

**Math 153 - PreCalculus II
1231-154-S01**

Fall 2022- CWU Sammamish

Instructor Information

Name: Nelson LaPlante

Email: Nelson.LaPlante@CWU.edu Please use Canvas for quick response

Phone: (Sammamish) 509-963-3690

Office Location/Hours: Sammamish/Online through BlackBoard Ultra in Canvas and through Canvas Messaging at essentially all times, even weekends.

Class Hours: 9-9:50 am ~~and 12-12:50p~~ M-F

Office Hours: 10a-11p & after 2p

General Education at CWU

The General Education program prepares you for success at CWU and as a citizen in our dynamic, diverse, and global society. The program fosters integrated learning, enhancing your ability to make connections across courses and disciplines and to apply a breadth of knowledge to real-world problems. It will help you develop skills in critical thinking, clear communication, creative leadership, ethical decision making, and complex problem solving. Combined with your major, the General Education program will cultivate curiosity, empower personal development, strengthen understanding of and respect for diverse perspectives, and build a foundation for lifelong learning.

CWU General Education Program Goals

Explore: You will explore a breadth of knowledge, methods of inquiry and reasoning, and fundamental questions. That process will cultivate curiosity, facilitate the understanding of diverse perspectives, empower personal development and growth, and build a foundation for life-long learning.

Engage: As you engage with new knowledge, people, and perspectives, you will assume responsibility for your learning. In the process, you will develop enhanced communication—written and spoken—and critical thinking skills grounded in logic, reason, analysis, and synthesis. Combining these skills will enable you to employ multiple approaches to complex and real-world problems. As an engaged citizen, you will bring intellectual creativity and curiosity into your personal, civic, and professional life.

Connect: You will discover how disciplines, societal challenges, and cultures are interconnected. This process links coursework and community, local and global issues, past and present. Your ability to integrate learning will lead to new ways of thinking, analyzing, and interacting with our dynamic and diverse world.

Create: Your knowledge and skills will empower you to ask innovative questions and envision unique projects. This process of creative engagement will enable inquisitiveness and original thinking. It will provide you with agility for success in your career and life.

Empathize: Your General Education will facilitate open-mindedness and enable you to better understand and imagine others' experiences. As you become more knowledgeable and curious about the world, you will develop respect for diverse points of view, engage in ethical decision-making, and demand and demonstrate compassionate leadership.

CWU Diversity Statement

CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events.

Academic Conduct Code

All students enrolling in College of Business courses are expected to comport themselves in a professional manner consistent with Washington State law, CWU policy and the College of Business Honor Code. As College of Business students, we pledge to uphold these standards of professionalism and conduct ourselves in accordance with them. We will not lie, cheat, or steal, and will not tolerate those who do. Our behavior defines who we are and what we will become. Academic conduct encompasses integrity as well as professional behavior towards students, staff, and faculty.

All acts of dishonesty in any course work constitute academic misconduct. This includes, but is not limited to, cheating, plagiarism, fabrication of information, misrepresentations, and abetting of any of the above. Should you have any questions about plagiarism or any other forms of academic misconduct, please speak with me before submitting an exam/assignment.

Students violating CWU policy on academic dishonesty (see CWUP 5-90-040(22) and CWUR 2-90-040(22)) will at a minimum be given a score of zero on the relevant assignment/exam and at a maximum failed from the course and referred for further disciplinary action. In addition, CWU disciplinary policy

will be followed in the event that academic misconduct occurs. Students should refer to the CWU policy manual (section CWUP 5-90-010(4)) and the CWU Student Conduct Code (II.B) for more information.

Professional behavior is expected of all students. Students who deploy, threats, harassment, or a pattern of communications with the intention of damaging another student's reputation require professional interventions beyond what is available from this instructor, and clearly compromise the learning of other students in the class. Similarly, students who behave in a way that interferes with, impedes, or otherwise unreasonably hinders normal teaching, learning, research, administrative, or other functions, procedures, services, programs, or activities involved with the class. This behavior will lead to being excused from the remainder of the course with an "F". Such behavior is inexcusable.

