

Syllabus: Math 43 Fall 2017

Instructor: Dr. Bill Wilson

Office Hours: 2:45 – 3:45 Monday, Wednesday

Room E37

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Required Materials: Precalculus with Limits (3rd edition) by Ron Larson
Graphing calculator

Student Learning Outcome Statements (SLO)

Analyze, investigate, and evaluate linear systems, vectors, and matrices related to two or three-dimensional geometric objects.

Graph and analyze regions/curves represented by inequalities or trigonometric, polar, and parametric equations, including conic sections.

Analyze, develop, and evaluate formulas for sequences and series; Justify those formulas by mathematical induction.

II. Course Objectives

- Graph and analyze curves in polar coordinates
- Graph and analyze parametric equations.
- Explore matrices, matrix reduction and determinants in the context of solving systems of linear equations
- Solve systems of inequalities and systems of non-linear equations
- Perform operations with 3D vectors
- Explore equations of lines and planes in 3-space.
- Develop and use sequences and series
- Write proofs using mathematical induction
- Use the binomial theorem to calculate binomial coefficients and to expand binomial expressions
- Examine the logic of conditional and bi-conditional statements as they appear in mathematical statements
- Examine Hyperbolic functions, their graphs and verify and use common hyperbolic identities, and solve equations containing hyperbolic expressions

Homework: Homework will be assigned most classes.

Exams: Three exams will be given plus the final exam. There will be no makeups. If an exam is missed because of a valid excuse, an equivalent of the final exam score will be used as the score for the missed exam.

Quizzes: Regular quizzes will be given. You may correct and resubmit two quizzes for a higher score.

Final Exam: A comprehensive final exam will be given on Wednesday 12/13/17 from 4-6 PM.

Accommodations: Students requiring accommodations are welcome in this class. Please notify me immediately if you have special learning requirements. We need to make arrangements with DSS as soon as possible. Go to <https://www.deanza.edu/dss/> for more information.

Grading: 3 midterms @ 15% = 45%
homework and class work: 10%
quizzes: 15%
final exam: 30%

Scale: A: 93+ A-: 90+
B+: 87+ B: 83+ B-: 80+
C+: 77+ C: 70+
D: 60+
F: < 60

ESL: If English is a second language, a print English translation dictionary is allowed for exams/quizzes

Expectations of Students:

1. **Academic dishonesty will not be tolerated.** If a student is found cheating on an exam or quiz, he or she will receive a 0 for the item. Repeated instances of cheating may lead to failing the course and further action.
2. **Showing your work.** You need to show your work on homework and exams to receive full credit.
3. **Respect you fellow students.** Silence cell phones and tablets in class.