

MATH 45 – Modern Mathematics (#53241)
Course Id: perez93323
Spring 2022

Instructor: Mr. Conrad Perez

Class Time: N/A

Classroom: N/A

Office: (Math and Sciences Building) Office 12 Room 127

Office Hours: MTF: 1:30-2:30 PM (Zoom); W: 6:00PM-7:00 PM (Zoom);

TH:11:00AM-12:00 PM (Zoom); 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): Course Compass 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
	OS X 10.15	Chrome 49 or newer
		Chrome OS Chrome OS

- 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- Fri. Mar 11, 2022.

Days Off- Mon. Jan 17; Fri. Feb 18; Mon. Feb 21: Mon.-Fri. Apr 11-15.

Final Exam- Tue. May 17, 2022

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 may be some mandatory Zoom meetings throughout the semester.

Behavior: N/A

Homework: Homework assignments are completed online and the assignments can be found at the MyLab/Mastering (MyMathLab) website (<http://www.pearsonmylabandmastering.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 1/14, then the student will be dropped as a no-show.** The program is set up so that you go in order. You should take exam 1 before you start on the homework for exam 2, and so on. In order to be successful, you should not skip around. 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 10 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 8-9 online tests given. The online tests will also soon 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 for every chapter that is on the exam.

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, 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 65-69% D 0-64% 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.