



UNIVERSITY OF NORTHERN COLORADO

## Extended Campus

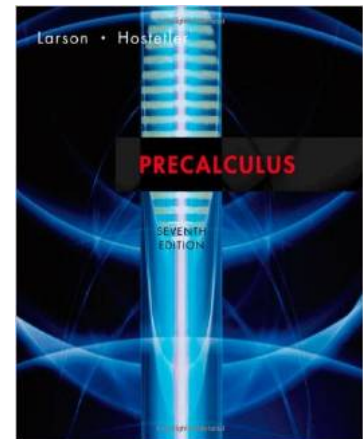
College of Natural & Health Sciences  
School of Mathematical Sciences

UNC Dual Enrollment at Severance High School

MATH 125-652: Plane Trigonometry (3 credits)  
Spring 2021  
How We Function

**Instructor:** Bryan Horn  
**Email:** bryan.horn@weldre4.org  
**Voicemail:** (970) 686-8100 x 3674  
**Office location:** Room B204 (WHS)  
**Office Hours:** 7:30 to 8:00 (T-F), 3:14 to 4:00 (M-F)

**Text:** Precalculus with Limits, Larson, Ron  
and Hostetler, Robert. 2007. Houghton  
Mifflin Company. ISBN 13:978-0-618-64344-8



As you have learned in your previous math classes, **you must take responsibility for your own learning**. Not only must you **complete** your assignment each day, you must also aim to complete it **correctly** each day...practicing concepts incorrectly is of no help. You should always work in pencil and you should always show your work because it communicates your thought process. **When you have questions make sure that you seek out the help that is needed, again mastering the concepts is YOUR responsibility!** I am available before school, during ELO, or after school by appointment. Please do not drop into my plan period, I need it for making copies, working with other teachers, grading, and planning.

**Expectations for Success:** You are responsible for your own learning and success...

- Be on time.
- Bring the required materials EVERYDAY!
- Be respectful of the learning environment, people, and their property.
- Be responsible for coming prepared to class and participating.
- Leave your cell phone out of sight!

### Supplies:

#### Required Everyday:

- Textbook
- Graphing calculator, bring them to class we will use them throughout the semester  
Acceptable models include TI-83, TI-83+, TI-84, TI-84+, all other models, please ask. (Instructor will be using a TI-84Plus CE)
- Graph paper
- Composition Book



- Pencils/extra lead

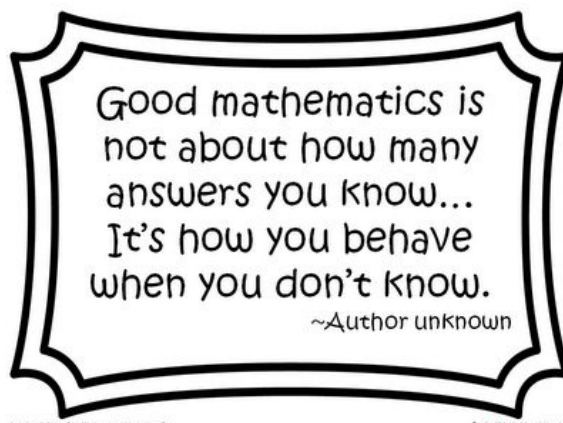
**Prerequisites For UNC Dual Enrollment:**

- Junior or Senior status
- 3.0 cumulative GPA
- Grade of “C” or better in College Algebra. A C- is not acceptable
- Counselor/Instructor approval prior to taking the course
- Parent consent
- Special Exemptions to these qualifications may be made on an individual basis through written request to UNC Extended Campus

**Course Description:** Topics covered in this course include circular functions and their applications, inverse trigonometric functions and identities, complex numbers and DeMoivre’s Theorem.

**Grading Scale:**

A	90.0-100%
B	80.0-89.9%
C	70.0-79.9%
D	60.0-69.9%
F	59.9% and below



**Grading Allotment:**

- 70% In-class exams and Quizzes
- 15% Comprehensive Final Exam
- 15% Activities/homework/SAT prep

**Course Requirements:**

Homework assignments will be given each class. The purpose of assignments and homework is to supplement work done in class. I will be logging some of your scores in infinite campus to track your practice habits and provide you with feedback. Many class activities will also be recorded, mostly for participation.

