



IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	Spring 2026	Instructor Name:	Juan Andres Noguez
Course Title & #:	Math 110: Number Systems in Elementary Math	Email:	juan.noguez@imperial.edu
CRN #:	20049	Webpage (optional):	N/A
Classroom:	2722	Office #:	2724
Class Dates:	2/17/2026 – 6/12/2026	Office Hours:	M/W 9:40am-10:40am, R 11:00am-11:30am, Friday 2:00pm-3:30pm
Class Days:	T/TR	Office Phone #:	(760)-355-6390
Class Times:	1:00pm – 2:25pm	Emergency Contact:	Silvia Murray (silvia.murray@imperial.edu)
Units:	3	Class Format/Modality:	In Person

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.

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, reasoning and representation
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.

Software as needed: Logo, Geometer's Sketchpad, Stat Explorer

Course Requirements and Instructional Methods

Lecture: Our class time will consist of lecture and sometimes it will include a class activity where students might be required to do group work. You are encouraged to ask questions during class. I will try my best to answer your questions, in the case that my answer is not satisfactory, I will recommend meeting with me during office hours or tutoring from the library for additional help. Keep in mind that there is a lot of material to be covered so there may be times when I will briefly answer questions and then move on to lecture. If you miss a day of class, it is your responsibility to ask a classmate for their notes and homework that was covered and assigned.

Homework and Class Activities: These assignments will be assigned without prior notice; you are expected to attend every class lecture. On a day that Homework is assigned, it will be announced at the end of class. The assignments will have a due date, and you will be expected to submit it on said due date. If you miss class, it is your responsibility to ask a classmate for the homework assignment, complete said assignment and submit it on the expected due date. On a day that a class activity is given, it will be due that same day within the timeframe that the instructor deems appropriate. Some class activities will be group activities. You all are expected to work in groups for group activities. **Refusing to work in groups will result in a zero for the class activity. Refusing to work in groups will be considered willful disobedience,** such behavior constitutes good cause for discipline which may lead to removal, suspension, or expulsion of a student. You are required to notify the instructor if you have a documented legitimate reason that prevents you from working in groups, otherwise it will be assumed that you refuse to do the group activity, and you will be given a zero on said assignment. People who miss the group activity due to being late or absent will be given a zero. Late homework/class activities will not be accepted.

When working on a group activity, each member of the group is expected to write down their solutions on their notebook; the instructor will provide the group with a single worksheet which will be turned in within the timeframe indicated by the instructor. The names of each group member must be written on said worksheet. Group activities will be graded, but not returned to the group.

Quizzes: Quizzes will be given during class (without prior notice). One lowest quiz score will be dropped. If you are absent during a day where there was a quiz, then your grade for that quiz will be a zero, and that quiz will be dropped from your grade. No make-up quizzes will be offered. No calculators or any other electronic device will be allowed during the quizzes. People who use a calculator, cellphone or any other electronic device will automatically receive a zero and be referred to the Dean of Student Affairs for cheating. People who have a cellphone on their desk will automatically receive a zero, this will also constitute cheating, the same procedure described above will be followed. Talking to classmates during a quiz will be considered as cheating, anyone engaging in a conversation during a quiz will receive a zero and be referred to the Dean of Student Affairs for cheating. I recommend that you study and familiarize yourself with the material regularly. The best way to prepare for the quizzes is to attend lecture, go over the notes at home, and review homework/class activities. If you missed a class activity, then ask a classmate for a copy of theirs so you can use it for study purposes.

Exams: There will be 3 in class exams, each exam is worth 20% of your grade. There are no make-up exams. If an exam is missed, then you will receive a 0% and that 0% will be replaced with the final exam percentage score. This can only be done once. If a person misses two exams, then only one exam will be replaced with the final percentage score while the other exam will receive a zero. People who use a calculator, cellphone or any other electronic device will automatically receive a zero. People who have a cellphone on their desk will automatically receive a zero. Talking to classmates during an exam is not allowed, anyone engaging in a conversation during an exam will receive a zero. As mentioned in the



quizzes section, having a calculator/electronic device on your desk, using such devices during an exam or talking to a classmate during an exam will be considered cheating and will be referred to the Dean of Student Affairs.

