

Math 119 - Precalculus Trigonometry, Section 01

Mo, Tu, We, 10:00 – 10:50 am, SCI A225

**plus one virtual, asynchronous class session per week*

<u>Professor Information</u>	<u>Drop-In-For-Help Hours</u>
Mick Veum Point Campus Office: SCI D351 Wausau Campus Office: Room 087A mveum@uwsp.edu	<p>Mo, Tu: In-Person Option 12:00-12:25 pm, SCI D351 (Point) Zoom Option 12:25-12:50 pm</p> <p>Th: In-Person Option 12:00-12:25 pm, 087A (Wausau) Zoom Option 12:25-12:50 pm</p> <p><i>Feel free to email me to schedule an appointment at a different time if these do not work. Please also note that the 12:00 pm time slot will be available on certain Wednesdays when I have no department meetings. I will keep you informed week to week on that.</i></p>

Course catalog description: Trigonometric functions, their basic properties and graphs; inverse trigonometric functions; identities; applications. Preparation for MATH 225 if you did not place into MATH 225. May not earn credit in both MATH 119 and MATH 112. May not earn credit in both MATH 119 and UWX MA113.

Prerequisites: Math 107 or suitable placement test score

Text: Precalculus: Mathematics for Calculus, 7th Edition, by Stuart, Redlin, & Watson.

Calculators: You will need a scientific calculator for this course. Be sure your calculator has trigonometric and logarithmic functions. You may use a graphing calculator such as the TI-83. The use of computers, phones, smart watches, tablets, calculators with a CAS (computer algebra system), or calculators with a “QWERTY” keyboard (such as the TI-89 and TI-92) will not be allowed during exams. It is recommended that you regularly use your “exam calculator” for homework so that you are familiar with the functions while taking your exams. I personally use a TI-30XIIS, which is by no means a fancy calculator. It does the job.

Course Schedule: See the final page of this syllabus for a tentative course schedule of topics and for exams.

Keys to success: Actively engaging yourself in the class is your best bet for doing well. Attending class and doing your homework are the most important components to succeeding in the course. Study after study show this to be the case. Missing class regularly and putting minimal effort into your homework are a good bet for struggling in the class. **Learning mathematics takes time and practice. I strongly encourage you to work on your math homework a little each day rather than cramming once per week. Your brain simply needs time to process new mathematical concepts and techniques. Just like regular exercise gets your body in good physical condition, regular practice in mathematics gets your brain in good shape for exams and later coursework.**

Attendance: Regular participation is expected. Attendance to exams is required. Absences for serious illness, family emergencies, or University sponsored activities may be excused provided you adequately notify me by e-mail prior to the intended absence or provide documentation of an emergency.

Homework: Class sessions only introduce you to the material. Homework is where you get the necessary practice to master the topics. Homework is also where you figure out what topics give you the most trouble. Homework is assigned once per week and will consist primarily of problems from the text. Homework will be submitted on Canvas in a single PDF file. Your assignments will be graded based upon the effort you show, **meaning that you need to show your work to get full credit.** I will be looking for effort, not perfection. Strive for both, but your homework is a place where it is okay to struggle and get stuck on problems. You can still get full credit on your homework if you show that you made an honest effort. On the other hand, a correct answer without the supporting work will be worth little if any credit. Solutions to homework assignments will be provided in advance of exams. You are strongly encouraged to seek help when you are getting stuck on problems (see “Getting Help” section below). If assignments are late due to an excused absence, penalties will be waived if reasonable and timely communication is received by the instructor. Homework will be worth 25% of your final semester grade. Your lowest homework score will be dropped. The drop grade is there in case of illness, an emergency, etc. Use your drop grade wisely. More information about homework assignments will be provided during the semester.

Getting Help Outside of Class: There are a couple of ways to get academic support outside of class.

1. I will be holding regular drop-in sessions when you may stop into my office or see me on Zoom without an appointment. Those days and times are shown at the top of the syllabus. You may also check with me to see if I am available at other times. Please note that I am based on the Point Campus, but I spend Thursdays on the Wausau Campus. I can still be available through Zoom. Zoom links will be posted on the Canvas site.
2. The Tutoring-Learning Center (TLC) offers free drop-in one-on-one tutoring to support you in your math classes. The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and math content knowledge to help others succeed. Discussing mathematical concepts and practicing problems together clarifies and solidifies knowledge, and the tutors are eager to study with you. For tutoring information, go to: <https://www3.uwsp.edu/tlc/Pages/CA-tutoring.aspx> . Please note the “Visit Us” sidebar that has links for the Marshfield and Wausau campuses. For general information about the TLC, go to: <https://www3.uwsp.edu/tlc/Pages/default.aspx> .

Late Penalties for Homework: Homework assignments may be submitted late with a 25% reduction for each day that the assignment is late. Please note that this means the assignment is effectively closed after four days. Working regularly on your homework is your best bet for doing well in the course, so don't wait until the last minute to start working on your assignments. Still, a late submission of homework is better than not doing it.

Exams: There will be three 50-minute midterm exams and a cumulative final. Each of the midterm exams will be worth 17% of your final semester grade. The final will be worth 24%. Exams are frequent to keep you from falling behind in between exams. More detailed information on exams will be provided during the semester. See the final page of this syllabus for a tentative schedule.

Late exams will not be given without extenuating circumstances.

