Math 142 Fall 2021

Instructor: Alexa Serrato

Virtual Office hours:

- Monday, Tuesday, Wednesday, Thursday 1pm-2:15pm
- During Fall 2021 classes will be delivered remotely due to the ongoing pandemic. Meetings may occasionally require me to move my office hours. The calendar on Canvas will be updated each week to show available office hours time slots. Send me an email to arrange a meeting outside these times.

Email: alexa.serrato@bellevuecollege.edu

Let me know what method of communication you prefer. I can respond to math questions

- Directly by email
- Chat with me on Teams
- With an email attachment for symbolically heavy questions
- By audio call via Teams. If you would like to schedule an audio call with me, you can do so by using the calendar in Canvas. Each week I will create a set of 15-minute appoints where it will be possible for you to reserve a time. We can write on a shared virtual whiteboard together. You can reserve 2 consecutive time slots if needed. Instructions for scheduling an appointment in Canvas
- You can expect me to generally be responsive to email or chat messages on Teams on Monday-Friday 9am-5pm. I do anticipate a lot of messages this quarter, so please be patient. I will not be checking my email on weekends, holidays, or late in the evening. You can still email me and I will see it on my next working day.
- Please ask me **specific questions**. Instead of asking "How do you do problem 3 on the homework?" Clearly explain what you are working on, what you have tried, and what misunderstanding you might be having after consulting a similar example problem in your book or a posted video. If you send me a picture of your written work, I am often able to find where an error might have happened.

This class will be primarily asynchronous. This means that we will not all be meeting as one big group every day. Instead, there are videos, readings, homework, and projects on Canvas for you to complete when it fits into your day. There is a calendar of due dates at the very end of this syllabus to help you stay on track.

Math Lab

Please make use of the Math Lab. Anyone can participate in drop-in tutoring and you are encouraged to do so. The Math Lab is fully online.

Textbook

Our textbook is
Precalculus, 6th Edition by Blitzer
We will cover material from chapters 4, 5, 6, and 9
Upon registering for this class, you have already purchased online access to the book, homework, and supplementary content.

Expected Learning Outcomes

After completing this class, students should be able to:

- Evaluate, analyze, and graph trigonometric and inverse trigonometric functions.
- Solve trigonometric equations and non-linear systems of equations.
- Verify trigonometric identities and simplify trigonometric expressions.
- Analyze and graph conic sections and parametric equations.
- Evaluate, analyze and graph functions expressed in polar coordinates.
- Perform operations on vectors, including the dot product.
- Solve application problems.

Calculator

A TI-83 or TI-84 calculator is recommended. I will create videos that will show how to use some different features of this calculator. If you have a different kind of calculator, make sure that you know how to do the equivalent operations on your device.

Online Expectations

- **You are expected and encouraged to take initiative in asking questions whenever something is unclear.** As a part of your grade, you will be required to initiate communication where you ask a math question. You have the option to ask your math question to me, in the Math Lab, or to other students in the class. Asking questions is not a bad thing or something to be ashamed of, it is how you learn and grow!
- You should use your Bellevue College email or the Canvas messaging system in any communications with me, not a personal email address. You are expected to regularly check these accounts.
- For some assignments you will need to either
    - take a high-quality scan of some written work
    - take a clear picture of some of your written work
    - type your some of your work throughout the quarter
    - or write with a stylus pen on a tablet throughout the quarter
- For some assignments you will need to upload your work to Gradescope. Within Canvas there is a button on the left side Navigation panel that says Gradescope. I do not want to receive 36 emails each time an assignment is due, so I need you to properly upload your work to Gradescope. This includes specifying which page each problem can be found on and rotating any pages/pictures if necessary. You may lose up to one point on each assignment if it is not uploaded correctly. This short video shows how to upload your work to Gradescope.

- You are expected to utilize the available resources This means reading your textbook, reading the example problems from the sections that we will cover, watching the online videos, and completing online homework.