Final Exam: The final exam is comprehensive and is worth 25% of your grade. There is no make-up for the final exam, if the final exam is missed, then you will receive a zero. People who use a calculator, cellphone or any other electronic device will automatically receive a zero. People who have a cellphone on their desk will automatically receive a zero. Talking to classmates during the final exam is not allowed, anyone engaging in a conversation during the final exam will receive a zero. As mentioned before, the behavior that earns people a zero on an assignment is considered cheating and students engaged in such behavior will be referred to the Dean of Student Affairs.

Cellphones and any other electronic device: Cellphones must be turned off and, in your backpack, or bag. Cellphones or any other electronic devices are not allowed on your desk, failure to comply will be considered willful disobedience and will result in the start of the discipline procedure. Notes will be taken on paper. Computers, tablets or any other electronic device will not be allowed in class. Bring a notebook, pencil, pen, eraser and be prepared to take handwritten notes. If you have a documented legitimate reason for using an electronic device during class, you are required to notify the instructor so that the accommodations can be made.

Zoom Recorded Lectures: The instructor will try recording the lectures through Zoom so students can have these videos as an additional resource for study purposes. These zoom recordings are not substitutes for attending class. Technology issues might occur and there may be occasions where the zoom recordings are not possible. Be warned that not all lectures may be recorded due to technological issues.

Course Grading Based on Course Objectives

No make up exams: There will be 3 in class exams, each exam is worth 20% of your grade. There are no make-up exams. If an exam is missed, then you will receive a 0% and that 0% will be replaced with the final exam percentagewise. This can only be done once. If a person misses two exams, then only one exam will be replaced with the final percentage score while the other exam will receive a zero. For example, let's say someone misses exam 1 and exam 2. In such case only exam 1 will be replaced by the final exam percentage score while exam 2 will remain a zero. Keep in mind that everyone will be treated the same, there won't be any exceptions. Regardless of the reason of absence, people won't be allowed to make up an exam, instead the final exam will replace the missing score percentagewise. The keyword here is percentagewise, be sure to understand it. For example, suppose a student misses exam 1 which is out of 50 points. The student will then get a zero and will have to wait until after taking the final to replace that zero with the corresponding percentage score of the final. Suppose the final is out of 100 points and the student got a 70/100 which is a 70%. In this case, this student's exam 1 new grade will be 70% of 50 points which is 35/50.

No make up final: The final exam is comprehensive and is worth 25% of your grade. There is no make-up for the final exam, if the final exam is missed, then you will receive a zero.

Important Dates: Plan to be here for the exam dates in the schedule but also note that those dates can change so make sure you are attending class, paying attention, checking Canvas announcements and staying up to date. Occasionally in a semester, class could get cancelled due to weather conditions or other type of situations. If the college cancels class on an exam day, then the exam will be given the following class day. Be sure to check Canvas Announcements and Canvas Inbox for updates. In the situation that the instructor can't make it to class due to an unforeseen circumstance and the instructor can't find someone to replace him for the day, then you will be notified via Canvas and the exam will be taken the following class day. For any changes to exam dates, always check Canvas Announcements and email with your instructor via Canvas Inbox.

Late work/missing work: The combined total of your homework/class activities is worth 10% of your grade. Late homework/class activities will not be accepted. If you miss a homework assignment or class activity, then you will receive a zero. I will drop the two lowest scores from the homework/class activities category. For example, suppose there are 5 homework assignments and 5 group class activities. In such case, the following possible scenarios could

occur: Scenario 1: person misses 2 homework assignments. For this case, those two homework assignments will be dropped and if the student were to miss any subsequent class activity/homework assignment then he/she/they will get a zero on said assignment. Scenario 2: person misses 1 homework and 1 class activity. For this case, the 1 homework and 1 class activity will be dropped and if the student were to miss any subsequent class activity/homework assignment then he/she/they will get a zero on said assignment. Scenario 3: person misses 2 class activities. For this case, those two class activities will be dropped and if the student were to miss any subsequent class activity/homework assignment then he/she/they will get a zero on said assignment.

Missing Quizzes: The combined total of your quizzes is worth 5% of your grade. There are no make-up quizzes. If you miss a quiz, then you will receive a zero. I will drop the lowest quiz score.

