Point Loma Nazarene University, Fall 2026

Fundamentals of Elementary Mathematics I

Department of Mathematical, Information, and Computer Science – School of STEM

Professor: Kyle Havens	**Course:** Math 2013	**Section:** 1	**Units:** 3
Office: Rohr Science 288	**Days:** Tuesday and Thursday	**Class Time:** 3:00-4:15pm	
Phone: (619) 849-3362	**Email:** kylehavens@pointloma.edu	**Location:** RS 265	

Final Exam: The final exam is cumulative and will be held at the following time in our classroom:

Thursday, December 17th from 4:30pm to 7:00pm.

PLNU Mission – To Teach ~ To Shape ~ To Send: Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Department Mission: The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

General Education Message: PLNU provides a foundational course of study in the liberal arts informed by the life, death, and resurrection of Jesus Christ. In keeping with the Wesleyan tradition, the curriculum equips students with a broad range of knowledge and skills within and across disciplines to enrich major study, lifelong learning, and vocational service as Christ-like participants in the world's diverse societies and culture.

Course Description: A comprehensive approach to the mathematical knowledge necessary for a California multiple subject teaching credential (K-8). Topics covered in this course include whole numbers, numeration systems, fractions, decimals, ratios, proportions and an introduction to number theory. The integers, rational numbers, irrational numbers and real numbers are studied along with algebraic expressions, inequalities, graphs and polynomials. This class is highly interactive and emphasizes group work and cooperative learning. Not applicable toward a major in Mathematics. Passing an 8th grade mathematics proficiency test is a requirement for the completion of this course.

Required Materials: Please obtain the following by the end of the first day of class.

1. *A Problem Solving Approach to Mathematics for Elementary School Teachers*, 13th Edition by Billstein, Boschmans, Libeskind, and Lott (ISBN: 9780135183885).
   - You will use this text in Math 2023. If you buy temporary access, ensure it is valid through Spring 2027.
2. Access to Canvas and a non-graphing calculator with root and exponential keys.

Office Hours: Located in Rohr Science. Professor Havens has open office hours at the following times:

Monday	Tuesday	Wednesday	Thursday	Friday
7:30-8:15am	2:00-2:45pm	11:00am-12:15pm	2:00-2:45pm	11:00am-12:15pm
9:45-11:00am			*4:45-5:45pm	

*Times marked by an asterisk are by appointment only and may be on Zoom. Please book a 20-minute appointment with Professor Havens at least 24-hours in advance.

Prerequisite: Math 1013 (algebra) or equivalent with a grade of C- or higher.

Student Learning Outcomes: Upon completion of this course:

1. Students will be able to demonstrate a facility with operations on the integers.
2. Students will be able to demonstrate a facility with operations on the rational numbers.
3. Students will be able to apply concepts from number theory to solve problems.

General Education Learning Outcomes:

- Link to GE courses and corresponding GELO's: https://assessment.pointloma.edu/academicassessment/general-education/assessment-plan/
- *GELO 1e*: Students will be able to solve problems that are quantitative in nature.
- *Signature Assignment*: Questions on the Final Exam and Think Like a Math Educator.

Comments on the Hybrid Course Design: Your professors in this two-course sequence aim to provide a consistent hybrid experience. Tuesdays are designated as "class sessions" and most Thursdays are designated as "lab sessions."

- It is imperative that you read, watch assigned videos, and complete warm up questions **before** each class session.
- Class sessions are mandatory – your professor will start with a short lecture or review, and the majority of the class session will be spent working on a variety of activities with your classmates with the help of your professor.
- Lab sessions are optional – students will work on group activities, discuss homework, and prepare for next session.

Class Performance: Your final grade in my class will be calculated by the following system.

35%	Final Exam	Cumulative. You must get a "D" on the final exam to pass.
25%	Midterm Exam	In-class exam covering the first half of course material.
5%	Video Notes	Watch videos, read, and take notes **before** class.
8%	Warm-Up Assignments	Canvas warm-up to check understanding of the videos and text.
12%	Class Activities	In-class group activities graded on completeness and correctness.
15%	Written Homework	Traditional homework from the book. Problems graded randomly.

Letter Grade: The letter grade you receive in this course is based on the final percentage score you earned in the previously described weighted grading system. Requests for an opportunity to improve your grade due to personal circumstances will be denied. Borderline grades may be rounded up if student has good participation. Incompletes are only assigned in extremely unusual circumstances.

