Syllabus: Math 44 (Section 28), Fall 2019

4:00 – 6:15 PM Monday and Wednesday, Room G6

Instructor: Dr. Bill Wilson
Office Hours: 3:00-3:45 Monday, Wednesday in E37 (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

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 at the end of most classes 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 December 11 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 @ 10% = 20%
Homework: 10%
Classwork: 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.