pagers, music devices, tape recorders, etc. Electronic devices may be activated during lab time so long as they do not disturb classmates.

Special Accommodation: Southwestern College recommends that students with disabilities discuss academic accommodations with their professors during the first two weeks of class. An alternate form of this syllabus is available upon request.

- Grading Policy: Your final grade will be a composite of four or five chapter tests and a Final Exam. The Final Exam is weighted as one and one half-chapter tests. Letter grades of A, B, C, D, or F are assigned to each chapter test and Final Exam. These are incorporated into the final grade based on the weighting A=4, B=3, C=2, D=1, and F=0. Excessive F scores (two) will result in a lower class grade regardless of the weighted average score. The final exam is comprehensive. There will be no make up tests.
- Example of Grading Algorithm: Assume chapter test grades of C,B,D,B, and final exam grade of A. Then Class Grade = (2+3+1+3+4\*1.5)/5.5 = 2.73 = B. With a final exam grade of B instead of A, the class Grade would be (2+3+1+3+3\*1.5)/5.5 = 2.45 = C. Note that for the class grade A is 3.5 to 4.0, B is 2.5 to 3.5, C is 1.5 to 2.5, D is 1. to 1.5, and F is 0 to .99.
- Website: <u>www.staley-classes.org</u> contains relevant information for this class including: homework assignments, current notes to students, information on exams, an updated syllabus, the current grade sheet (password protected), project descriptions, exam practice problems, practice tests, answers to practice tests, and other relevant information. You will need Adobe Reader (5.0 or higher; instructions for downloading Adobe Reader are on the website). So that you receive website update notifications please send an email message to <u>stserv@list.mr-ideahamster.com</u> with "subscribe M254F08" in the body. If you are viewing this syllabus in electronic form you may click <u>here</u> to send the appropriate email message for the notification list.
- Exclusion Policy: A student may be dropped from the class for excessive absences, non-performance, cheating, or disruptive behavior.
- Cheating: Behavior indicative of cheating will be handled by an oral exam, the outcome of which will be one of: F grade on the exam, F grade for the semester, dropping the class, or reinstatement of the original score. This penalty also applies to any accomplice, e.g. if some other student gets exam answers from you and cannot defend their answers in an oral exam then YOU get an F.

Projected Schedule:

week 1Chapter 1	week 10Chapter 5
week 2Chapter 2	week 11Chapter 6
week 3 "	week 12 "
week 4Chapter 3	week 13 "
week 5 "	week 14Chapter 7
week 6Chapter 4	week 15 "
week 7 "	week 16 "
week 8 "	week 17Review
week 9Chapter 5	week 18Final Exam

Final Exam time: Tuesday, December 16 8:00am-10:00AM

Initial Assignment: Read section 1.1 and do all of the assigned homework problems for that section.