Students engaging in Prohibited Student Conduct within the course as defined by Washington Administrative Code (See WAC 106-125-020) will face course sanctions, which can include being failed from the course. Further, these students will be reported to the College of Business Dean's Office and the Office of Student Success. This may result in additional punitive action.

CWU Accommodation for Religious Holidays

University Policy, CWUP 5-90-040(34), provides for reasonable accommodation of student absences for religious holidays in accordance with RCW 28B.137.010. Students seeking reasonable accommodations under this policy must provide written notice to their instructors within the first two weeks of class specifying the dates for which religious accommodations are requested. Contact the Dean of Student Success at (509) 963-1515 for further information.

CWU Accommodations for Disabilities

CWU is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any obstacles to learning, contact Disability Services to discuss a range of available options. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

CWU Statement on Sexual Misconduct

Central Washington University is committed to providing all community members with a learning and work environment that is free from sexual harassment and assault. Students have options for getting help if they have

experienced sexual assault, relationship violence, and sexual harassment, or stalking. Information can be found at <http://www.cwu.edu/wecare> and in CWUP 2-35-050: Sexual Harassment. Faculty are required to report information regarding sexual misconduct or related crimes. Students may speak to someone confidentially by contacting the CWU Wellness Center, 509-963-3213, or the CWU Student Counseling Clinic, 509-963-1391.

CWU Support for Student Emotional & Mental Health

Stress and other life circumstances that may be out of your control can make learning and focusing difficult. If you find stress or other mental health concerns make academics difficult, Central has resources to support you. I encourage you to reach out as soon as you notice you're struggling.

§ Student Counseling Services – crisis appointments available – 509-963-1391 – <http://www.cwu.edu/medical-counseling/counseling-clinic>

§ Mental health crisis support outside of normal business hours – 1-800-273-8255; Text HOME to 741741

§ Wellness Center – confidential sexual assault and other victim advocacy – 509-963-3213 – <http://www.cwu.edu/wecare/>

§ Disability Services – registration for accommodation – 509-963-2214 – <https://www.cwu.edu/disability-services/>

CWU General Safety Protocols & Guidelines for Public Health

Due to COVID-19, and under the directive and mandate of public health officials and the president of Central Washington University, students must adopt face covering protocol before entering any classroom or building at CWU until further notice. Students must also follow the social distancing placement marks in buildings and classrooms. If you do not have a face covering Central Washington University can provide one for you. If you have not yet received your CWU-supplied facial covering, please go the SURC Information Desk. Please do so prior to the start of your first class.

THIS SPECIFIC COURSE:

More Optional Course Materials Link (Professor Tim Brown's website)

<https://sites.google.com/site/timbrowncwuwebsite/math-153-pre-calculus-i>

FREE PDF Book- Link found on Home Page

Optional Materials

- Calculator- a Graphing Calculator is recommended, especially the TI-83/84 models. If you have another model, that's fine and none of these are necessary. I use the TI-30 which is a simple statistical calculator and more than adequate

- Paper for taking notes, graph paper is helpful for when we graph
- Pencils. I won't accept exams done with pen (not even those cool erasable pens)!

Required Materials

- Access to Canvas. I will post grades, notes, course syllabus, and other important stuff there.

Assignments will be found here.

Course Description :

Math 154 is a 5-credit course designed to develop both the concepts and the procedural skills in Trigonometry that will prepare you for the study of Calculus. Math 154 is a continuation of Math 153 with emphasis on trigonometric functions, Vectors, systems of equations, the complex numbers and the introduction to analytical geometry. It will involve the study of the unit circle, solving trigonometric equations, vectors, the complex numbers, and an introduction to analytic geometry.

Prerequisites: MATH 153 with a grade of C or higher or satisfactory score on the math placement test.

