I. COURSE INFORMATION

1. Meeting Time & Place: TR 7:00-8:15, CI-126
2. Professor: Dr. Diane Denny
3. Office Phone: 825-3485
4. Office Address: CI-313
5. E-MAI L Address: diane.denny@tamucc.edu
6. Web page: none
7. Office Hours: MTWR 3:30-5:00, or by appointment

II. COURSE DESCRIPTION

Fundamentals of linear algebra and matrix theory. Topics include vectors, matrix operations, linear transformations, fundamental properties of vector spaces, systems of linear equations, eigenvalues and eigenvectors, and applications.

III. PREREQUISITES for the COURSE

MATH 2413.

VI. TEXT and OTHER SUPPLIES REQUIRED

Required text: Introduction to Linear Algebra, by Gilbert Strang.

VIII. STUDENT LEARNING OUTCOMES

This course is designed to enable students to:

1. Make basic calculations with vectors and matrices.
2. Solve linear systems of equations using elimination, LU factorization, and inverse matrices.
3. Work with linear spaces and their subspaces, including column and row spaces.
4. Understand and apply linear independence, spanning, bases and dimension to linear spaces.
5. Use orthogonality of vectors in projection and Gram-Schmidt orthogonalization.
6. Find eigenvalues and eigenvectors, and diagonalize matrices.
7. Apply the spectral theorem.

IX. INSTRUCTIONAL METHODS AND ACTIVITIES

Methods and activities for instruction include using a lecture format for the class.

X. EVALUATION AND GRADE ASSIGNMENT

Evaluation and grade assignment will be based on weekly homework, three tests, and a cumulative final exam.

Summary of the methods of evaluation and the criteria for grade assignments:

<table>
<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>35%</td>
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<tr>
<td>Three tests</td>
<td>45%</td>
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<tr>
<td>Cumulative final exam</td>
<td>20%</td>
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Grading Scale:

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 0%-59%

XI. TENTATIVE COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>1, 2, 3</td>
<td>1, 2</td>
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<tr>
<td>4, 5</td>
<td>2, Test 1</td>
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<tr>
<td>6, 7</td>
<td>3</td>
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XII. CLASS POLICIES

Attendance will be taken each day. Homework will be assigned every week, and is due at the start of class one week after the day the homework was assigned. Late homework will not be accepted. The lowest homework grade will be dropped. If you have to miss an exam, it is your responsibility to contact me no later than the day after the exam. A valid written excuse is required in order to make up a missed exam.

Academic Integrity/Plagiarism.

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one's own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a grade of zero for the assignment or test for each student involved.

Dropping a Class

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. April 12 is the last day to drop a class with an automatic grade of "W" this term.
*Notice to Students with Disabilities: Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in CCH 116, at 825-2259. If you need disability accommodations in this class, please see me as soon as possible.

** Grade Appeal Process. As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/universityrules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.