

Basic Course Information

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|-------------------|---|---------------------|--|
| Semester: | Summer 2025 | Instructor Name: | Caroline Bennett |
| Course Title & #: | Math 190: Pre-Calculus | Email: | caroline.bennett@imperial.edu |
| CRN #: | 30060 | Webpage (optional): | N /A |
| Classroom: | Building 2700, Room 2722 | Office #: | Building 2700, Room 2765 |
| Class Dates: | 6/16/25 – 7/24/25 | Office Hours: | Regular office hours do not apply during summer session; however, some “office hour” times will be available during the lab component of each class period |
| Class Days: | Mon. – Thurs. | Office Phone #: | (760) 355 – 6124 |
| Class Times: | Lecture: 12:30 – 3:55 pm Lab: 4:05 – 5:10 pm | Emergency Contact: | (760) 355 – 6155 |
| Units: | 5.0 | Class Format: | Face-to-Face (on campus) |

Course Description

Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates. (UC credit limited. See a counselor) (CSU/UC)

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

Appropriate placement as defined by AB705 or MATH 140 or equivalent with a grade of "C" or better.

SHOULD YOU TAKE MATH 190 AS A SHORT-TERM ACCELERATED COURSE?

DO NOT TAKE MATH 190 AS A SHORT-TERM ACCELERATED CLASS IF:

- You are deficient in pre-algebra, algebra, and trigonometry skills
- You have never taken algebra or trigonometry before (or haven't taken those in a long time)
- You are low in mental stamina and discipline, and are unable to stay focused on math for 4.5-hour blocks of time
- You have difficulty with intense fast-paced math courses
- You are taking other summer classes or have a work schedule that doesn't allow for full attendance and sufficient study time

DO TAKE MATH 190 AS A SHORT-TERM ACCELERATED CLASS IF:

- You have a **strong sense of discipline** and **work ethic**
- You have the **mental stamina** to do math for 4.5+ hours at a time
- You have a **solid foundation in basic math, pre-algebra, algebra, and trigonometry** skills, and can review pre-requisite skills quickly when necessary

Textbooks & Other Resources or Links

MYMATHLAB Access Code (REQUIRED): This comes as an insert if you buy a new text packaged with a code. Otherwise, you may purchase an access code online or at the IVC Bookstore. **A handout with instructions on how to register with MyMathLab is provided on Canvas.** **Course ID: bennett58392**

CALCULATOR (REQUIRED): A **scientific calculator** is required. A graphing calculator is recommended, but not required. Graphing calculators may be used on homework and on in-class activities. Students may NOT share calculators during exams.

Graphing calculators and cell phones are NOT permitted during exams.

Certain exams or portions of exams may not allow any calculators at all.

TEXT (RECOMMENDED): Since MyMathLab includes full access to the e-book, buying a physical textbook is **not required**. However, if you wish to purchase a physical book, it is:

Precalculus, 6e by Robert Blitzer. ISBN: 978-0134469140

Course Grading Based on Course Objectives

EVALUATION:

| | |
|--------------------------------|--------------|
| In-Class Activities/HW Quizzes | 25 |
| MyMathLab Homework | 50 |
| Projects | 25 |
| No-Calculator Trig Quizzes | 50 |
| 3 Exams × 200 points each | 600 |
| Final Exam (cumulative) | <u>+ 250</u> |
| | 1000 |

GRADING SCALE

| | |
|------------|---|
| 900 – 1000 | A |
| 800 – 899 | B |
| 700 – 799 | C |
| 600 – 600 | D |
| Below 600 | F |

The grade that is earned, according to the point scale above, is the grade that will be received. Grades are not subjective. Grades are not negotiable. All students will be assessed by the same standards.

NOTE: MyMathLab will automatically display a current “percentage” based upon the online work that you have completed (homework only); however, this percentage generally does not reflect your accurate overall course grade (as it does not include in-class activities, quizzes, projects, and exams).

At the end of the semester, students’ MyMathLab data will be exported by the instructor to a separate spreadsheet, and grades will be calculated according to the category weights outlined above. You may contact the instructor at any point throughout the semester if you wish to see your current overall grade approximation.