*It is my hope that this process will encourage you to understand the material, rather than just going through the motions of completing assignments.*

- Quizzes will be relatively frequent and will range in length. Quizzes can be announced and/or unannounced. If you are doing your work and understanding the material, quizzes will not be a big deal.
- Exams will be given approximately every 3 weeks. Because I announce tests at least a week in advance, you will be required to take the test even if you miss the review.
- Projects will vary, and details will be announced at the time I assign them.
- Comprehensive Final will be a summative evaluation of the semester.

**Portable Electronic Devices:**

Please extend courtesy to your instructor and fellow students by turning off your portable electronic devices such as: cell phones, pagers, and iPods. Although not an audio issue, text-messaging is a distraction to other students and prevents you from full participation in class. You should keep your portable electronic devices in your backpack or purse during class. Your personal electronic devices should not be on your desks. If you know that you may need to accept an emergency phone call during class, please let the instructor know Thank you for your cooperation.

**Honor Code:**

All members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community’s academic, professional, and personal growth. Endorsement of these core elements by students, faculty, staff, administration, and trustees strengthens the integrity and value of our academic climate.

**Academic Conduct: UNC's Policies:**

UNC's policies and recommendations for academic misconduct will be followed. For additional information, please see the Dean of Student's website: <http://www.unco.edu/dean-of-students/>.

**Disability Accommodations:**

Students with Individualized Education Plan will receive accommodations through Severance High School and will comply with the American Disabilities Act.

**Assignment Policy:**

As previously stated, homework assignments will be given each class.

- Quizzes will be relatively frequent, (expect 2-3 every unit chapter), and will range in length. Quizzes can be announced and/or unannounced. If you are doing your work and understanding the material, quizzes will not be a big deal.
- Tests will be given approximately every 2-3 weeks. Because I announce tests at least a week in advance, you will be required to take the test even if you miss the review.
- Projects will vary, and details will be announced at the time I assign them.

**Absences/Tardy Policy:**

Unexcused Absences: You are responsible for any content missed, but no credit will be given for missed assessments.

Excused Absences: Any quiz or test must be made up within one week after the original test date. If you only missed a review day or a test day, expect to take the test the day you return to school. *Please note that it is your responsibility to find time to come in outside of class to complete your test/quiz and to get any assignments or notes you missed.*

Tardy Policy: Prompt attendance is a key component to academic success. Attendance is taken at the beginning of each class period. If you are tardy to class, you must report to the Attendance Office for a tardy slip to be admitted to class. The teacher and/or administration may institute additional consequences including lunch detention, after school detention, etc. for students whom are repeatedly tardy to classes.

**SHS Dress Code (from student handbook):**

While in school and attending school sponsored events, your appearance should reflect good taste and decency. Clothing that is too revealing, contains references to alcohol or drugs can distract from or interfere with the instructional program or image of Severance High School:

\*Students are not permitted to wear hats, bandanas or any other head covering, including having the hood up on a shirt or sweatshirt;

\*Clothing must cover underwear, midriff, buttocks, lower back, and chest (covered when standing upright). Tank tops, spaghetti straps, or strapless tops are not allowed to be worn in school. Exposed back and low necklines are not acceptable for school;

\*Clothing made of see through materials or torn clothing may not expose underwear, midriff, lower back, or chest;

\*Short shorts and short skirts are not allowed in school during the school day. Skirts and shorts must be at least mid-thigh length;

\*Clothing that displays profanity, gang references, sexual innuendoes, and drug, tobacco, or alcohol references will not be permitted;

\*Any jewelry or accessories that could be used as a weapon will not be allowed (i.e. spikes, etc.);

\*Clothing that is pre-approved for a school sport or organization will be allowed with administrative permission.

Students who choose to violate the dress code will be asked to turn their shirt inside out, put on other clothes, or take off the unacceptable item. If a student does not have a substitute item of clothing, one will be provided by Severance High School. Failure to comply or multiple violations will result in disciplinary action.

**\*Liberal arts core & Colorado gtPathways.** This course satisfies 3 credits of Area 2. (Mathematics) of the UNC Liberal Arts Core. This course has been approved by the Colorado Commission on Higher Education for inclusion in the Colorado Guaranteed Transfer Program, gtP. gtP courses automatically transfer to any public institution in Colorado and will continue to count toward general education or other graduation requirements for any liberal arts or science associate or bachelor's degree program IF a grade of C- or higher is recorded. Statewide articulation agreements prescribe specific general education and degree requirements in the following

professional degree programs: business, early childhood, elementary education, engineering and nursing. Most other courses not approved for the gtP designation will also be accepted in transfer by other institutions but may not fulfill general education or degree requirements. For more information on the GT Pathways program, go to <http://higher.colored.gov/academics/transfers/gtpathways/curriculum.html>.

