IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Fall 2025**	Instructor Name:	**Jill Nelipovich**
Course Title & #:	**Math 110 – Number Systems in Elementary Math**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**10767**	Webpage (optional):	**Canvas**
Classroom:	**2735**	Office #:	**2760**
Class Dates:	**08/11/25 – 12/06/25**	Student Hours:	**MW: 6:55 – 7:25 a.m.** **M: 1:00 – 2:00 p.m.** **TR: 12:30 – 1:30 p.m.** ****And by appointment** **If I am in my office, you are welcome to stop in.**
Class Days:	**MW**	Office Phone #:	**760-355-6297**
Class Times:	7:30 – 10:05 a.m.	Emergency Contact:	**760-355-6201**
Credits:	4	Class Format/Modality:	

Course Description

This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. (C-ID: MATH 120) (CSU, UC credit limited. See a counselor.)

Course Prerequisite(s) and/or Corequisite(s)

Successful completion of Intermediate Algebra or appropriate placement as defined by AB705.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:
1. Demonstrate knowledge of operations and properties by creating story problems.
2. Demonstrate knowledge of operations by modeling the solutions.
3. Demonstrate an understanding of place value by counting in bases other than ten.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Perform calculations with place-value systems
2. Evaluate the equivalence of numeric algorithms and explain the advantages and disadvantages of equivalent algorithms in different circumstances.
3. Apply algorithms from number theory to determine divisibility in a variety of settings.
4. Analyze least common multiples and greatest common divisors and their role in standard algorithms.
5. Explain the concept of rational numbers, using both ratio and decimal representations; analyze the arithmetic algorithms for these two representations and justify their equivalence.
6. Analyze the structure and properties of whole, rational, and real number systems; define the concept of rational and irrational numbers, including their decimal representation; and illustrate the use of a number line representation.
7. Develop and reinforce conceptual understanding of mathematical topics through the use of patterns, problem solving, and communication, connections, modeling,
8. Develop activities implementing curriculum standards

Textbooks & Other Resources or Links

Sowder L., Sowder J., Nickerson. S., Whitacre I. 2023. *Reconceptualizing Mathematics*. 4th W.H. Freeman & Company. ISBN: Printed Text: 9781319303730; E-Text: 9781319483135.

Course Requirements and Instructional Methods

1. Class participation: Be present in mind, body and spirit! You need to participate to succeed.

2. Do not spend time on your cell phone. Time on your cell phone is time away from calculus.

3. Love to learn! Embrace the productive struggle. Take joy in not knowing how to do a problem and working it out with your peers. Learn a little every day and refrain from learning a lot in one day. You need time to digest the material.

4. Exams – Three exams! Study a little bit every day.

5. Final Exam – you get to share with me what you learned!

6. No Make-up tests. If you miss an exam, every student is entitled to one make-up test, whether to improve a score or to make up a test. Date TBD.

Course Grading Based on Course Objectives

Quizzes: In class and on Canvas……………..10%

Exams: (Three)…………………………………60%   A: 90% - 100%   B 80% - 89.9%

Projects……………………………………………..5%   C: 70: - 79.9%   D: 60% - 69.9%

Final Exam……………………………………….25%   F: Less than 60%

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through **DSPS**, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

Course Policies

1. Form study groups.

2. Become a family.

3. Don't cheat.

4. Cell phones are only allowed to take pictures of the board. If you are on your phone, I will ask you to leave the classroom.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
Week 1 August 11 - 15	Syllabus, Chapter 1 Chapter 1
Week 2 August 18 - 22	Introduction, Chapter 2 Chapter 2
Week 3 August 25 - 29	Chapter 2 Chapter 2
Week 4 Sept 1 - 5	Review Exam 1
Week 5 Sept 8 – 12	Chapter 3 Chapter 3
Week 6 Sept 15 – 19	Chapter 3 Chapter 4
Week 7 Sept 22 – 26	Chapter 4 Chapter 5
Week 8 Sept 29 – Oct 3	Chapter 5 Review
Week 9 Oct 6 – 10	Exam 2 Chapter 6
Week 10 Oct 13 – 17	Chapter 6 Chapter 6
Week 11 Oct 20 – 24	Chapter 7 Chapter 7
Week 12 Oct 27 – 31	Chapter 7 Chapter 8
Week 13 Nov 3 – 7	Chapter 8 Chapter 9
Week 14 Nov 10 – 14	Chapter 9 Review
Week 15 Nov 17 – 21	Exam 3 Chapter 11
Holiday Nov 24 – 28	
Week 16 Dec 1 - 5	Review Final Exam

Subject to change without prior notice