Basic Course Information

Semester:	**Winter 2022**	Instructor Name:	**Caroline Bennett**
Course Title & #:	**Math 190: Pre-Calculus**	Email:	**caroline.bennett@imperial.edu**
CRN #:	**15126**	Webpage (optional):	**N/A**
Classroom:	**Building 2700, Room 2725**	Office #:	**Building 2700, Room 2765**
Class Dates:	**1/03/22 – 2/03/22**	Office Hours:	**Regular office hours do not apply during winter session; however, some 'office hour' times will be available in class and on Zoom**
Class Days:	**Mon/Wed: On campus** **Tues/Thurs/Fri: Online**	Office Phone #:	**(760) 355 – 6124**
Class Times:	**8:05 am – 11:55 am**	Emergency Contact:	**(760) 355 – 6155**
Units:	**5.0**	Class Format:	**Hybrid: Face-to-face (campus) AND Real-Time Online (synchronous)**

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.
~~Corequisite: Math 094 (Math 190 Support Course)~~

Should I take Math 190 as a short-term accelerated class?

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

- You are deficient in algebra skills (or haven't taken algebra in a long time)
- You have never taken trigonometry (or haven't taken trigonometry in a long time)
- You are unable to stay focused on math for 4-hour blocks of time
- You have difficulty with fast-paced math courses
- You 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+ hours at a time
- You have a solid foundation in basic algebra and trigonometry skills

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: bennett45852**

CALCULATOR (**REQUIRED**): A **scientific calculator** is required. A graphing calculator, such as the TI-83+, 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:

Online in-class activities	20*
Homework	100
Project (7 parts × 10 points)	70
Quizzes (4 × 15 points)	60
Midterm	100
Final Exam	+ 150
	500

GRADING SCALE

450 – 500	A
400 – 449	B
350 – 399	C
300 – 349	D
Below 300	F

*70% completion or higher:	20/20
50% - 70%:	15/20
25% - 50%:	10/20
10% - 25%:	5/20

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 treated equally.

NOTE: Grades are NOT posted in Canvas.

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

This course is in a hybrid format, meaning that it is a combination of both face-to-face lectures on campus and online (real-time) lectures via Zoom. BOTH of these are required components of this course. It is important to understand that this class is neither fully on-campus nor fully online. Pre-Calculus is available solely in one or both of those formats at other colleges as well as at IVC during the fall/spring semesters.

ONLINE COMPONENT

Online lectures will take place through Zoom on Tuesdays, Thursdays, and Fridays from 8:05 am – 11:55 am. Students are expected to engage, participate, and take lecture notes just as they would in a regular on-campus classroom. This roughly 4-hour block will include a combination of instructor lecture and short online assignments that must be completed during class time, as well as some opportunities for tutoring and open question/answer sessions (similar to office hours).

***The short online assignments through MyMathLab that are designated for class activities must be done during class time and cannot be "made up" later. This is because they are primarily about being present and participatory during class time. These are not to be confused with the longer "Homework" assignments in MyMathLab, which are to be completed on the students' own time.**

FACE-TO-FACE (ON CAMPUS) COMPONENT

On Mondays and Wednesdays, our class will meet in person on campus (room 2722) from 8:05 am – 11:55 am. Classroom time will also include a combination of instructor lecture and student activity time, as well as some opportunities for tutoring and open question/answer sessions (similar to office hours).

Quizzes and exams take place in person during on-campus class time. While students may sometimes be permitted to work together during quizzes, exams must be done individually. Quizzes and exams cannot be "made up" later online.

A series of "project" problems will be assigned during on-campus class periods as well. These may only be completed and turned in for credit during class (not online or after class). Please see "Project Problems" below for further detail.

TYPES OF ASSIGNMENTS

ONLINE: Short In-Class MyMathLab Assignments

One or more short online assignments will be assigned during each online class session (Mon/Wed), to help students reinforce and practice concepts from lecture. These are designated as in-class activities; therefore, they must be completed during class time and cannot be "made up" later. This is because these short assignments are about being present and participatory during class time.

ONLINE: Longer MyMathLab Homework Assignments

These are the official homework assignments that make up the "Homework" portion of the overall course grade (see point scale on page 3). These assignments are lengthier, as they 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 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.

Students can receive assistance from me on particular homework problems during designated "office hour" times during class, or from our embedded tutor during their review session times, or from any other math tutor provided by the IVC Study Skills Center or other tutoring resource. The sooner you get started on each assignment, the more time you will have to ask questions and get help on particular problem areas.