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)

Course Objectives

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

1. Solve systems of equations and inequalities.
2. Solve equations in one variable including polynomial, rational, radical, absolute value, exponential, logarithmic, piecewise-defined functions, trigonometric and inverse trigonometric functions; and solve inequalities in one variable, including polynomial, rational and absolute value inequalities.
3. Demonstrate an understanding of the relationship between functions and their inverses algebraically and graphically.
4. Graph functions and relations in rectangular and polar coordinates. Analyze the graphs of polynomial, rational, exponential and logarithmic functions based on particular characteristics of the function.
5. Apply transformations to the graphs of functions and relations.
6. Analyze the results from equations and/or graphs of functions and relations;
7. Solve applied problems from a variety of disciplines that can be modeled by linear, polynomial, absolute value, rational, radical, exponential and logarithmic functions.
8. Evaluate trigonometric functions of an angle in radians and degrees.
9. Simplify trigonometric expressions.
10. Solve trigonometric equations, triangles and applied problems that can be modeled by trigonometric functions.
11. Identify special triangle and their related angle and side measures.
12. Graph trigonometric functions and their inverse functions and apply changes in period, phase and amplitude to generate new graphs
13. Prove trigonometric identities and use the identities to solve for exact values, simplify expressions and solve trigonometric equations.
14. Classify and graph conic sections.
15. Analyze parametric and polar equations, functions and graphs.
16. Evaluate sequences and series.

Course Requirements and Instructional Methods

LECTURE AND INSTRUCTION

On Monday – Thursday, our class will meet in person on campus (room 2722) from 12:30 pm – 5:10 pm. Classroom time will consist of a combination of instructor lecture and student activity time, which will include opportunities to ask questions and receive help from both the embedded tutor and the instructor.

Quizzes and exams take place in person during class time. Students may be permitted to work together during activities, but quizzes and exams must be completed individually. Although homework is online, **quizzes and exams must be taken in person.**

CATEGORIES OF ASSIGNMENTS

MYMATHLAB HOMEWORK ASSIGNMENTS (Online)

These are the official homework assignments that make up the “Homework” portion of the overall course grade (see point scale on page 2). These assignments provide **very essential practice** to help students prepare for quizzes and exams.

Homeworks are generally delineated by chapter/section, and each assignment is typically open for full credit for 2 – 5 days. After each assignment’s deadline passes, its link will remain open, and students will be able to continue working on it for 50% credit on any problems completed past the deadline (problems completed before the deadline still retain their 100% credit).

In the homework assignments, you have unlimited tries on each problem. Therefore, if you are willing to devote the necessary time and patience, then you can achieve a score of 100% on every homework assignment (provided you start it soon enough and allow enough time).

Students can receive assistance from me on specific homework problems during designated office hours, or from our embedded tutor during their review session times, or from any other math tutor provided by the IVC Learning Support Services Center or other tutoring resources. **The sooner you get started on each assignment, the more time you will have to ask questions and get help on specific problem areas.**

A NOTE ABOUT DEADLINES: Homework deadlines are strict. Please understand that I cannot extend homework deadlines for individual students because of a missed due date. In the interest of equity and fairness, students must be assessed with the exact same assignments, deadlines, and standards.

It is every student’s responsibility to log in regularly and stay on top of all due dates. For the online homeworks, after an assignment’s due date passes, you may still work on it for 50% credit (you keep 100% credit for all work done before each due date).

PROJECTS: (Outside of class)

The only collected homework, outside of MyMathLab, will come in the form of Projects that will appear as typed problem sets in Canvas (Canvas → Files → Projects). Between 1 – 3 Projects will be given over the course of the summer session. Students may work individually or in groups of up to 4 students on Projects. Although it is considered as an out-of-class assignment, some of the “lab” portions of our class periods may be devoted to helping students with Project problems. Further details will be provided when the first Project becomes available on Canvas.

CLASS WORK: (In class)

Many class lecture periods will include work upon 1 – 4 problems from current or recent topics. Students are encouraged to work together, but work will be collected individually and awarded points based upon effort and/or accuracy (depending upon circumstances).

A couple of notes about class work:

1. Class work time is your opportunity to practice the current topics, receive assistance from the instructor and/or embedded tutor (in addition to office hours and review sessions), and learn from one another. This is a crucial part of the learning process. However...
 - Class work does NOT replace the need to practice problems from the textbook **outside of class**. Class work alone is NOT sufficient preparation for exams.
 - There may be classes in which we do not have time for class work. If we are falling behind in the material according to the Course Calendar, then some classes may have to be 100% lecture so that we may catch up.
2. **Make-Up Work:** After the beginning of the semester, I do not take attendance. Instead, the collected **class work is primarily about attendance and participation**, and therefore it cannot be “made up”. The point values are generally very minimal (2 – 4 points for each collected class work); therefore, if you do miss a couple of classes, this will not have a significant impact on your grade. **Do not email me to ask about “making up” missed class work. It is about being present and participating in class, not about the couple of math problems themselves.** For each in-class activity problem that we do, you should be practicing dozens more of that type of problem outside of class in the homework anyhow.

