



Basic Course Information

Semester:	Fall 2025	Instructor Name:	Allyn Leon
Course Title & #:	Math 105, Integrated Math for Technical Fields	Email:	allyn.leon@imperial.edu
CRN #:	11213	Webpage (optional):	imperial.instructure.com
Classroom:	2728	Office #:	2761
Class Dates:	8/11/2025 - 12/6/2025	Student Hours (2761):	Mon: 4:45 pm to 5:45 pm
		Student Hours (Zoom):	Tu/Wed/Th: 10 am to 11 am
Class Days:	Monday	Office Phone #:	760-355-6523
Class Times:	6:00 pm to 9:10 pm	Emergency Contact:	Email me or call/text office phone
Units:	3	Class Format:	Face to Face

Course Description

A mathematics course designed to develop the computational skills needed in many career education programs. Topics include geometry, measurement, number sense, estimation, basic statistics, trigonometric functions, and algebraic thinking. (CSU)

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

Intermediate Algebra or appropriate placement according to the college's multiple measures assessment

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester. (ILO1, ILO2)

Other Course Information

Last day to add the class: Saturday 8/23/2025

Last day to withdraw from the class with a "W": Saturday 11/1/2025

Textbooks & Other Resources or Links

Textbook: Integrated Math for Technical Fields, available for free [online](#). There will also be a PDF download in Canvas.

Calculator: A basic calculator, like a TI-30 (costs around \$10) is recommended. Some things will require written work while others can be done with the help of a calculator. A number of apps may also work (we'll discuss those in class).



Course Objectives

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

1. Demonstrate proficiency in working with fractions, decimals, and percentages.
2. Convert between and within English and Metric units of measure.
3. Correctly apply units of measurement in various application problems related to technical fields.
4. Demonstrate proficiency in estimation, including using algebraic skills to estimate the amount of material needed for a job and determine the materials cost.
5. Understand and apply college level algebraic skills as used in trades.
6. Demonstrate algebraic skills focused on solving real-world problems, including linear, polynomial and exponential functions.
7. Graph linear, polynomial, trigonometric and exponential functions and analyze the associated models.
8. Solve application problems involving perimeter and area of two-dimensional models.
9. Solve application problems involving surface area and volume of three-dimensional models.
10. Analyze and solve application problems using trigonometry, including how trigonometry is used in skilled trades.
11. Apply descriptive statistics to trade fields, including measures of central tendency and spread of data.
12. Use basic sampling methods to collect and organize data, analyze data, and to make informed decisions.
13. Establish the mathematical relationships between skilled trade and the necessary mathematical processes, including the ability to produce illustrations to solve problems.
14. Use technology for visualization and problem solving.

Course Requirements and Instructional Methods

Quizzes: We will have a short quiz (sometimes 2) during almost every class session to make sure you are understanding all the material. You will also have the opportunity to make corrections to any quiz problems that didn't come out right in order to maximize your points and understanding. We will take 13 quizzes and count the top 10, with each quiz being worth 10 points.

Exams: Each unit will end with an exam on the skills covered. There are four main units, so there will be **four unit exams**. The exams are your chance to show you have learned the skills that your grade will be based on. The fourth exam is the final exam and will have a little bit of everything in it. These exams will be taken during class and are worth 100 points each.

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.



Course Grading Based on Course Objectives

Your grade will be calculated based on the following items:

10 Quizzes (take 13, top 10 count) @ 10 points each	100 points	~20%
4 Exams @ 100 points each	400 points	~80%
Total	500 points	100%

Your final grade will be based on the following points and percentages:

90% to 100%	450-500 points	A
80% to 89%	400-449 points	B
70% to 79%	350-399 points	C
60% to 69%	300-349 points	D
Below 60%	Below 300 points	F

The **Canvas Gradebook** is where you want to go to check your grades and progress. You can do this at any time to get an idea of how you are doing in the class.

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.

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.

Anticipated Class Schedule/Calendar

Date or Week	Activity/Topic	Assignment
Week 1 Aug 11 - Aug 17	Introduction to the class Syllabus Quiz	Syllabus Quiz
Week 2 Aug 18 - Aug 24	Chapter 1: Whole Numbers Chapter 2: Fractions	Quiz 1 Quiz 2
Week 3 Aug 25 - Aug 31	Chapter 3: Decimals Chapter 4: Ratio, Proportion, Percent, and Fractions	Quiz 3 Quiz 4
Week 4 Sept 1 - Sept 7	No Class	Labor Day
Week 5 Sept 8 - Sept 14	Review and Exam 1	Exam 1
Week 6 Sept 15 - Sept 21	Chapter 5: Measurements	Quiz 5
Week 7 Sept 22 - Sept 28	Chapter 6: The Integers Chapter 7: Fundamentals of Algebra	Quiz 6 Quiz 7
Week 8 Sept 29 - Oct 5	Review and Exam 2	Exam 2
Week 9 Oct 6 - Oct 12	Chapter 8: Plane Geometry	Quiz 8
Week 10 Oct 13 - Oct 19	Chapter 9: Triangle Trigonometry	Quiz 9
Week 11 Oct 20 - Oct 26	Chapter 10: Systems of Equations Chapter 11: Quadratic Equations	Quiz 10 Quiz 11
Week 12 Oct 27 - Nov 2	Review and Exam 3	Exam 3
Week 13 Nov 3 - Nov 9	Chapter 12: Data and Statistics	Quiz 12
Week 14 Nov 10 - Nov 16	No Class	Veteran's Day
Week 15 Nov 17 - Nov 23	Review for Final	
Week 16 Nov 24 - Nov 30	No Class	Thanksgiving Week
Week 17 Dec 1 - Dec 6	Final Exam	Final Exam