Learner Outcomes:

Upon successful completion of this course, the student will be able to:

- Model real phenomena using trigonometric functions.
- Convert between different units of angular measure.
- Analyze the effects of transformations on the graphs of trigonometric function
- Use and manipulate inverse trigonometric functions.
- Use trigonometric formula.
- Locate and determine features of trigonometric functions and their inverses.

Expectations/Policies

- All work turned in to me is preferably to be done in pencil again.
- Attendance: I do not take attendance on a regular basis (except for the first 3 days of the quarter).
As a policy I won't accept late work but if you have something message me about it and we can discuss it with reason.
- Grading:
I post grades on Canvas, Please let me know if you have any questions or concerns about a wrong grade or anything else!

KEY CANVAS COMPONENTS:

- **Course Information:** includes Course Syllabus and Course Policies
- **Announcements:** I post announcements occasionally. Be sure to get notifications on your phone via the Free Canvas App.
- **Weekly Lessons:** includes weekly assigned chapters, Exams (See Below), Homework (See Below), Discussion Board (See Below), Lecture Notes that contains chapter overviews, instructional objectives.
- **Modules:** Modules will appear according to the sectional topics and will consist of PDF worksheets to practice with, video and voice recorded lectures, and review exam material. BE Sure to Check the Module Tab weekly. Follow along with the Modules and Syllabus and you will know what to study for the week.
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Required Materials •

NO PURCHASE REQUIRED

Free PDF Book available on Canvas Files

The Goal is to cover all 3 Chapters (#s 4-6)

- Graphing Calculator is NOT required but is recommended model is TI-89 (I use a TI-30 statistics calculator and not a graphing calculator)
- Paper for taking notes, graph paper is helpful for when we graph
- Pencils. Exams should be done in Pencil
- Access to Canvas & email. I will post grades, notes, course syllabus, and other important stuff in Canvas and you can set up your account to get emails at every new announcement and with new assignments due.

Expectations/Policies

- All work turned in to me is preferably to be done in pencil.

- **Attendance:** I do not take attendance but I generally like to know who you are and know if you're here. Its not required but is beneficial for you.

If an assignment or take home quiz is due the day you will be absent, have someone turn it in for you, OR turn it in early or LET Me Know. I am always happy to work with you.

- **Grading:**

I post your grades on Canvas, make sure you let me know if you have any questions!

- o **Homework** should be done Daily but will not be due until the Unit Exam. It will count towards your grade for the course. HW for the unit is generally due the day of the chapter exam.

- o **Quizzes** I expect to give at least 1 for each section, most likely they will be take-home. You will have a day or more to work on it. These are OPEN EVERYTHING. Fridays will generally be Quiz-Day.

- o **Take Home Assignments** (Included in the HW grading **if** any are included) will be given in class or posted on Canvas. You will have 1 week to complete and turn in. Questions will be graded as right or wrong, partial credit will not be considered.

- o **Midterm Exams:** You will have 3 exams (100 points each). No retake exams will be given. If you are unable to attend class on an exam day, you must arrange with me PRIOR to the exam date. These are likely to be similar to last quarter though the last of them will be in-class.

- **Final Exam:** This will be given during the last week of class on the official Final Exam day and be done In-Class at the allotted time period during Finals' Week. It will consist of a nice mix of chapters 4, 5, & 6.

- **Cheating = Failure.** You will receive a zero (with no chance of makeup) if you copy, help, hint, check, etc. on a test or in-class quiz. That includes sharing information with your peers in other sections of my Math 154.