Homework

You can access your homework by clicking “IA Course Materials” on the navigation panel on the left side in Canvas, which will take you to the Pearson site. Homework due dates are listed in the calendar at the end of this document. You will have some homework problems for each section and also a review homework assignment for each chapter.

Quizzes

Quiz deadlines are shown in the calendar. You will have 2 attempts to take the quiz and 60 minutes for each attempt. If you have any questions about the quiz, please let me know because I am here to help! If you make an appointment to meet with me and talk about any questions that you are still struggling with, then I will re-open the quiz for an additional attempt if needed. Your best quiz score is the one that will be sent to Canvas.

Group Projects

During the quarter you will participate in 2 group projects. **You will receive detailed information about these projects later in a separate document.** You will be given time to form your own groups if you would like to choose your teammates. Then I will assign anyone who still needs to be assigned to a group. You can choose to meet over Teams or Zoom or some other platform that is mutually agreeable to all team members. Afterwards you will also need to fill out a Canvas survey about your team work experience.

Tests

There are three tests. Test dates are listed in the calendar and tests will be made available to you as a pdf on Gradescope. You will need to write your work down step-by-step with good notation and upload your work to Gradescope. Tests will be written such that it is expected that they can be completed within about 50-60 minutes, but you will have 2 hours to work on your test and upload work. On test days, the test will become available at 10am. You can choose when to take your test during the next 24 hours.

Post-Test Review

Following a test, if you earn less than 80%, you will have a post-test review assignment to complete. (For students earning 80% or greater, you do not need to complete this assignment.) This assignment will require you to go back, solve the problems that you missed, and find and solve another similar problem in either your homework, the video lectures, or in your textbook. More details about this assignment will be given to you after the first test.

Final Exam

A comprehensive final exam will be made available at 10am on Tuesday, December 14th through 10am on Wednesday, December 15th. Your final will be submitted through Gradescope. You will have 3 hours to upload work for the final once you begin.

Detailed Learning Objectives:

On each test and final, you will have the opportunity to demonstrate that you understand the following learning objectives. By the end of the quarter, you need to collect 1 point for each of these objectives.

Test 1 Learning Objectives:

1. Find exact values of trig functions at certain angles (with unit circle)
2. Use SOH-CAH-TOA relationships (to find unknown quantities)
3. Use SOH-CAH-TOA relationships when the angle is not necessarily in the first quadrant
4. Graph trig functions
5. Evaluate inverse trig functions (with unit circle, with calculator)
6. Trig applications involving bearings
7. Trig applications involving oscillating motion

Test 2 Learning Objectives:

8. Verify a trig identity algebraically
9. Verify a trig identity graphically
10. Use trig identities to find the exact value of an expression
11. Solve a linear trig equation
12. Solve a quadratic trig equation

Test 3 Learning Objectives:

13. Law of Sines and Cosines
14. Polar Coordinates and Graphs
15. Complex Numbers
16. Vector Applications
17. Dot Product

Learning Objectives before the Final:

18. Ellipses
19. Hyperbolas
20. Parabolas
21. Parametric Equations

Late Policy

A calendar is provided so that you can plan to manage your time. I will grade your work quickly. In return I expect that you turn in your work on time.

- Your homework due dates are listed in the calendar. If you do not meet that deadline, you can still turn it in prior to the day of the next test which will cover that content, but with a 5% penalty.
- Other assignments, including tests, the final, and group projects can not be turned in late unless there is documentation of extenuating circumstances.
- If during the entire quarter, you do not ask me to move any deadlines for you, then you will earn extra credit, equivalent to 0.5% of your grade.
- In the event of a true emergency that causes you to miss a test, talk to me. There is flexibility for other assignments to be weighted more for you to account for one missed test, although this is not ideal. If you find yourself missing two or more tests though, I will not have enough data to assign you a meaningful grade at the end of the quarter, and you may need to consider withdrawing if you are missing a substantial amount of coursework.

