Syllabus: Math 44 (Section 27Z), Spring 2023

4:00 – 6:15 PM Tuesday and Thursday, Online

Instructor: Dr. Bill Wilson
Office Hours: 3:00-3:45 Tuesday, Thursday online (or by appointment)
Email: wilsonwilliam@fhda.edu Phone: 408-309-3956

TEXTBOOK: **The Heart of Mathematics: An Invitation to Effective Thinking** by Burger and Starbird. The book is available as an ebook for rental for $39 from Wiley at https://www.wiley.com/en-us/The+Heart+of+Mathematics%3A+An+Invitation+to+Effective+Thinking%2C+4th+Edition-p-9781119668282

Course Description: A survey of selected topics from contemporary mathematics, including problem solving techniques and connections between mathematics and culture. Includes a selection of introductory topics from symmetry; graph theory; chaos and fractals; topology; number theory; geometry; combinatorics and counting; the mathematics of social choice; data analysis, probability and statistics; consumer mathematics and personal financial management.

Homework: Homework will be assigned each week and will be due the following Monday. Some homework problems will be graded for correctness and the rest for completion.

Exams: Two exams will be given plus the final exam. Exam dates will be announced at least a week ahead of time. 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. Quizzes will be announced at least one class ahead of time.

Mathematical Autobiography: A detailed description will be provided in class.

Report: Present an overview of an area of mathematics related to the course that sparks your interest

Group Project: You will be asked to work on a project in a group and to give a short presentation during the last week of class, details will be provided in class.

Final Exam: A comprehensive final exam will be given on June 29 from 4:00 PM to 6:00 PM.

Accommodations: Students requiring accommodations are welcome in this class. Please notify me and DSS of any special requirements. Go to https://www.deanza.edu/dss/ for more information.

Grading:
2 midterms @ 15% = 30%
Homework: 10%
Mathematical autobiography: 5%
Report: 10%
Quizzes: 10%
Group project: 15%
Final exam: 20%

Scale:

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

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.

Student Learning Outcome(s):

*Analyze contemporary mathematical problems, apply problem solving techniques using a variety of methods, and communicate the results mathematically through a variety of forms.
*Demonstrate and correctly apply basic mathematical techniques in at least five of the following ten areas: symmetry, graph theory, fractals and chaos theory, topology, number theory, geometry, combinatorics, methods of social choice, probability and statistics, economics and personal finance.
*Examine and evaluate myths and realities about the contemporary discipline of mathematics and its practitioners.

Office Hours:

T,TH	03:00 PM	03:45 PM	Zoom