

MATH 45 – Modern Mathematics (#52047)
Course Id: perez47848
Spring 2024

Instructor: Mr. Conrad Perez

Class Time: N/A

Classroom: N/A

Office: (Math and Sciences Building) MSCI-127

Office Hours: MW: 12:00-1:00PM (In-person and Zoom); T: 10:00AM-12:00 PM (In-person and Zoom); TH: 11:00AM-12:00PM (Zoom only); or by appointment

Phone: 638-3641 ext. 3255

E-Mail: conrad.perez@reedleycollege.edu

Textbook (Optional): Excursions in Modern Mathematics (Ninth Edition) by Tannenbaum

Web Access (Required): MyMathLab access code must be purchased

Computer Requirements:

	Operating systems	browsers
Windows	Windows 10	Microsoft Edge
		Firefox 45 or newer Chrome 49 or newer
	Windows 7	Internet Explorer 11
		Firefox 45 or newer Chrome 49 or newer
Mac OS	OS X 10.12	Safari 11 or 12
		Firefox 45 or newer Chrome 49 or newer
	OS X 10.13	Safari 11 or 12
		Firefox 45 or newer Chrome 49 or newer
	OS X 10.14	Safari 12 Firefox 45 or newer Chrome 49 or newer
OS X 10.15	Chrome 49 or newer	
Chrome OS	Chrome OS	Chrome 49 or newer

- Internet Connection: Cable/DSL, T1 or other high-speed connection. You **cannot** use a dial-up modem for the course.
- Adobe Acrobat Reader

Important Dates: Drop Deadline- Sat. March 9, 2024.

Days Off- Mon. Jan 15; Fri. Feb 16; Mon. Feb 19; Mon.-Fri. Mar 25-29.

Final Exam- Wed. May 15, 2024

Course Prerequisites: C or better grade in Math 103 or equivalent.

Course Overview: The course will cover all or parts of sections 1-5. The course objective is to obtain a solid understanding of the following concepts and problems dealing with modern mathematics:

1. Characterize and compare different voting systems, using plurality, borda count, or pair-wise comparison.
2. Derive the probability of succeeding at basic games of chance.
3. Describe statistical data in a variety of methods such as in using mean, median, and standard deviation.
4. Use the empirical numbers to answer statistical questions.
5. Find the apportionment of a finite number of items.
6. Use various procedures to divide items fairly.
7. Find the terms of a sequence and series.
8. Measure the rate of growth of different systems, example: linear vs. exponential growth.
9. Solve problems from the area of management science by means of linear programming.
10. Create geometric shapes using recursive construction rules.

Course Student Learning Outcomes: Student Learning Outcomes are statements about what the discipline faculty hope you will be able to do at the end of the course. This is NOT a guarantee: the ultimate responsibility for whether you will be able to do these things lies with you, the student. In addition, the assessment of Student Learning Outcomes is done by the department in order to evaluate the program as a whole, and not to evaluate individual faculty performance.

SLO1: Demonstrate problem solving skills by applying mathematical principles and techniques in real world areas.

SLO2: Apply the mathematics of finance to making consumer decisions.

SLO3: Examine statistical principles used to display, interpret and analyze data.

Attendance: There will be 2-3 mandatory Zoom meetings throughout the semester during my office hours or by arrangement. These will be for points and will count towards your grade.

Behavior: N/A

Homework: Homework assignments are completed online and the assignments can be found at the MyLab/Mastering (MyMathLab) website (<http://mlm.pearson.com>). You may work ahead if you like, all homework for the entire course will soon be available to the student. **It is important to stay current to be successful in the course! If a student is not registered on MyMathLab by Friday 1/12, then the student will be dropped as a no-show.** The program is set up so that you go in order. Each assignment has a due date and the assignment will be unavailable to the student after the due date for points, but you can still go back and get practice on that homework. **No late homework will be accepted for points.** Each online homework will be worth 5 points.

*Note: When working on the homework, you do not have to complete an entire assignment during one session. If you need to stop while in the middle of an assignment, simply click the **Save** icon and the program will save your work. You can then come back to the assignment and continue from where you left off before the due date.*

Online Tests: There will be 9 online tests given. The online tests is also be available to the student. **If there are 0 s for all homework sections and a 0 for the exam on that homework, then the student will be dropped.** Each online test will be worth 100 points.

Note: All exams must be completed in one seating. Once you begin the online test you will have 90 minutes to complete it. After the 90 minutes have expired the online test will no longer be available to you. It is not possible to stop the exam and return to it later!

Grading: The course grade is based upon the points earned from the homework, quizzes, zoom meetings, exams, extra credit, and the final. At any time during the course, the grade of a student is determined as follows:

$$\frac{\text{Points Earned}}{\text{Total Points Possible}} \times 100 = \text{grade of the student}$$

The grade will be based upon the following percentages (**NO ROUNDING**):

90-100% A 80-89% B 70-79% C 60-69% D 0-59% F

Note: If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.