[92%,100%]: A	[82%,88%): B	[70%,78%): C
[90%,92%): A-	[80%,82%): B-	[68%,70%): C-
[88%,90%): B+	[78%,80%): C+	[60%,68%): D

Final Exam: Successful completion of this class requires taking the final examination on its scheduled day. The final examination schedule is posted on the Traditional Undergraduate Records: Final Exam Schedules site. If you find yourself scheduled for three (3) or more final examinations on the same day, you are authorized to contact each professor to arrange a different time for one of those exams. However, unless you have three (3) or more exams on the same day, no requests for alternative final examinations will be granted.

Video Notes and Warm Up Assignments: Before each class session, there will be a collection of lecture videos that must be watched. These videos are designed to help you learn the fundamentals of the subject corresponding to the assigned reading. As you watch the lecture videos, you must take notes as you follow along. After you have completed the videos and reading, you must complete the corresponding warm up assignment in Canvas (one attempt). All of these assignments will make sure you are prepared for the upcoming class. Class time is more geared towards group activities and exploration as opposed to lecture, and coming unprepared will inhibit your progress.

Written Homework/Classwork: All written work is due on the posted date which can always be found on Canvas alongside the problem numbers. No late homework will be accepted except by prior arrangement or with a documented emergency. In your written homework I expect to see calculations using the terminology and methods of the class and not just an answer. A detailed explanation or thorough work is worth much more than a correct answer. A random selection (the same for all people) of the problems will be graded on any homework assignment. Collected assignments must be prepared in a style suitable for grading. The following guidelines are used to determine credit:

- The organization must be easy to follow and answers must be clearly marked.
- The work must be legible and uploaded to Canvas as a single PDF file. See Canvas for tutorial, if needed.
- Complete solutions must be written for problems (not just answers).
- Use complete sentences to answer verbal questions or when explaining.

Engagement in Class Activities: Mathematics requires active participation. Participation means asking questions, taking notes, making conjectures and checking them, providing solutions to problems, and sharing ideas with classmates. I will act as the expert facilitator during class time, with a mixture of lecture, group problem solving, use of technology, and integrated discussion. Each class we will work on a class activity directly related to the chapters of study. You are to work on them in your groups and submit them to Canvas. These may be fully graded or you may get credit for completion, depending on the activity. You will gain points for class attendance and participation. There are 15 mandatory interactive class meetings (see the schedule). You will gain five points for each session that you attend and in which you participate. If you are late to class, leave early, or are not participating, you will lose some of these points. If you are excused to miss a mandatory class meeting, you may make up the missing points during an optional lab session.

Exams: There will be one midterm exam and a comprehensive final exam. No notes or are allowed. Contact Professor Havens **before** missing an exam if you have a critical emergency. No make-up exams are allowed without prior consent. Exams must be made up within then week or will be scheduled during the department make-up on the morning of Saturday, December 12th. If you do not inform me that you will be missing an exam beforehand, you will get a zero on that exam. Practice questions will be posted on Canvas prior to the exam designed to help you identify topics that you need to study further.

Course Credit Hour Information: In the interest of providing sufficient time to accomplish the stated Course Learning Outcomes, this class meets the PLNU credit hour policy for a 3-unit class delivered over 15 weeks. It is anticipated that students will spend a minimum of 37.5 participation hours per credit hour on their coursework. For this course, students will spend 115 estimated total hours meeting the course learning outcomes.

Distribution of Student Learning Hours: See table to the right.

Category	Time in Hours
Videos	18.75
Reading Assignments	24
Written Assignments	48
Video Notes	15
Review Sessions	2.5
Chapter Reviews	1.75
Exam	1.25
Final Exam	2.5
Total Hours	113.75

Artificial Intelligence Policy: The use of Artificial Intelligence (AI) tools (e.g., ChatGPT, Gemini Pro, GrammarlyGo, Perplexity, etc.) is prohibited in the course for any aspect of your work, including idea generation, drafting, editing, or final submissions. This course is designed to assess your independent critical thinking, writing, and research skills without the assistance of AI technologies. Any reliance on AI tools in this course is subjective to an academic honesty violation.