If I allow students to miss class and then turn in the in-class activity later, it defeats the entire purpose of collecting in-class work. It is only when students habitually miss a lot of classes, that the points start to add up and have a significant impact on the overall grade. *[If you do have a true medical or personal emergency during the semester that causes you to miss a significant amount of class, then you have much larger concerns than a few missing class points. In such cases, it is usually better to drop the class and take it in a later semester when you will be able to devote the proper amount of time and energy.]*

HOMEWORK QUIZZES: (In class)

There will be two No-Calculator Trig Quizzes worth 50 points collectively. The purpose of this is to encourage more students to work on their vital trig skills that every student in Pre-Calculus and higher should know WITHOUT RELYING ON A CALCULATOR, such as key Unit Circle values.

Additionally, there may be some other quizzes sprinkled throughout the semester (depending upon need and upon available class time). If these take place, then upcoming quizzes will be announced both in class and on Canvas. These are not listed in the syllabus calendar, as their dates are dependent upon the pace and progress of the class. These are called “homework quizzes” because they are specifically based upon selected MyMathLab homework problems. Therefore, the best way to prepare for them is to stay caught up with your MyMathLab homework. If they take place, then these quiz points will be included under your “In-Class Activities” points.

EXAMS: (In class)

There will be 3 regular exams at 150 points each. Exams are closed-book and closed-note. Some exams will allow scientific calculators, while others may not (if an upcoming exam will not be permitting calculators, then this will be announced in advance). However, for all exams, NO graphing calculators and absolutely NO cell phones or other electronic devices may be used. Students seen touching or looking at a cell phone during an exam will receive an automatic “0” for that exam. **Students may NOT leave the room during an exam.**

MAKE-UP QUIZZES AND EXAMS

All **exam dates are listed in the Course Calendar on page 11**; please plan accordingly. If you know ahead of time that you absolutely cannot make an exam date due to an out-of-town trip or important engagement, it is possible to arrange with me to take an exam 1 – 3 days ahead of time. However, it is not possible to take an exam after the rest of the class has taken it, as the solutions will be posted in Canvas. In such cases, it will be necessary to take the universal Make-Up Exam.

Each student will have the chance to make up ONE missed exam on the designated Make-Up Exam day in the course calendar. The Make-Up Exam can replace only one missing exam score. The Make-Up Exam is “universal”, meaning that all students who take it will be taking the same exam (regardless of whether they are replacing Exam 1, 2, or 3). The Make-Up Exam will contain selected material from each of Exams 1 – 3. As with the other exams, a review guide will be provided several days prior to the Make-Up Exam.

If you do NOT miss any exams, then you may choose to take the Make-Up Exam if you wish, and replace your lowest exam score (if your Make-Up Exam score is higher than your lowest exam score). Or, you may opt to ignore the Make-Up Exam altogether with no negative consequences to your grade. [If you decide to attempt the Make-Up Exam and score lower than all of your first 3 exams, then the Make-Up Exam score simply wouldn’t count; however, you will have gained some valuable review and practice for the Final Exam.]

Course Policies

ATTENDANCE

- 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.

ACADEMIC HONESTY:

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the importance of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General Catalog](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination;

(d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service.

- The consequences of academic dishonesty are severe and may include the possibility of expulsion. For further information, refer to the Standards of Student Conduct in the 2023-2024 General Catalog.

HOW DO I SHOW ACADEMIC HONESTY AND INTEGRITY IN AN ONLINE “CLASSROOM”?

- **KEEP YOUR PASSWORDS CONFIDENTIAL.**
 - You have a unique password to access online software like Canvas. Never allow someone else to log-in to your account.
- **COMPLETE YOUR OWN COURSEWORK.**
 - When you register for an online class and log-in to Canvas, you do so with the understanding that you will produce your own work, take your own exams, and will do so without the assistance of others (unless directed by the instructor).

Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment;
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment;
- Having someone else take an exam or quiz for you;
- Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);
- Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;
- Excessive revising or editing by others that substantially alters your final work;
- Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class);
- Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

NOTE: Although this is a face-to-face class, many of these above principles regarding academic honesty in online classes still do apply to our MyMathLab homework assignments, as well as collected Projects.