Withdrawing from the Course

If you no longer wish to be enrolled in the course then you must officially drop or withdraw from the course. If you simply stop attending the class, then you won't be removed from the roster and I will have to assign you a failing grade which will affect your GPA. The attached calendar shows the deadlines by which you can "drop" the course or withdraw from the course. If you drop the course, then there will be no record of the course on your transcript. If you withdraw from the course there will be a grade of W for this course on your transcript, but the W does not affect your GPA.

Assignments

Assignment Type	Points Awarded
4 Tests	40% (10% each)
Homework Assignments	20%
Quizzes	6%
HW Groups and Communication	2%
Post Test Review Assignments	2%
Two Group Projects	10% (5% each)
Learning Objectives	10%
Final Exam	10%

Table 1 Assignments which will determine your grade

Grade Based on Percentage

Percentage	Letter Grade
[93,100]	A
[90,93)	A-
[87,90)	B+
[83,87)	B
[80,83)	B-
[77,80)	C+

Percentage	Letter Grade
[73,77)	C
[70,73)	C-
[65,70)	D+
[60,65)	D
[0,60)	F

Table 2 How your letter grade is calculated

Disability Resource Center

The Disability Resource Center serves students with a wide array of learning challenges and disabilities. If you are a student who has a disability or learning challenge for which you have documentation, or if you have seen someone for treatment and feel you may need accommodations in order to be successful in college, please notify me and contact the DRC as soon as possible at drc@bellevuecollege.edu

Reasons of Faith and Conscience

Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made within the first two weeks of the course to the office of the Associate Vice President of Student Affairs (see Bellevue College Policy 2950). Brenda Ivelisse, b.ivelisse@bellevuecollege.edu, is the current Associate Vice President of Student Affairs. In the event you feel you are being discriminated against based on faith or conscience, you may refer to the procedures outlined in the college's Discrimination, Harassment and Retaliation Policy 1440P .

Affirmation of Inclusion

Bellevue College is committed to maintaining an environment in which every member of the campus community feels welcome to participate in the life of the college, free from harassment and discrimination. We value our different backgrounds at Bellevue College, and students, faculty, staff members, and administrators are to treat one another with dignity and respect.

Classroom Conduct and Academic Integrity

I want you to succeed and I encourage questions and participation. Show respect to me and also to your fellow classmates so that we can have a good quarter together. Specific student rights, responsibilities and appeal procedures are listed in the Student Code of Conduct

I take cheating very seriously. You, the student, are expected to conduct yourself with integrity. If you cheat or aid someone else in cheating, you violate my trust. Cheating includes, but is not limited to, copying answers on tests or assignments, glancing at nearby test papers, swapping papers, stealing, plagiarizing a solutions manual or other written work, copying solutions from online tutoring or homework help sites, and illicitly giving or receiving help on exams or assignments. If you cheat, the following actions will be taken:

1) You will receive a grade "0" on the work (exam, assignment, quiz, etc.) where the cheating occurred. This grade cannot be dropped.

2) A report of the incident will be sent to the Dean of Students. A report may be filed in your permanent record or further disciplinary action may be taken, such as suspension or expulsion from the college.

If you feel you have been unfairly accused of cheating, you may appeal.

Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. Should you choose to share information related to your life experiences with me, I will seek to keep information you share private to the greatest extent possible. However, I am required to share with the Title IX Coordinator any and all information regarding sexual assault and other forms of sexual misconduct (e.g. dating violence, domestic violence, stalking) that may have occurred on campus or that impacts someone on campus. I am a math instructor, not a counselor, but students may speak to someone confidentially by contacting the BC Counseling Center or the Title IX Office

Calendar

Below is a calendar of deadlines.

- You do not need to wait until the deadline to begin the assignment. You will probably find that the class runs at a better pace if you begin HW before the day that HW is due. (The **due date** shouldn't necessarily be the **do date**.)
- On any day that a Test is assigned, the Test will become available at 10am and it will be open for 24 hours, until 10am on the next day.
- On any day that HW or a Quiz is due, it is due at 11:59pm on the date shown.
- It will be possible to continue working on HW late for a 5% penalty up until the next test day. For example, Section 4.1 HW is due on Thursday, September 30th by 11:59pm for full credit. If you aren't able to finish the assignment, then you have until the end of the day on October 15th to finish. October 15th is the day of the first test and the purpose of the homework is to help prepare you for that test, so that is the final deadline for that HW.

Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
September 27 Review of Algebra Skills Watch Video 1	September 28 Read 4.1 Watch Video 2	September 29 Read 4.3 Watch Video 3 and 4	September 30 Read 4.2 Watch Video 5 **HW Due: 4.1 and 4.3**	October 1 Read 4.4 Watch Video 6
October 4 Read 4.4 Watch Video 7	October 5 Read 4.5 Watch Video 8 **HW Due: 4.2 and 4.4**	October 6 Read 4.5 Watch Video 9 **Quiz 1**	October 7 Read 4.6 Watch Video 10 **HW Due: 4.5**	October 8 Read 4.6 Watch Video 11 **Project 1 Groups are Assigned** **Deadline to Drop**

October 11 Read 4.7 Watch Videos 12 and 13 **Practice Gradescope Assignment Due**	October 12 Read 4.8 Watch Video 14 **HW Due: 4.6 and 4.7**	October 13 Read 4.8 Watch Video 15 **Quiz 2**	October 14 **HW Due: 4.8 and Chapter 4 Review**	October 15 **Test 1** **Project 1 is due**
October 18 Read 5.1 Watch Video 16	October 19 No Classes	October 20 Read 5.1 Watch Video 17	October 21 Read 5.1 Watch Video 18 **HW Due: 5.1**	October 22 Read 5.2 Watch Video 19
October 25 Read 5.3 Watch Video 20 **Post-Test Review 1 is Due**	October 26 Read 5.4 Watch Video 21 **HW Due: 5.2 and 5.3**	October 27 Read 5.5 Watch Video 22 and 23 **Quiz 3**	October 28 Read 5.5 Watch Video 24 and 25 **HW 5 Due: 5.4 and 5.5**	October 29 Read 5.5
November 1 **HW Due: Chapter 5 Review**	November 2 **Test 2**	November 3 Read 6.1 Watch Video 26	November 4 Read 6.1 Watch Video 27 **HW Due: 6.1**	November 5 Read 6.2 Watch Video 28
November 8 Read 6.3 Watch Video 29	November 9 Read 6.4 Watch Video 30 **HW Due: 6.2 and 6.3**	November 10 Read 6.4 Watch Videos 31 and 32 **Quiz 4** **Post-Test Review 2 is Due**	November 11 No Classes	November 12 Read 6.5 Watch Video 33 **HW Due: 6.4**
November 15 Read 6.6 Watch Video 34	November 16 Read 6.7 Watch Video 35 **HW Due: 6.5 and 6.6**	November 17 Read 6.7 Watch Video 36 **Quiz 5**	November 18 **HW Due: 6.7 and Chapter 6 Review**	November 19 **Test 3**
November 22 Read 9.1 Watch Video 37	November 23 Read 9.1 Watch Video 38	November 24 Read 9.2 Watch Video 39	November 25 No Classes	November 26 No Classes

November 29 Read 9.2 Watch Video 40 **Post-Test Review 3 is Due**	November 30 Read 9.3 Watch Video 41 **HW Due: 9.1 and 9.2**	December 1 Read 9.3 Watch Video 42 **Quiz 6** **Project 2 Groups are Assigned**	December 2 Read 9.4 Watch Video 43 **HW Due: 9.3**	December 3 Read 9.5 Watch Video 44 and 45
December 6 Read 9.5 Watch Video 46	December 7 **HW Due: 9.5 and Chapter 9 Review**	December 8 **Test 4**	December 9 Work on the Group Project, Final Review Assignment, and Post-Test Review 4	December 10 **Project 2 is Due** **Deadline to Withdraw with a W**
December 13 Student Success Day **Post-Test Review 4 is Due** **Final Review Assignment is Due by 11:59pm**	December 14 **Final Exam Available at 10 am**	December 15 Final Exam is closed at 10am	December 16	December 17 Winter Break