IN-CLASSROOM: Project Problems

During the 16-week semester, I normally assign one or more group projects that students collaborate on in their own time and turn in as a written homework assignment. For this short-term session, I will be selecting a subset of these project problems and featuring them 1 or 2 at a time in class, to be completed and turned in during class time. These will be considered as in-class activities reflecting student engagement and participation, and therefore cannot be "made up" later.

This "Project" will have 7 "parts" overall, comprising the Project component of the final course grade. An extra "8^{th} part" will take place during the last week. This 8^{th} part can be considered as a "make-up" for one previously missed part; if no parts are missed from 1 – 7, then the 8^{th} part will count as Extra Credit.

Each project part will be separately graded; therefore, it will not be necessary to compile them and turn it all in as one project (as is normally done during the fall/spring semesters). HOWEVER, a subset of the project problems will be selected to appear on the Final Exam. Therefore, it would be wise to keep all of your completed project problems together and organized, so that you will have them to refer to and study when the Final Exam is approaching.

IN-CLASSROOM: Quizzes

Quizzes take place during on-campus days (see Course Calendar on page 12 for quiz dates). A total of 4 quizzes will comprise the Quiz portion of the overall course grade. Students may be allowed to work together during quizzes, but each student turns in their own quiz. Quizzes must be taken in person. Only one missed quiz can be made up (see "Make-Ups" below). If no quizzes are missed, then students may elect to either skip the Make-Up Quiz or take the Make-Up Quiz and replace their lowest quiz score (this opportunity is forfeited if a quiz is missed).

IN-CLASSROOM: Exams

There will be a Midterm Exam and a Final Exam (see Course Calendar on page 12 for exam dates). Exams must be taken in person. Unlike quizzes, students may not work together during exams. Exams are closed-book and closed-note. Calculators may or may not be permitted, depending upon the content of the exam.

MAKE-UPS

Each student will have the chance to make up one missed quiz during the designated Make-Up Quiz on Monday, January 31. There is no "make up" for the Midterm or the Final Exam. **The only circumstances under which a missed Midterm or Final Exam can be made up are in cases of severe personal emergency (e.g., auto accident, urgent hospital visit, death in the family, etc.); documentation must be provided by the student (e.g., hospital intake or discharge papers, funeral notice, etc.).** NOTE: Out-of-town family trips and elective or cosmetic surgeries do not qualify as emergencies – see the Course Calendar on page 12 and make any such plans accordingly.

A NOTE ABOUT DEADLINES: Homework deadlines are strict. Please understand that I cannot extend homework deadlines for particular students because of a missed a due date. In the interest of equity and fairness, it is vital that all students be assessed with the exact same assignments and deadlines. It is each student's responsibility to log in regularly and keep track 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 the due date).

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.

What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment
- Student submission of an exam
- Student participation in an instructor-led Zoom conference
- Documented student interaction with class postings, such as an interactive tutorial or computer-assisted instruction via modules
- A posting by the student showing the student's participation in an assignment created by the instructor
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters
- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

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 important 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 on pp. 45-46 of the 2019-2020 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.

HOW AM I EXPECTED TO ACT IN AN ONLINE "CLASSROOM" (ESPECIALLY ZOOM)?

Attending a virtual meeting can be a challenge when there are many students on one conference call. Participating in such meetings may count as class attendance, but disruptive behavior may also result in you not being admitted to future meetings. Follow the tips below for best results:

1) **Be RESPECTFUL**
    a. Your written, verbal, and non-verbal communications should be respectful and focused on the learning topics of the class.
2) **Find a QUIET LOCATION & SILENCE YOUR PHONE (if zooming)**
    a. People walking around and pets barking can be a distraction.
3) **EAT AT A DIFFERENT TIME.**
    a. Crunching food or chugging drinks is distracting for others.
    b. Synchronous zoom times are set in advance so reserve meals for outside class meetings.
4) **ADJUST YOUR LIGHTING SO THAT OTHERS CAN SEE YOU**
    a. It is hard to see you in dim lighting so find a location with light.
    b. If your back is to a bright window, you will be what is called "backlit" and not only is it hard on the eyes (glare) but you look like a silhouette.
5) **POSITION THE CAMERA SO THAT YOUR FACE AND EYES ARE SHOWING**

a. If you are using the camera, show your face; it helps others see your non-verbal cues.
b. You may be at home, but meeting in pajamas or shirtless is not appropriate so dress suitably. Comb your hair, clean your teeth, fix your clothes, etc. before your meeting time to show self-respect and respect for others.

