

Math 44-27: Mathematics in Art, Culture, and Society [CRN 35010]
Tu/Th 04:00 PM–06:15 PM, Location MCC-12
Classes meets January 07 - March 29, 2019 .

Instructor: Reza Shariatmadari, **Email:** shariatmadarireza@fhda.edu

Office Hours and Location: Tuesday: 2:30PM - 3:30PM at the lower level of Financial Aid building (Baldwin Vinery). Dial 5720 for my office access..

Textbook: Leonardo da Vinci by Walter Isaacson.

Calculators: In general we don't use calculator in this class that often, but if needed online calculator/graphing calculator (like DESMOS) will suffice.

Course Description and Prerequisites: 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. **Prerequisite:** Qualifying score on the Math Placement Test within the past calendar year; or MATH 114 or equivalent with a grade of C or better. Advisory: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

Midterms: There will be two midterm exams. These exams will be given either during regularly scheduled class meetings, as a take home exam, group exam, or any combination of them. The midterm exams are cumulative. Any change in Midterm dates and location will be announced in advance.

Tentative Midterms Schedule:

Midterm 1: Thursday February 07, 2019

Midterm 2: Thursday March 14, 2019

Final Exam: The Final Examination will be on Thursday, March 28, 2019, 04:00 PM-06:00 PM. Final Exam is a comprehensive examination covering the entire quarter.

Homework: Homework and recommended problems will be assigned according to our progress in class. They provide practice, help clarify ideas introduced in class or in the text.

You are encouraged to work together to study and do your homework. Taken in the right spirit, this can be very productive. However, assignments that you turn in under your name must be your own.

Quizzes: There will be three quizzes during this quarter. These quizzes will be given either during regularly scheduled class meetings, as a take home quiz, group quiz, or any combination of them. Any change in quiz dates will be announced in advance.

Tentative Quiz Schedule:

Quiz 1: January 24, 2019

Quiz 2: February 14, 2019

Quiz 3: March 07, 2019

Attendance and class participation: You are expected to attend lectures every day. Active class participation is required. You are expected to come to class prepared for the days discussion. Should you miss a lecture for any reason, you are responsible for all the material that was covered and assignments that were given.

Academic Integrity: Students are reminded that their behavior at all times reflects upon the college community. **The minimum penalty for cheating, plagiarism, etc. is a grade of zero on the assignment.** For additional information on the college's policies, read the Ethics and the Academic Integrity Policy at

<http://www.deanza.edu/studenthandbook/academic-integrity.html>.

Disability Services: Students with disabilities should contact Disability Support Programs Services, Building: AT209. Contact: Marilyn Booye, Phone: 408.864.8407.

I am happy to meet with you to discuss necessary academic accommodations once I receive the appropriate documentation from Disability Support Programs Services .

Courtesy: As a courtesy to those around you, cell phones and other electronic devices should be silenced and put away during lecture unless otherwise instructed by me.

Grades: Course grades will be determined by homework, group assignment, quiz and exam. I reserve the right to make any changes to the syllabus. I also reserve the right to adjust your grade (for better of course) based on my opinion of the quality of your work and your progress throughout the quarter. I will not post any grades online or discuss your grade via email for security and privacy reasons, so you must consult with me about your standing in class and your grades throughout the quarter. I strongly suggest that you do not leave anything for the last minute.

Important Dates: For more detail go to: <https://www.deanza.edu/calendar/>

General guidelines are as follows:

Homework: 5%

Quiz: 5%

Exam 1: 25%

Exam 2: 30%

Final Exam: 35%

Your course letter grade will be assigned as follows:

A : 94%-100%

A- : 90%-93%

B+ : 87%-89%

B : 84%-86%

B- : 80%-83%

C+ : 77%-79%

C : 74%-76%

C- : 70%-73%

D+ : 67%-69%

D : 64%-66%

D- : 60%-63%

F : 00%-59%

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.