



Basic Course Information

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|-------------------|--------------------------------------|----------------------|--|
| Semester: | Summer 2023 | Instructor Name: | Allyn Leon |
| Course Title & #: | Math 150, College Algebra | Email: | allyn.leon@imperial.edu |
| CRN #: | 30189 | Webpages (optional): | Canvas Login Web/Syllabus |
| Classroom: | Zoom Link and Password are in Canvas | Office #: | 2761 (but home for now) |
| Class Dates: | 06/20/2023 - 07/27/2023 | Class Link (Zoom): | N/A |
| Class Days: | Monday - Thursday | Office Phone #: | 760-355-6523 |
| Class Times: | 9:05 am to 12:10 pm | Emergency Contact: | Email me or call/text my office phone |
| Units: | 4 | Class Format: | Online |

Course Description

College level course in algebra: polynomial, rational, radical, absolute value, exponential and logarithmic functions; systems of equations, theory of polynomial equations, matrix algebra, linear programming, and analytic geometry. (CSU, UC credit limited. See a counselor.)

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

Appropriate placement as defined by AB705 or, MATH 098 or MATH 091 with a grade of "C" or better.

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.

Textbooks & Other Resources or Links

Recommended Textbook: College Algebra, 8th Edition, by Robert Blitzer, Pearson Publisher.

The OPTIONAL textbook is available at the bookstore or online. There are also numerous online resources in Canvas.

Calculator: A basic calculator, like a TI-30 (costs around \$10) is recommended, or you can go with a graphing calculator, like the TI-83 or TI-84, and there are also various apps that you can use instead; it really depends on what other math or science classes you plan on taking later on. You NEED a calculator of some sort to do the work on the tests.



Course Objectives

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

1. Perform operations on matrices and solve linear systems of equations using matrix algebra.
2. Use Linear Programming in common business and science applications.
3. Analyze and investigate properties of functions.
4. Synthesize results from the graph and/or equations of functions.
5. Apply transformations to the graphs of functions.
6. Recognize the relationship between functions and their inverses graphically and algebraically.
7. Solve and apply rational, linear, polynomial, radical, absolute value, exponential, and logarithmic equations and solve linear, non-linear, and absolute value and equality.
8. Solve systems of equations and inequalities.
9. Apply techniques for finding zeros of polynomials and roots of equations.
10. Apply functions and other algebraic techniques to model real world B-STEM applications.
11. Analyze conics algebraically and graphically and use formulas to find sums of finite and infinite series.

Course Requirements and Instructional Methods

Quizzes: Each unit (or module) has a set of specified skills to learn, along with study materials and “quizzes” to help you practice these skills. There are four general units in the course, and each unit has several modules. Each module has one to three quizzes. Quizzes are your chance to **practice**, to make mistakes, to learn. Making mistakes is part of the process of learning math and is expected. For this reason, **quizzes will only count as a small portion of your grade**. There are an **unlimited** number of attempts on quizzes and these assignments will be available for the entirety of the course. There are due dates listed for each of these assignments to **help keep you on pace** to complete the class by the last day.

Exams: Each unit will end with an exam on the skills covered. There are four main units, so there will be four exams. The exams are your chance to show you have learned the skills that your grade will be based on. You will **NEED to submit your work for MOST problems**, so make sure to review the rubric for each skill and show work that explains your solution. If you do not submit or upload work for your exam exercises I will not be able to verify the skill completed. Exam grades will “count” once the written work is graded. **How to show your work?** You will take pictures of the work you did and upload them into Canvas, or create a document that has the steps and upload that.

Note: If you do not have written work uploaded for your exam, your score will not count and will be recorded as a zero.

If you have not yet mastered a skill in the exam, you will have additional opportunities to show you have learned the material, either in a project, an exam retake or when the skill is revisited in a future exam (depending on the skill). Before attempting a retake exam, you will be expected to study, work on quizzes, and seek out tutoring help. If you show improvement on a retake or future exam, then your grade on that skill will be replaced to reflect your most recent work. Details on retakes will be in one of the orientation videos in Canvas. Please check those out.

Note: Do not log out in the middle of an exam or your score will be automatically recorded. If you run into a problem with this, please contact me right away.

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 @ 10 points each (count top 10 towards your grade) | 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.

Other Course Information

Last day to add the class: Thursday 06/22/2023

Last day to withdraw from the class with a "W": Thursday 07/19/2023

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.

Course Policies

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.
- *Attendance in an online class is more than just logging in*
 - You will need to make sure that you log in and check announcements regularly
 - There are weekly readings and assignments that need to be done in a timely manner
 - There will be exams completed online in Canvas as well
 - **The Syllabus Quiz, based on the syllabus, counts as an attendance check for the first week**
 - **The Syllabus Quiz is due by 11:59 pm on Wednesday, 06/21/2023**
 - **If you do not complete the Syllabus Quiz on time, you will be dropped from the class**



Anticipated Class Schedule/Calendar

| Date or Week | Activity, Assignment, and/or Topic | Pages/ Due Dates/Tests |
|-----------------|---|---|
| Week 1: June 19 | No Class | Juneteenth |
| Week 1: June 20 | Introduction/Orientation Equations & Inequalities, Module 1 Syllabus Quiz | Syllabus Quiz (Quiz 0) due on WEDNESDAY 06/21 NO EXCEPTIONS |
| Week 1: June 21 | Equations & Inequalities, Module 1 | |
| Week 1: June 22 | Equations & Inequalities, Module 1 | Quiz |
| Week 2: June 26 | Functions & Graphs, Module 2 | |
| Week 2: June 27 | Functions & Graphs, Module 2 | Quiz |
| Week 2: June 28 | Functions & Graphs, Module 2 | |
| Week 2: June 29 | Exam 1 | Exam 1 |
| Week 3: July 3 | Polynomial & Rational Functions, Module 3 | |
| Week 3: July 4 | No Class | Independence Day |
| Week 3: July 5 | Polynomial & Rational Functions, Module 3 | |
| Week 3: July 6 | Polynomial & Rational Functions, Module 3 | Quiz |
| Week 4: July 10 | Exponential & Logarithmic Functions, Module 4 | |
| Week 4: July 11 | Exponential & Logarithmic Functions, Module 4 | Quiz |
| Week 4: July 12 | Exam 2 | Exam 2 |
| Week 4: July 13 | Systems of Equations & Inequalities, Module 5 | |
| Week 5: July 17 | Systems of Equations & Inequalities, Module 5 | Quiz |
| Week 5: July 18 | Systems of Equations & Inequalities, Module 5 | Quiz |
| Week 5: July 19 | Matrices & Determinants, Module 6 | |
| Week 5: July 20 | Matrices & Determinants, Module 6 | Quiz |
| Week 6: July 24 | Exam 3 | Exam 3 |
| Week 6: July 25 | Conic Sections, Module 7 | Quiz |
| Week 6: July 26 | Sequences & Series, Module 8 | Quiz |
| Week 6: July 27 | Exam 4 | Exam 4 |

THE SYLLABUS QUIZ, BASED ON THE SYLLABUS, IS DUE BY THE END OF THE DAY, 11:59 PM, ON WEDNESDAY 06/21/2023. IF THE SYLLABUS QUIZ IS NOT COMPLETED BY THEN, YOU WILL BE DROPPED FROM THE CLASS.