All Grades will be shown on Canvas. Your grade will be weighted as summarized below:

Homework/Class Activities 10% of grade

Quizzes 5% of grade

Exams 60% of grade

Final 25% of grade

Final class grade is based on the following guidelines:

Percent \geq 89.5	A
$79.5 \leq$ Percent $<$ 89.5	B
$69.5 \leq$ Percent $<$ 79.5	C
$59.5 \leq$ Percent $<$ 69.5	D
Percent $<$ 59.5	F

Grades earned according to the percentage scale above will be the final grade you receive for the class. All students are graded by the same standards and grades are nonnegotiable.

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

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement. This means you should plan on 3 hours of class time, plus an additional 6 hours each week for working outside of class. This means you should spend at least 9 hours working on math each week.

Basic Course Rules:

1) Late work is not accepted.

Updated 11/2024

- 2) There are no make-up exams or quizzes.
- 3) It is your responsibility to drop or withdraw the class. Failure to do so will result in a regular grade (most probably an F).
- 4) It is your responsibility to submit the homework on time if you are absent. I highly recommend finding a classmate to ask for notes and homework assigned in your absence.
- 5) Electronic devices must be turned off and in your backpack. This includes but is not limited to your cellphone, laptop, tablet, etc.
- 6) You will be required to take handwritten notes so come prepared with paper, pencil, pens, highlighters and erasers.
- 7) Arrive on time to class. If you arrive late, please enter as quietly as possible and do not engage in conversations with your classmates. Keep in mind that if you miss work when you arrive late, you won't be allowed to make up such work.
- 8) Refer to your instructor as Professor Noguez, Mr. Noguez, or just "Professor".

Attendance and Absences: Attendance is expected. The instructor may drop you from the class if you have more than the allowed number of unexcused absences. That is, if you have 3 unexcused absences, you may be dropped from this course. An absence may be excused if the student presents documentation that justifies the absence on said day. If you miss the day of an exam, the absence itself may be excused but keep in mind that you won't be allowed to make up the exam. See the exam policy above for further details.

Excessive Excused Absences: Students with excessive excused absences may be dropped from the course. A student with more than two weeks of excused absences may be dropped. That is to say, on the fifth absence, the student may be dropped.

Classroom Behavior:

- Disruptive behavior will not be tolerated. Disruptive behavior includes but is not limited to: having a conversation with a classmate while the instructor is speaking, cellphone use during lecture, answering a phone call in the classroom, arriving late to class in a disruptive manner, cellphone going off during lecture, making loud noises such as loudly tapping your desk, sharpening a pencil during lecture, bringing people to class who are not registered in the class, listening to music during lecture, playing video games, any form of distractive behavior to the instructor, any form of distractive behavior to fellow classmates, etc. The instructor will notify you if you're engaging in disruptive behavior and you will be asked to stop such behavior. Be warned that a verbal warning is the first step in the discipline procedure. Failure to comply will escalate the discipline procedure which can lead to suspension from the course.
- Civil and respectful conduct towards fellow classmates and the instructor is expected.
- Inappropriate behavior will be documented and may be subject to disciplinary action. Inappropriate behavior includes but is not limited to the use of bad words, any kind of harassment, etc.
- The following shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student: disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.

Discipline Procedure:

Step 1: Student(s) will be given a **verbal warning**. The instructor will explain the student(s) that their conduct is disruptive/inappropriate. The instructor will take note of the students who engaged in disruptive/inappropriate behavior. An email may be sent to the student(s) as a reminder.

Step 2: Student(s) who failed to comply after the verbal warning will be given a **written reprimand**. The written reprimand will be provided to the student(s) either through paper, email, or both. In the written reprimand the instructor will describe the student(s) conduct. Said student(s) will be once again reminded to stop such behavior. Student(s) will be warned that continuation of specified conduct may result in formal disciplinary action. The instructor will notify and forward this information to the Dean of Student Affairs Dr. Andrew Sanchez.

Step 3: Student(s) who failed to comply after the written reprimand will be referred to the Dean of Students Affairs Dr. Andrew Sanchez for **disciplinary action**.



IMPERIAL VALLEY COLLEGE

Further steps: Student(s) may be **removed** or **suspended** from class or even **expelled** from the college. For further details on such procedures please read the student conduct policy in IVC's catalog.

