Math 150 – College Algebra - Syllabus Fall 2023

Basic Course Information

Semester:	**Fall 2023**	Instructor Name:	**Jill Sorenson (Kitzmiller)**
Course Title & #:	**Math 150**	Email:	**jill.kitzmiller@imperial.edu**
CRN #:	**10765**	Webpage (optional):	
Classroom:	**3112**	Office #:	**2768**
Class Dates:	**8/14/23 – 12/9/23**	Office Hours:	**12:30 – 1:30 pm and 6:15 – 6:45 pm T/Th and 9:30–10 MW by text/zoom**
Class Days:	**T/Th**	Office Phone #:	**760-355-6296**
Class Times:	**3:40 – 6:15 pm**	Emergency Contact:	**Sylvia Murray – Staff Sec 760-355-6201**
Units:	**4**	Class Format:	**In person on campus**

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)

In Person Courses

This class meets in person on campus. You are expected to addend every class meeting. 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. In the event that I am out of town due to family or medical reasons, class meeting s may be live using zoom at the regularly scheduled time. You may attend using your own personal computer or a computer in the library and/ or watch the recording. These dates will be announced in advance.

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

Appropriate placement as defined by AB705 or successful completion of Intermediate Algebra.

Textbooks & Other Resources or Links

MYMATHLAB ACCESS CODE: (required): **A handout with instructions on registering with MYMATHLAB, as well as the necessary course ID number is posted on Canvas.**

CALCULATOR: A scientific calculator is required.

Textbook: (not required) College Algebra 8th Edition; Blitzer. Pearson ISBN: 9780136970613

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to: Given a problem or a set of problems, the student will demonstrate problem solving strategies by identifying an appropriate method to solve a 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.

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

In class instruction is lecture based with worksheets and practice problems that correspond to material covered in lecture. Evaluation is based on homework and in class examinations.

HOMEWORK: Homework is assigned on Pearson **mymathlab** site for each section covered in the book. You must purchase access to the website and then use your own personal computer with internet access or use a computer in the Math Lab or Library to complete the assignments. There are 15 points assigned for each homework assignment regardless of length. There are 3 due dates for the homework corresponding to each test. **It will be difficult to pass the class if you do not complete the homework!**

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.

Homework grades will be given 3 times each semester **after each test** based on your percentage of work completed. Each assignment will be graded as follows: 90 – 100% points 18 (3 extra credit), 70 – 89% 15 points, 60 – 69% 12 points, 50 – 59% 9 points, 40 – 49% 6 points, below 40 % 0 points.

EXAMS: There will be 3 exams and one cumulative final exam. There are **NO make-up exams** without a doctor's note and/ or arranged in advance. Any missed test that was not rescheduled in advance will receive a 15% reduction in grade. **The final exam is cumulative and mandatory for all students.** Any missing exam grade will be recorded as a 0.

Course Grading Based on Course Objectives

Points in this course are earned and grades are given according to the scale outlined below. All grades are posted on Canvas along with the corresponding points and due dates. If any modification to assignments is necessary, students will be notified, and changes will be made on Canvas. Grades are not negotiable. All students will be treated equally. Your scores on each assignment or exam will be posted on Canvas. Your grade will be based on the percent of points you have earned by the end of the semester.

GRADING

Breakdown: 90% and up = A, 80 – 89% = B, 70 – 79% = C, 60 – 69% = D, below 60% = F.

INCOMPLETE GRADES: To receive a final grade of incomplete, you must be passing the class and be unable to take the final exam.

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.

Communication and Feedback Policies

I strive to check my email every day and try to respond to everyone within 24 - 48 hours if you require a response. I prefer that you email me using your IVC email address or from Canvas, sometimes emails from other sources go to junk mail and I do not see them. If you do **not** email me through Canvas, be sure to include the class you are enrolled in in the subject of your email. If you have not heard from me within the time period above, you can assume that I did not get your email and contact me again. I DO NOT look at email on the weekends (Friday- Sunday) or on holidays.

I communicate with the entire class during class and using announcements posted on Canvas. I will answer questions during class, in office hours, or by email. **Please check Canvas regularly for announcements.** Any updates, reminders, or changes, I will post as an announcement or send an email via Canvas messaging.

Normal turnaround for grading assignments is within one week of the due date. If you are emailing an assignment because you had an issue with turning it in using Canvas, give me a few extra days to grade it. Grades will be posted as they are scored and will be kept track on Canvas' grade book in which students can access**.** Answer keys to some assignments will be posted and questions on assignments discussed in class.

Course Policies

Attendance and Drop Policy

You must attend the first day of class or you will be dropped from the course as a 'No Show.' Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. 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. **It is the student's responsibility to drop or officially withdraw from 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.

Anticipated Class Schedule/Calendar

Tentative Schedule – Math 150 – CRN 10765 (classroom)

	Tuesday	Thursday
Week 1 August 14-17	Introduction Coordinate Plane	1.2 – 1.3
Week 2 August 21 - 24	1.4 – 1.5	1.6 -1.7
Week 3 August 28 - 31	2.1 – 2.2	2.3 – 2.4
Week 4 September 4 – 7	2.5 – 2.6	2.7 -2.8
Week 5 September 11 – 14	3.1 – 3.2	Review
Week 6 September 18 – 21	**Exam 1**	3.3 – 3.4
Week 7 September 25 – 28	3.5 – 3.6	3.7 , 4.1
Week 8 October 2 – 5	4.2 – 4.3	4.4 – 4.5
Week 9 October 9 – 12	Review	**Exam 2**
Week 10 October 16 – 19	5.1 – 5.2	5.4
Week 11 October 23 – 26	5.5 – 5.6	6.1
Week 12 October 30 – Nov.2	6.2 – 6.3	6.5
Week 13 November 6 – 9	Review	**Exam 3**
Week 14 November 13 – 16	7.1 – 7.2	7.3
Week 15 November 20 – 23	**Thanksgiving Break**	**Thanksgiving Break**
Week 16 November 27 - 30	Review for Final	Review for Final
Week 17 December 4 – 8	**FINAL EXAM**	