MATH 3203 Matrix Methods

Instructor: Prof. Regan Beckham
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Office: RBN 4012
Office Hours: TBA, by appointment
Class Meeting Time: MW 1:25P-2:20P (RBN 3041)

Required Text*: Class Notes*

If you chose to take this class you will:

- *Read the book* – Read the material being covered prior to attending class and again after.
- *Attend Class* – You should not take this course if you are not committed to attending class.
- *Complete Homework* – Homework completion is vital to the understanding of the material.

Grading Policy
Your final grade will be based on the following:

Exams
There will be **five** 20 point exams throughout the semester. Every exam is comprehensive.
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Your final grade will be no more harsh than the following scale

Percentages
100 - 85 A, below 85 - 70 B, below 70 - 50 C, below 50 - 40 D, below 40 F
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A bit about grading
Below is the grading scheme that will be used for all exam problems. Whether this splits up to each part of a multi-part problem depends on the necessary work to move through each problem.

0 - No progress or relevant information given for the problem
1 - Some progress which could lead to a correct solution
2 - Significant progress, major elements present, partial explanation/proof
3 - Essentially complete and correct solution, with minor gaps, errors, or lack of explanation
4 - Fully correct and complete solution with all relevant information and explanation

UT Tyler Honor Code
To embrace honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

Plagiarism and Academic Dishonesty
Any work submitted must represent your own effort!

Make-up Policy
Make-ups for documented absences that are required as part of a UT Tyler obligation (e.g. athletes participating in an event, participating in a debate contest, etc.) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required.

Classroom Policy
When you attend class you are to be actively engaged in the classroom activity. Also, you are to be respectful of those around you and conduct yourself in a collegial manner. Students not adhering to this may be asked to leave the classroom.

A bit about study groups

In my experience, study groups are most successful when the following is done. The problems should be attempted by the group members before the group meets. If problems are worked from start to finish in the group only the strongest students will benefit. You should limit the amount of outside aid you get in the course. I do not recommend tutoring. If you have questions come see *me*.

For University policies concerning Students Rights and Responsibilities, Grade Replacement/ Forgiveness, State-Mandated Course Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University-Sponsored Events and Activities, and the Social Security and FERPA Statement please see:
http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf

Student Learning Outcomes
Upon completion of this course, students should be able to do the following:

- Successfully perform computational tasks regarding matrices such as gaussian elimination, finding the rank of a matrix, finding the inverse of a matrix, finding the determinant of a matrix, and finding the eigenvalues and eigenvectors of a matrix.

- Demonstrate a conceptual understanding of the material by using computational results to discuss the structure of solutions and linear independence and be able to explain how the different computational procedures are inner related with respect to linear independence and the theory of solutions.

- Be able to solve applications which require the use of matrix algebra. This includes problem not directly covered in the lecture or homework but requiring the tools and theory developed in the course.