### **Changes**

The instructor reserves the right to amend, adjust, or otherwise modify the outline and syllabus at any time during the course. Changes will be announced in class and posted online on my website. The new syllabus will be available under the 'Syllabus' link.

*Students who successfully complete the Area 2 Liberal Arts Core requirement in mathematics will have developed an understanding of fundamental mathematical concepts and their applications, will have developed their quantitative problem-solving skills, and will have developed a level of quantitative literacy that provides a foundation for success in their programs of study, careers, and citizenship.*

*Specifically, they will be able to:*

- a) Demonstrate good problem-solving habits, including:
  - estimating solutions and recognizing unreasonable results
  - considering a variety of approaches to a given problem, and selecting one that is appropriate
  - interpreting solutions correctly
- b) Generate and interpret symbolic, graphical, numerical, and verbal (written or oral) representations of mathematical ideas
- c) Communicate mathematical ideas in written and/or oral form using appropriate mathematical language, notation, and style
- d) Apply mathematical concepts, procedures, and techniques appropriate to the course
- e) Recognize and apply patterns or mathematical structure
- f) Utilize and integrate appropriate technology
- g) Demonstrate competency in Quantitative Literacy by being able to:
  - 1) Interpret Information
    - a. Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
  - 2) Represent Information
    - a. Convert information into and between various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
  - 3) Perform Calculations
    - a. Solve problems or equations at the appropriate course level.
    - b. Use appropriate mathematical notation.
    - c. Solve a variety of different problem types that involve a multi-step solution and address the validity of the results.
  - 4) Apply and Analyze Information
    - a. Make use of graphical objects (such as graphs of equations in two or three variables, histograms, scatterplots of bivariate data, geometrical figures, etc.) to supplement a solution to a typical problem at the appropriate level.
    - b. Formulate, organize, and articulate solutions to theoretical and application problems at the appropriate course level.
    - c. Make judgments based on mathematical analysis appropriate to the course level.
  - 5) Communicate Using Mathematical Forms
    - a. Express mathematical analysis symbolically, graphically, and in written language that clarifies/justifies/summarizes reasoning (may also include oral communication).

Students will be assessed on the content and competency criteria through a combination of tests, quizzes and homework assignments.

### **Outline of Course Content: Major Study Units:**

- Radian measure, trigonometric functions, the fundamental identity.
- Graphs of trigonometric functions.
- Trigonometric identities

- Solving trigonometric equations
- Applications of trigonometry
- Complex numbers and trigonometry.

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### **Dropping or withdrawing from a course**

- *Note: Drop and withdrawal dates for the courses at your school can be found on your [dual enrollment page for your high school](#).*
- Please use the [Dual Enrollment Drop & Withdrawal Form](#).
- You can drop your course up until the designated Drop Deadline. The course will be removed from your transcript and you will receive a full tuition refund.
- After the Drop Deadline and up until the Withdrawal Deadline you can withdraw from your course. The course will remain on your transcript with a grade of “W” (this does not impact your GPA), and there is no tuition refund.
- After the withdrawal deadline you are unable to be removed from the course. The course will remain on your transcript with the grade that you have earned, and there is no tuition refund.
- If you stop attending the course but fail to officially withdraw from the course(s), you will be responsible for full tuition and fees and the course grade will remain on your transcript.

### **Paying Your Bill**

Tuition for this course will be billed directly to you by UNC. Any course materials costs (textbooks, digital access, etc.) would be a separate or additional expense.

Billing notification will be sent to your Bearmail (student email) account when your bill is ready. If you have not activated your Bearmail, directions are in the activation and registration instruction PDFs under item #2 of the [How to Register or Drop page](#).

All students will receive a bill. If you are responsible for paying your bill...

- Please pay your bill by the end of the month in which it was received to avoid finance charges.
- To view or pay your bill, log into Ursa and go to the *Financial* tab. You will not receive a bill in the mail; UNC has an eBill system.
- Further instructions for finding and paying your bill are available on the [UNC Bursar's website](#). Please contact Aimee Rogers at [970-351-2594](tel:970-351-2594) if you have any other billing concerns.