The most common form of disruption involves students having a conversation during lecture. In such situations, the instructor will give a verbal warning to the students involved. If the behavior continues the following class meeting, the instructor will rearrange the students' seating by having them sit far away from each other and students will be given a written reprimand, the documentation will be forwarded to the Dean of Students Affairs, Dr. Andrew Sanchez. If the students don't comply with the instructor, then they will be referred to the Dean of Student Affairs Dr. Andrew Sanchez for **disciplinary action**.

Conversations During Lecture: As explained above people engaging in a conversation while the instructor is speaking will be subject to the discipline procedure described above. If you are helping a classmate, I suggest you do so after class, before class or set up a meeting time outside the classroom. Regardless of the reason of the conversation, it is a distraction to the instructor, and the instructor will label such behavior as disruptive.

Netiquette: Please refer to your professor as Mr. Noguez or Professor Noguez when emailing him. It is strongly recommended that you email your instructor through Canvas Inbox. Another form of acceptable email is IVC's email, just be sure to include in the email the name of the class and the times and days the class meets. Write your emails in a professional fashion. Don't use bad words or slang. Use proper grammar. No personal email accounts should be used. For example, if a person emails me from a google/apple/yahoo/etc email account, then I will not reply.

Academic Honesty: Cheating, plagiarism or engaging in other academic dishonesty on an exam, quiz, final exam or any other assignment will result in a zero on said assignment. Students who have cheated an assignment will not be allowed to make up said work and the zero will remain in their grade. In the case of cheating on an exam, the students will be given a zero on the exam and the final exam percentage score will not be used to replace that zero. Students who cheat will be subject to disciplinary action. The instructor will require the student(s) involved in academic dishonesty to meet with the Dean of Student Affairs Dr. Andrew Sanchez for disciplinary action.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making 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.

The Learning Services Department's tutoring center offers free tutoring in-person in for Math 110 building 1500 (library) and online via Zoom. Contact the tutoring center or visit the [Learning Support Services website](#) for more information.

Visit the [Student Support page](#) for more information regarding additional student resources, including:

- Disability Support Programs & Services (Refer to them if accommodations are needed)
- Counseling & Transferring Services
- Student Health Services
- Food & Housing Services
- Career Services
- Undocumented Student Resources
- Education Technology
- Technology Support Services

Updated 11/2024



IMPERIAL VALLEY COLLEGE

- Library & Tutoring Services • Military & Veteran Success Center
- MESA Center
- EOPS/CARE/NextUp Services

Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
Week 1 2/17-2/20	Syllabus & Introduction. Sections: 2.1
Week 2 2/23-2/27	Sections: 2.2, 2.3
Week 3 3/02-3/06	Sections: 2.4, 3.1
Week 4 3/09-3/13	Sections: 3.2, 3.3 Sections: Review
Week 5 3/16-3/20	Exam 1 (CH2, 3.1-3.3) (Tuesday, March 17th) Sections: 3.4, 3.5
Week 6 3/23-3/27	Sections: 4.1, 5.1
Week 7 3/30-4/03	Sections: 5.2, 5.3, 5.4
Spring Break 4/06-4/10	Spring Break (No classes this week)
Week 8 4/13-4/17	Sections: 6.1, 6.2, 6.3, 6.4
Week 9 4/20-4/24	Sections: 7.1, 7.2, 7.3
Week 10 4/27-5/01	Sections: Review (Tuesday, April 28 th) Exam 2 (3.4, 3.5, 4.1, 5.1-5.4, 6.1-6.4, 7.1-7.3) (Th, April 30th)
Week 11 5/04-5/08	Sections: 8.1, 8.2
Week 12 5/11-5/15	Sections: 9.1, 9.2, 9.3
Week 13 5/18-5/22	Sections: 11.1, 11.2
Week 14 5/25-5/29	Sections: 11.3, 11.4
Week 15 6/01-6/05	Sections: Review (Tuesday, June 2 nd) Exam 3 (8.1, 8.2, 9.1-9.3, 11.1-11.4) (Th, June 4th)
Week 16 6/08-6/12	Review (Tuesday, June 9 th) Final Exam (cumulative) Thursday, June 11th

Note: The above schedule is tentative, the sections covered on the exams may change, be sure to attend class and check Canvas for updates.

*****Subject to change without prior notice*****