ONLINE NETIQUETTE

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Other Course Information

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. The Western Association of Schools and Colleges (WASC) has adopted a similar requirement.

Since Math 190 is a 5-unit class, during a 16-week semester you should plan to spend a minimum of 10 hours per week working on homework, studying, working with tutors, etc., outside of class time. **When condensed into a 6-week accelerated session, this translates to students spending roughly 25 hours per week on homework, studying, tutoring, etc.**

Some of our class time may be devoted to homework and tutoring during the activity or "lab" portion (up to 4 – 8 hours per week); however, the remaining part of that 25 hours is up to each individual student. **If you are not prepared to devote these kinds of hours and rigorous schedule for 6 weeks, then Math 190 during summer session is not for you.** You should instead take it during a full 16-week fall or spring semester.

Out of class hours are at your discretion; however, it is wise to set up and stick to a routine so that you follow the same structured schedule every week.

IVC Student Resources

CANVAS LMS: Canvas is Imperial Valley College's Learning Management System. To log onto Canvas, use this link: [Canvas Student Login](#). The [Canvas Student Guides Site](#) provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.

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. Services include, but are not limited to:

- Tutoring Labs
- Career Services Center
- Child Development Center
- Student Counseling and Health Services
- Military and Veteran Success Center
- Extended Opportunity Program and Services (EOPS)
- Disabled Student Programs and Services
- Student Equity & Achievement Program*
- Library Services and Information Literacy

***What if I cannot afford food, books, or need other help?**

The Student Equity & Achievement Program has many resources that are available to you. Please tell us what you need by submitting your request(s) here:

<https://www.imperial.edu/students/assessment-center/index.html>

Anticipated Course Calendar

(*With the exception of the Final Exam, these dates are tentative and subject to change with advance notice!)

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY |
|------------------------------------|---|-----------------------|-----------------------------------|
| 6/16 Ch. 1 misc. topics, 2.2 | 6/17 2.2, 2.3, 2.4 | 6/18 2.4, 2.5, 2.6 | 6/19 HOLIDAY – NO CLASS |
| 6/23 2.6, 3.1, 3.2 | 6/24 3.2, 3.3, 3.4 | 6/25 3.4, 3.5 | 6/26 EXAM 1 3.5, 4.1 |
| 6/30 4.1, 4.2, 4.3 | 7/1 4.2, 4.3, 4.4 | 7/2 4.4, 4.5, 4.6 | 7/3 HOLIDAY – NO CLASS |
| 7/7 4.6, 4.7, 5.1 | 7/8 NO-CALCULATOR TRIG QUIZ 1 5.1, 5.2, 5.3 | 7/9 5.3, 5.5, 6.5 | 7/10 EXAM 2 6.5, 6.3 |
| 7/14 6.3, 6.4, 6.6 | 7/15 NO-CALCULATOR TRIG QUIZ 2 6.6, 6.7, 7.3 | 7/16 7.3, 8.1 | 7/17 EXAM 3 9.1, 9.2 |
| 7/21 9.3, 10.1 | 7/22 10.1, 10.2, 10.3 MAKE-UP EXAM | 7/23 10.5, review | 7/24 FINAL EXAM |

IMPORTANT DATES AND DEADLINES:

| | |
|---------|---|
| June 18 | Last day to add class |
| June 19 | Holiday |
| June 23 | Last day to withdraw without owing fees and/or be eligible for refund |
| July 3 | Holiday |
| July 16 | Last day to withdraw and receive a “W” |
| July 22 | Make-Up Exam |
| July 24 | Final Exam |



GET TUTORING HELP WHEN YOU HAVE QUESTIONS



1

Our class's own **embedded tutor, Jett Davis**, will be holding free tutoring sessions for several hours each week (solely for students in our Math 190 class).

[Please check email and Canvas announcements for days/times of Jett's review sessions as that information becomes available]

2

The Learning Support Services Center (in the IVC Library) will be offering tutoring during summer session, in the following forms:

- In person drop-in tutoring (no appointment necessary)
- In person tutoring by appointment
- Online tutoring via Zoom

Further detailed information will be listed on our Canvas site as it becomes available.

3

Although we do not have regular "office hours" during summer session, I will be available to help individual students and answer questions during our activity and "lab" portions of each class period.

A great deal of help is available for you, but you must be willing to take advantage of it in order to benefit from it!

"Never regard your study as a duty, but as the enviable opportunity to learn to know the liberating influence of beauty in the realm of the spirit for your own personal joy and to the profit of the community to which your later work belongs."

-- Albert Einstein