Grading: Grades will be based on the following percentages:

Homework: 25%
 Midterm Exams: 51% (17% each)
 Final Exam: 24%

93 - 100%	A	77 - 79.99	C+
90 - 92.99	A-	73 - 76.99 %	C
87 - 89.99	B+	70 - 72.99	C-
83 - 86.99	B	65 - 69.99	D
80 - 82.99	B-	0 - 64.99	F

I reserve the right to exercise discretion in raising a student's semester grade if I feel that the final weighted average does not properly reflect the quality of a student's work. I will *never* use discretionary judgments to lower a student's semester grade.

Canvas & UWSP Email: Canvas and email will be my primary means of communicating with students outside of class. Course materials and announcements will be frequently posted on Canvas. If you are not in the habit already, you will want to regularly check Canvas and email. Students are responsible for announcements made on Canvas and/or in lecture. Email is the best way to get in touch with me outside of class, and I will use email when/if I need to contact an individual student outside of class. All of these resources will be used for communication between the instructor and students. Students are responsible for reading all messages, announcements, and assignments posted on Canvas or sent through email. Students are also expected to make note of any announcements made during class.

Incompletes: A grade of incomplete may be given when circumstances arise which are beyond the student's control and the student is unable to complete the course AND the student is passing when the circumstances arise.

General Course Policies

1. Exams MUST be ONLY your own work. You are encouraged to work together or ask for assistance on homework (unless otherwise specified), but **it is your responsibility to understand and learn the content.**
2. As stated above, homework assignments may be submitted late with a 25%-per-day reduction in points awarded. There will be no extensions on any exams without valid extenuating circumstances.
3. Appeal of grading should be submitted in writing within 5 days of receiving the evaluation.

Disability Accommodations: Information regarding Section 504 of the Rehabilitation Act or the Americans with Disabilities Act can be found at the UWSP Disability and Assistive Technology Center site <http://www.uwsp.edu/disability>. To request any accommodations relevant to this class, please discuss the matter with the staff at the Center and communicate with the instructor for proper accommodations. If your accommodations are sent to the instructor via email, please take time to discuss them in person as well.

Community Bill of Rights and Responsibilities: You should be fully aware of your rights and responsibilities as a UWSP student. These are detailed in the UWSP Community Rights and Responsibilities found at <http://www.uwsp.edu/dos/Documents/CommunityRights.pdf>.

Title IX makes it clear that violence and harassment based on gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources at <http://www.uwsp.edu/DOS/sexualassault/Pages/default.aspx>.

Tentative Math 119 Schedule

Note that we don't actually meet on Thursdays. "Thursdays" will be virtual and asynchronous.
The virtual content will be posted on Thursday of each week.
The "cushion" days will be used for review and/or catch-up.

Week	Date	Topic	Text Contents
1	01/22/24	6-1	<p style="text-align: center;">CHAPTER 6 TRIGONOMETRIC FUNCTIONS: RIGHT TRIANGLE APPROACH</p> <hr/> <p style="text-align: center;">Chapter Overview 471</p> <p>6.1 Angle Measure 472</p> <p>6.2 Trigonometry of Right Triangles 482</p> <p>6.3 Trigonometric Functions of Angles 491</p> <p>6.4 Inverse Trigonometric Functions and Right Triangles 501</p> <p>6.5 The Law of Sines 508</p> <p>6.6 The Law of Cosines 516</p> <p style="text-align: center;">CHAPTER 5 TRIGONOMETRIC FUNCTIONS: UNIT CIRCLE APPROACH 401</p> <hr/> <p style="text-align: center;">Chapter Overview 401</p> <p>5.1 The Unit Circle 402</p> <p>5.2 Trigonometric Functions of Real Numbers 409</p> <p>5.3 Trigonometric Graphs 419</p> <p>5.4 More Trigonometric Graphs 432</p> <p>5.5 Inverse Trigonometric Functions and Their Graphs 439</p> <p>5.6 Modeling Harmonic Motion 445</p> <p style="text-align: center;">CHAPTER 7 ANALYTIC TRIGONOMETRY</p> <hr/> <p style="text-align: center;">Chapter Overview 537</p> <p>7.1 Trigonometric Identities 538</p> <p>7.2 Addition and Subtraction Formulas 545</p> <p>7.3 Double-Angle, Half-Angle, and Product-Sum Formulas 553</p> <p>7.4 Basic Trigonometric Equations 564</p> <p>7.5 More Trigonometric Equations 570</p>
	01/23/24	6-2	
	01/24/24	6-2	
	01/25/24	6-3	
2	01/29/24	6-4	
	01/30/24	6-5	
	01/31/24	6-6	
	02/01/24	6-6	
3	02/05/24	Cushion	
	02/06/24	Exam 1	
	02/07/24	5-1	
	02/08/24	5-2	
4	02/12/24	5-3	
	02/13/24	5-4	
	02/14/24	5-4	
	02/15/24	5-5	
5	02/19/24	5-6	
	02/20/24	Cushion	
	02/21/24	Exam 2	
	02/22/24	7-1	
6	02/26/24	7-2	
	02/27/24	7-3	
	02/28/24	7-3	
	02/29/24	7-4	
7	03/04/24	7-5	
	03/05/24	Cushion	
	03/06/24	Exam 3	
	03/07/24	Review	
8	03/11/24	Review	
	03/12/24	Final Part 1	
	03/13/24	Final Part 2	
	03/14/24	No Class	