IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Spring 2025**	Instructor Name:	**Jeffrey Burt**
Course Title & #:	**Integrated Math for Technical Fields**	Email:	**jeff.burt@imperial.edu**
CRN #:	**21221**	Webpage (optional):	**NA**
Classroom:	**2721**	Office #:	**2765**
Class Dates:	**2/10/25-6/6/25**	Office Hours:	**M/T/W/Th – 12:45 to 1:45**
Class Days:	**M**	Office Phone #:	**760-355-6489**
Class Times:	6:00pm – 9:00pm	Emergency Contact:	**email**
Units:	3	Class Format:	In Person

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:

1. 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)

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.

Textbooks & Other Resources or Links

Hal Saunders, Robert Carmen. 2018. *Mathematics for the Trades: A Guided Approach (What's New in Trade Math)*. 11th Pearson. ISBN: 978-0134756967.

Course Requirements and Instructional Methods

The goal of this course is for you to gain the necessary skills and knowledge to do well, and improve your mathematical abilities, so you are able to succeed in future courses. My responsibility is to help you in any way I can, to accomplish these goals, however it is your responsibility to be committed to your own success and keep up with the pace of the class. To do so you need to complete assignments on time and please ask questions when you have them.

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 5 hours of class time, plus an additional 10 hours each week for working outside of class. This means you should spend at least 15 hours working on math each week.

Course Rules:
1) Late work is not accepted. If you are going to be gone, contact me before the absence to make arraignments.
2) There are no make-up tests 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) Regular attendance is recommended and expected. The instructor can drop you from the class if you have more than the allowed number of absences.
5) You need to ask questions whenever you have them. If not in class, please come to my office during office hours, call me, email me, go to tutoring, google it, YouTube it, etc.
6) It is your responsibility to make up the work you missed if you are absent. I highly recommend finding someone else to copy notes and material from that were covered in your absence.

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Course Grading Based on Course Objectives

There will be 3 in class exams, each worth 15% of your grade. The final is comprehensive and is worth 25% of your grade. There are no make-ups for the exams or final. Plan to be here for the exam dates in the schedule, but also note that those dates can change, so make sure you are paying attention and staying up to date. Any missed exam will result in the grade of a '0'.

Grading: You need at least a total of 70% for a 'C' grade. It is broken down as follows

Quizzes	8%
HW	7%
Exams	60%
Final	25%
Total	100%

The grade categories are as follows: A 100%-90%, B 89.9%-80%, C 79.9%-70%, D 69.9%-60%, F 59.9%-0%

Attendance, class participation and a subjective instructor's interpretation of work may be used in assigning a final grade to borderline cases.

Course Policies

You are expected to be in class on time. You are expected to have academic integrity, and any cheating will result in a 0 on that particular assignment, and notification of dishonesty to the school.

If you are struggling here are some very helpful suggestions:

1) Read the material before you come to class. I cannot stress enough how much it can help to look at what we will be covering. Use the schedule at the end of the syllabus.
2) Form a study group with other students in class.
3) Come to office hours. I'm happy to go over absolutely anything you have questions about, even if you think it is too easy. Office hours are for questions and I really enjoy helping out.
4) Use the free tutoring! It is awesome. Math tutoring at universities costs over $40 per hour, and you have access to it for free.
5) Youtube is amazing. There are many many quality videos on first semester calculus.

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

Week 1 2/10 – 2/14	Intro, Chapter 2
Week 2 2/17 – 2/21	Chapter 3
Week 3 2/24– 4/28	Chapter 4
Week 4 3/3 – 3/7	Review, Exam 1
Week 5 3/10– 3/14	Chapter 5
Week 6 3/17 – 3/21	Chapter 6/7
Week 7 3/24 – 3/28	Chapter 6/7
Week 8 3/31 – 4/4	Review, Exam 2
Week 9 4/7 – 4/11	Chapter 8
Week 10 4/14 – 4/18	Chapter 10
Week 11 4/21 – 4/25	Spring Break
Week 12 4/28 – 5/2	Chapter 11
Week 13 5/5 – 5/9	Review, Exam 3
Week 14 5/12 – 5/16	Chapter 12
Week 15 5/19 – 5/23	Application problems
Week 16 5/26 – 5/30	Holiday, review for final
Week 17 6/2 – 6/6	Final Exam

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