### DVC - MATH 124 SYLLABUS



"You can't

direct the wind –
but you can adjust
the sails."

Course: Math 124-3272, Math for Liberal Arts

*Location:* Library-143

*Instructor:* Mr. Narin

*Term:* Fall 2025, (Late Start) Sep 8<sup>th</sup> – Dec 10<sup>th</sup>

*Time:* MW, 9:35 - 11:25

Class Website: MathWithSteve.com

Email: SteveNarin314@gmail.com

*Office Hours:* MW, 11:30 - 12:00

### **DVC Math/Engineering Student Tutoring Center Hours**

Tutoring M-Th: 8am to 8pm

Friday: 10am to 2pm

Counseling Tuesday: 2:30pm – 4:30pm



### Required

Texts: College Math for the Humanities, Third Edition, © 2019

Joe Vasta and Tammy Fisher-Vasta

Publisher: Lulu.com

\$25.37 + Shipping (about \$8)

Should also be available at the DVC Book Center

**Calculator:** A simple scientific calculator will be perfect for this class — just look for the SIN button — TI recommended; it's about \$13 and will be allowed on every quiz and test. No graphing calculators (or anything that does algebra) are allowed.



We will also use an online graphing program called **Desmos**.

There's nothing to install — it runs right in your browser.

We're also going to learn the **Python** programming language; it also runs right in your browser. And for statistics stuff, we'll use

Google Sheets. There's no cost for any of these programs.

**Email:** As a DVC college student, you are required to check your school email account regularly — that means at least a few times each day.



### **Grading Components**

25 Quizzes @10 points each 3 Tests @100 points each Various Activities with variable point values

### Homework

The problems I assign are designed to inform you as to what skills and concepts you are supposed to be gaining from this class. In other words, you need to do as much homework as you need to — whatever it takes to achieve



the degree of success that you desire. In short, it's up to you to discover the homework strategy that suits your personal learning style. Because of this policy, homework is *not* counted toward your grade.

### Quizzes

A guiz will be given at the end of each class meeting, including the first day of class, but excluding the three test days. The guizzes cover primarily the previous lecture, and quite likely previous



?, ?? ? quizzes. If a quiz does cover earlier material, it will be made clear in the **Homework** part of the **Schedule**. I will drop the four lowest guizzes, but neither of the last two. Assume that there will be NO make-ups on

quizzes.

### **Tests**

There will be **three** major tests. The tests might contain some T/F, multiple-choice, and matching questions, but mostly "show your work" questions (with partial credit quite possible).

### **Letter Grades**

A - 90% and up

B - 80% to 89%

C-70% to 79%

D - 60% to 69%

F - below 60%

## Live as if you were to die tomorrow.

Learn as if you were to live forever.

Mahatma Gandhi

### **Academic Integrity**

Click the following link:

### **Academic Integrity Policy**

That document should answer all your questions regarding this issue.



Please note that —if caught cheating — the consequences I impose will be as harsh as the DVC policy allows.

### **Catalog Description**

This course includes applications and concepts of intermediate algebra and critical thinking to the solving of contemporary problems in mathematics. Topics include statistics, finance, voting/apportionment and include one of the following: sets, probability, geometry, graph theory, exponential and logarithmic functions, mathematics and culture.

### **Course Content**

- 1. Statistics (measures of central tendency and dispersion, and the use of the normal distribution and applications of margins of error in surveys)
- 2. Practical applications of geometric series and exponential functions (e.g. financial applications of compound interest, annuity, loan amortization, and annual percentage rates)
- 3. Exponential and logarithmic functions (modeling exponential growth and decay, and logarithmic scales)

The following additional topics may be selected by the course instructor:

- 1. Set theory combinatorics, including Cantor's theory of infinite sets.
- 2. Probability (the application of combinatorics, tree diagrams, and expected values to problems in genetics, medicine, and gambling)
- 3. Topics from advanced geometry (e.g. analytic geometry, non-Euclidean geometry, and fractals)
- 4. Analysis of properties of algorithms and graphs (e.g. planar and nonplanar graphs, Euler circuits, the traveling salesperson problem, and Hamiltonian circuits)
- 5. Ethnomathematics (e.g. Egyptian fractions, number systems that don't use base 10: Mayan and Yoruba vigesimal base system and/or Babylonian base 60, Trigonometry and indigenous waterway navigation, Ten's Complement in Chinese abacus that leads to Binary Complement in modern computers)
- 6. Mathematics and Politics (voting theory and fairness criteria, apportionment paradoxes, Arrow's Theorem, and data interpretation)

### SLO's

Compute and interpret future values of simple interest, compound interest, and annuities.

Execute and analyze voting and apportionment algorithms (e.g., Instant Run-off voting, Hamilton's apportionment method).

Calculate measures of central tendency and variation for a given data set.

Define a real-world problem, analyze it mathematically, and formulate and

assess its solution.

# "Wisdom begins in wonder."

Socrates