PLNU Academic Accommodations Policy: PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities in accordance with the Americans with Disabilities Act (ADA). Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center, by email or phone at 619-849-2533. Once a student's eligibility for an accommodation has been determined, the EAC will work with the student to create an Accommodation Plan (AP) that outlines approved accommodations. Professors are able to view a student's approved accommodations through Accommodate.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their approved accommodations in that particular course. Accommodations are not retroactive; as such, clarifying with the professor at the outset is one of the best ways to promote positive academic outcomes.

Students who need accommodations for a disability-related need should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. In accordance with ADA, accommodations cannot constitute a fundamental alteration to course outcomes; therefore, planning ahead is vital in establishing appropriate accommodations for equal access to this course. It is the student's responsibility to make the first contact with the EAC. Students cannot assume that because they had accommodations in the past, their eligibility at PLNU is automatic. All determinations at PLNU must go through the EAC eligibility process. This is to protect the privacy of students with disabilities who may not want to disclose this information and are not asking for any accommodations.

LomaBooks Instructions for Students: This course is part of our course material delivery program, LomaBooks. The bookstore will provide each student with a convenient package containing all required physical materials; all digitally delivered materials will be integrated into Canvas. You should have received an email from the bookstore confirming the list of materials that will be provided for each of your courses and asking you to select how you would like to receive any printed components (in-store pick up or home delivery). If you have not done so already, please confirm your fulfillment preference so the bookstore can prepare your LomaBooks materials.

Additional Course Information: Additional PLNU policies and practices that apply to this course can be found at the following link:
https://docs.google.com/document/d/1SoL5YMfCv_5cobhBwrDjbcZJzNKKTCfM/edit?usp=sharing&ouid=104297418648613020764&rtpof=true&sd=true

Course Schedule: This course syllabus and schedule are subject to change due to unforeseen circumstances.

Date	Tuesday	Date	Thursday
9/1/2026	**Course Information:** Introduction, Group Discussion, and Basic Skills	9/3/2026	***Basic Skills Test***
9/8/2026	**Chapter 2:** Logic, Mathematical Set Notation, and Set Operations	9/10/2026	**Lab Session: Logic and Sets** Continue Activity, Homework, Reading
9/15/2026	**Chapter 3:** Numeration Systems and Whole Number Operations	9/17/2026	**Lab Session: Numeration** Continue Activity, Homework, Reading
9/22/2026	**Chapter 3:** More on Whole Number Operations	9/24/2026	**Lab Session: Operations** Continue Activity, Homework, Reading
9/29/2026	**Chapter 4:** Divisibility and Prime Factorization	10/1/2026	***Basic Skills Test Retakes***
10/6/2026	**Chapter 4:** Least Common Multiple, Greatest Common Factor	10/8/2026	**Lab Session: Common Factors** Continue Activity, Homework, Reading
10/13/2026	**Chapter 5:** Negative Numbers and Operating with Integers	10/15/2026	**Lab Session: Integers and Rationals** Continue Activity, Homework, Reading
10/20/2026	**Chapter 6:** Fractions and Modeling Rational Numbers	10/22/2026	*No Class: Fall Break*
10/27/2026	**Chapters 2-6:** Review for the Midterm Exam	10/29/2026	***Midterm Exam***
11/3/2026	**Chapter 6:** Operating on Rational Numbers and Modeling	11/5/2026	**Lab Session: Rational Operations** Continue Activity, Homework, Reading
11/10/2026	**Chapter 7:** Operating with Terminating Decimals	11/12/2026	**Lab Session: Terminating Decimals** Continue Activity, Homework, Reading
11/17/2026	**Chapter 7:** Repeating Decimal Numbers and Percentages	11/19/2026	**Lab Session: Percent** Continue Activity, Homework, Reading
11/24/2026	**Chapter 7:** Real Numbers and Irrationality	11/26/2026	*No Class: Thanksgiving*
12/1/2026	**Chapter 8:** Variables and Equations	12/3/2026	**Lab Session: Algebra** Continue Activity, Homework, Reading
12/8/2026	**Chapter 8:** Functions and Cartesian Coordinate Systems	12/10/2026	**Lab Session: Review** Reivew for the Final Exam
12/15/2026	*No Class: Finals Week*	12/17/2026	***Final Exam*** 4:30pm-7:00pm