MATH 123 - Differential Equations and Linear Algebra  
(Spring 2016)

Section: 001  
Lectures: MW 1:30-2:45 p.m., Sci 164  
Instructor: Matthew Douglas Johnston  
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Phone: (408) 924-1387  
Office: DH 215  
Office hours: M: 3:30-5:00 p.m., T: 12:00-1:30 p.m., W: 9:00-10:30 a.m.

Course Description:  
Matrices, determinants, systems of linear equations, vector geometry, linear transformations, eigenvalues and eigenvectors, diagonalization, first order differential equations, linear systems of differential equations, higher order differential equations, Laplace transforms.

Prerequisites: Math 31 (with a grade of "C-" or better) or instructor consent


Course Website: https://johnstonmd.wordpress.com

Grading: Available on WebAssign http://www.webassign.net/

Grade Breakdown: WebAssign Homework 20%, Term Tests 20% (× two), Final Exam 40%

Anticipated Conversion: A: > 80%, B: 70 – 79%, C: 60 – 69%, D: 50 – 59%, F: < 49%  
Note that the very upper/lower portions of these ranges will be reserved for +/- grades.

Course Discussion: https://piazza.com/class/ijrg1vuf8k142nq  
Piazza will be the preferred venue for course content related questions for several reasons:

1. More efficient than email: Posting questions to Piazza allows me to answer nagging questions to the benefit of the entire class, rather than one-by-one through email as students individually submit similar queries. I strongly suggest submitting course content questions to Piazza and waiting 12 hours before following up with an email.

2. Supports LaTeX: Piazza offers an easy opportunity to learn how to code in the technical typesetting language LaTeX. Although this is not required for this course, for those interested in a career in mathematics or engineering, this is a valuable learning opportunity. (Almost all technical manuscripts in these fields—including the textbook and my course notes—are compiled with LaTeX.)

WebAssign Homework:  
There will be almost weekly assignments administered through WebAssign. The assignments will be due shortly before the associated term test. Further information is available below:

* Enrollment help: http://www.webassign.net/manual/WA_Student_Quick_Start.pdf
Technical support: https://webassign.com/support/student-support/
Course code: sjsu 1624 2019

The lowest two homework scores will automatically be dropped at the end of the term.

**Term Tests:** There will be two in-class term tests on the following dates:
- March 14
- April 20

No electronic devices will be permitted during the tests (e.g. calculator, smart phone, tablets, etc.); however, you should not need them. If you know you cannot attend a term test due to a direct and verifiable scheduling conflict, please contact the instructor at least two weeks prior to the scheduled date. Conflicts after this point may not be accommodated.

**Final Exam:** Wednesday, May 18, 12:15 - 2:30 p.m. (Sci 164)

Note that you must take the final exam with your assigned section!

**Classroom Etiquette:**
In order to maintain a constructive and disruption free classroom, it is kindly requested that you follow some common sense etiquette rules (e.g. set your cell phone to vibrate; if you are using a laptop, sit near the back; if you know you must leave, sit near one of the aisles, etc.).

**Academic Integrity:**
Your own commitment to learning, as evidenced by your enrollment at San Jos State University, and the University’s Academic Integrity Policy requires you to be honest in all your academic course work. Faculty are required to report all infractions to the Office of Student Conduct and Ethical Development. The policy on academic integrity can be found at http://www.sjsu.edu/studentconduct/Policies/.

**Disabilities:**
If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with your instructors as soon as possible, or see them during office hours. Presidential Directive 97-03 requires that students with disabilities register with the Accessible Education Center to establish a record of their disability http://www.sjsu.edu/aec/.

**Attendance:**
Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.

**Expectations:**
Success in a math course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or other course related activities.
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<td>May 16</td>
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**Test dates indicated in bold**