6) **Be READY TO LEARN AND PAY ATTENTION**
   a. Catch up on other emails or other work later.
   b. If you are Zooming, silence your phone and put it away.
   c. If you are in a room with a TV – turn it off.
7) **USE YOUR MUTE BUTTON WHEN IN LOUD PLACES OR FOR DISTRACTIONS**
   a. Pets barking, children crying, sneezing, coughing, etc. can happen unexpectedly. It's best if you conference in a private space, but if you can't find a quiet place, when noises arise **MUTE** your laptop.
8) **REMEMBER TO UNMUTE WHEN SPEAKING**
   a. Follow your instructor's directions about using the **"raise hand"** icon or chat function to be recognized and to speak, but make sure you have unmuted your device.
   b. Do not speak when someone else is speaking.
9) **REMAIN FOCUSED AND PARTICIPATE IN THE MEETING**
   a. Especially when the camera is on YOU, we can all see your actions. Engage in the meeting. Look at the camera. Listen to instruction. Answer questions when asked.
   b. Do not use the Zoom meeting to meet with your peers or put on a "show" for them.
10) **PAUSE YOUR VIDEO IF MOVING OR DOING SOMETHING DISTRACTING**

Emergencies happen. If you need to leave the room or get up and move about, stop your video.

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, receiving tutoring, etc., outside of class time. Since this is an accelerated 5-week course, more than 10 hours per week spent on Pre-Calculus outside of class should be expected in order to achieve success.

Out of class hours are at your discretion; however, it would be wise to set up and stick to a routine so that you follow the same structured schedule every week. This course will be extremely fast-paced and intensive. If you plan to stay in the class, it is a serious commitment.

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://imperial.edu/students/student-equity-and-achievement/

Anticipated Course Calendar

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

MONDAY (ON CAMPUS)	TUESDAY (ONLINE)	WEDNESDAY (ON CAMPUS)	THURSDAY (ONLINE)	FRIDAY (ONLINE)
1/3 Welcome, intro Ch. 1 misc. topics Project part 1	1/4 2.2, 2.3	1/5 2.3, 2.4, 2.5 Project part 2 Project part 3	1/6 2.5, 2.6	1/7 2.6, 3.1
1/10 3.2, 3.3 Project part 4 Quiz 1	1/11 3.4, 3.5	1/12 3.5, 4.1, 4.2 Project part 5 Quiz 2	1/13 4.3, 4.4, 4.5	1/14 4.5, 4.6, 4.7
1/17 **HOLIDAY** **NO CLASS**	1/18 4.7, 5.1, 5.2	1/19 5.2, 5.3 **MID-TERM**	1/20 5.5, 6.5	1/21 6.3, 6.4, 6.6
1/24 6.6, 6.7, 7.3 Project part 6 Quiz 3	1/25 7.3, 8.1	1/26 8.1, 9.1 Project part 7 Quiz 4	1/27 9.2, 9.3	1/28 9.3, 10.1
1/31 10.2, 10.3 Project part 8 Make-Up Quiz	2/1 10.3, 10.5	2/2 10.5, review **FINAL EXAM** **(IN-CLASS PORTION)**	2/3 **FINAL EXAM** **(ONLINE PORTION)**	

IMPORTANT DATES AND DEADLINES:

January 5	Last day to add class
January 9	Last day to withdraw without owing fees and/or be eligible for refund
January 18	Holiday – Martin Luther King, Jr. Day
January 26	Last day to withdraw and receive a "W"
January 31	Make-Up Quiz
February 2	Final Exam (in-class portion)
February 3	Final Exam (online portion)

☆ ☆ GET TUTORING HELP WHEN YOU HAVE QUESTIONS ☆ ☆

1

Our class's own **embedded tutor, Soknin Whitmer**, will be holding free tutoring sessions for 4 hours each week (solely for students in our Math 190 class).

Mon/Wed:	**1:00 – 2:00 pm**
Tues/Thurs:	**2:00 – 3:00 pm**

To access, click on "IVC Tutoring" from our Canvas page menu, or use the link provided in one of Soknin's announcements. Appointments are not necessary.

2

The Study Skills Center is holding online tutoring through Zoom:
https://www.imperial.edu/students/learning-services/study-skills-center/

Or, simply click on **"IVC Tutoring"** from the menu on the left of our Math 190 Canvas page. Appointments are not necessary for "drop-in" tutoring.

Lots of resources are available to help you succeed, but you must take advantage of them in order to benefit!

"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