Letter Grades (based on total points possible at end of quarter, not weighted)

TOTAL	Grading Scale	Letter Grade
	93-100%	A
90-92%	A-	
87-89%	B+	
83-86%	B	
80-82 %	B-	
77-79%	C+	
73-76%	C	
70-72%	C-	
67-69%	D+	
63-66%	D	
60-62%	D-	
59% or less	F	

ASSIGNMENT GRADING WEIGHTS

EXAMS:

3 Midterms	15% Each	45%
Final Exam (in-class)		20%
QUIZZES		20%
HOMEWORK		10%
Special Assignment		5%

Important Dates:

January 17st – MLK Day
February 21st – Presidents' Day
 March 14th, - Study Day, No Classes
March 15th – 17th - Final Exams
 March 11th – Last Day of Classes

Challenges to Grades:

There is a statute of limitations of one week after assignments are graded for challenges to assignment, quiz, and exam points. This means you have one week to raise any issues with your grade. If you do not check GRADES in Canvas and do not realize until several weeks after an assignment is due that you did not hand it in, or that you sent it to the wrong place, it will be too late to make any grade changes. If you keep up to date by checking your e-mail, ANNOUNCEMENTS, and GRADES, you should have no issues. I will normally grade assignments within one week after they are due.

AT The End of the quarter I will post a non-graded 'assignment' called "FINAL GPA" which will be the grade posted to your transcript. Please be sure to view it and study it and make sure that all assignments are graded correctly so that I can make any necessary changes before I submit grades the weekend after the Final Exam is taken.

Basic Course Outline - Chapters 4-6

- **Content Explored**

Chapters by:

PDF-Larson/Hostetler

Chapter 5 - Trigonometric Functions

Chapter 6 - Periodic Functions

Chapter 7 - Trig Equations and Identities

Chapter 8 - Applications of Trigonometry

Chapter 9 - Conics

(Chapter Titles and Sections based off the PDF Link at the top)

This Textbook can be found in the Modules section of via the link on the Home Page

Course Schedule SEP Math 154: Precalculus II, Fall, 2018

Week 1: CH#5 – Trig Functions

Wed	1/5/19	Introduction/Orientation	9/2
TH	1/5	5.1	Circles
F	1/7	5.2	Angles/The Unit Circle

Week 2: Chapter #5 Continued

M	1/10	5.2	
T		5.3	Sin / Cos
W		5.3	
Th		5.4	Other Trig Functions
F		5.4	

Week 3: CH#5 – Continued

M	1/17	NO CLASS- PRESIDENTS'DAY	
T		5.5	Right Angle Trigonometry
W		5.5	
Th		Chapter 5 Review	
F		6.1-	Sinusoidal Graphs

Week 4: CH#6- periodic Functions

M 1/24	6.1
T	6.2 – Graphs of other Trig Functions
W	6.3 Inverse Trig Functions
<u>Th</u>	6.3
F	6.4 Solving Trig Equations

Week 5: CH#6 continued

M 1/31	6.4 Solving continued
T	6.5 Modeling with Trig Equations
W	6.5
Th	Chapter 6 Review
F	Exam I : Chapters 5 & 6

Week 6: Chapter 7 – Trigonometric Equations

M 2/7 –	7.1 Solving Trig Equations with Identities
T –	7.1
W	7.2 Addition and Subtractions identities
Th	7.3- Double Angle Ids
F	7.3

Week 7: Ch #7

M 2/14	7.4 Modeling Changing Amplitude and Midline
T	7.4
<u>W</u>	Chapter 7 Review
Th	8.1 – Non-Right Triangle : Law of Sine and Cosines
F	8.1

Week 8: Ch#8 – Further Applications of Trig

M 2/21	NO CLASS- PRESIDENTS' DAY
T	8.2 Polar Coordinates
W	8.2. Polar Coordinates
Th	8.3. Polar Form of Complex Numbers
F	8.4 Vectors

Week 9: Ch#8

M 2/28	8.4
T	8.5 Dot Products
W	8.5
Th	8.6 Parametric Equations
F	EXAM II – Chapters 8 & 9

Week 10: CH#9 – Conics

Catchup Week + Review

M 3/7	9.1 Ellipses
T	9.2 Hyperbolas
W	9.3 Parabolas and non-linear systems
Th	9.4 Conics in Polar Coordinates
F	Course Review

Week 11: FINALS WEEK

M	3/14/19 – NO CLASS- Study Day
T	
W	
TH	FINAL EXAM – Chapter 9 focused