

# Math 119, Section 1 Precalculus Trigonometry

# Spring 2019 Syllabus

<b>Maggie Milkovich</b> Office: B127 SCI Phone: (715) 346 – 4124 Email: <a href="mailto:mmilkovi@uwsp.edu">mmilkovi@uwsp.edu</a>	<b>Office Hours</b>	<b>Class Meets</b>
	2:00 – 2:50 Mon – Thurs 4-5 pm Mon – Thurs NOTE: Other office hours by appointment or discovery.	Monday – Thursday 3:00 – 3:50pm in SCI A225 <b>Final Exam: at the end of the 8 weeks, in class, possibly partly a take-home test.</b>

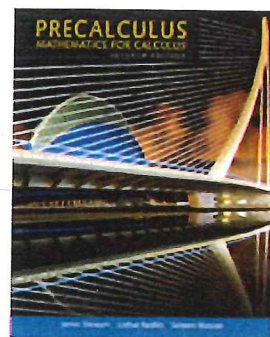
**MATH 119** Pre-calculus Trigonometry 2 credits  
 Trigonometric functions, their basic properties and graphs; inverse trigonometric functions; identities; applications. Preparation for 120 if you did not place into 120. (May not earn credit in both 112 and 119)

**Prerequisite:** Math 95 or suitable placement score.

**Text:** **PRECALCULUS: MATHEMATICS FOR CALCULUS**, 7<sup>TH</sup> EDITION, STEWART, REDIN & WATSON (CENGAGE)

**Calculators:** A graphing calculator is required for this course. Recommended calculators are the TI-83 or 84 (Plus), and TI-86. (If you plan to take Math 355, I suggest the TI-84 Plus.)

**Objectives** for students in this course: To gain a basic understanding of the topics in Chapters 5 – 7 of the text. To be able to think and communicate better mathematically through the study of trigonometry.



**Quantitative Literacy Learning Outcomes**

- Select, analyze, and interpret appropriate numerical data used in everyday life in numerical and graphical format.
- Identify and apply appropriate strategies of quantitative problem solving in theoretical and practical applications.
- Construct a conclusion using quantitative justification.

**Evaluation:** Your final course grade will be determined by the following weights:

20% for homework and worksheets	45% for Exams – 15% each
15% for quizzes – 5% each	20% for the comprehensive final exam

Homework will be checked randomly and will be collected and graded about once a week. Worksheets (when given) will be due the next class period. All quizzes will be announced in advance.

When you do your homework, it is advisable to do your work in an organized way (I suggest keeping a notebook so all your work is together). I expect to have well-written and well organized work to grade, so take my advice and develop that skill right away! I will try to model for you what organized, well written work is in class when I show examples.

**Grading Scale:**

<b>A:</b> ≥ 92%	<b>A –:</b> ≥ 90% but < 92%	
<b>B +:</b> ≥ 88% but < 90%	<b>B:</b> ≥ 82% but < 88%	<b>B –:</b> ≥ 80% but < 82%
<b>C +:</b> ≥ 78% but < 80%	<b>C:</b> ≥ 72% but < 78%	<b>C –:</b> ≥ 70% but < 72%
<b>D +:</b> ≥ 68% but < 70%	<b>D:</b> ≥ 64% but < 68%	<b>F:</b> < 64%

**Dates for the quizzes and exams, and assigned homework problems** are listed in the tentative schedule.

**Attendance** is expected at every class meeting. It is the student's responsibility to make every effort to keep up even if absent. Only in rare cases will I extend a homework due date beyond the automatic extension period. Quizzes and exams may not be made up unless arranged with me ahead of time, and then only for sufficient reason.

**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.

**For Help:** 1) Ask questions as they arise. Come to see me after class, during my office hours or schedule an appointment with me for another time. 2) Make use of the Math Room (SCI A113A). 3) Tutoring services are also available for this course through the TLC.

### **General Course Policies**

- 1) Pagers and cell phones should be turned off during class.
- 2) UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (library) as soon as possible. DATC can be reached at 715-346-3365 or DATC@uwsp.edu.
- 3) You should be fully aware of your rights and responsibilities as a UWSP student. Refer to <http://www.uwsp.edu/dos/Pages/Student-Conduct.aspx> for more information regarding the UWSP Community Bill of Rights and Responsibilities, the UWSP Student Academic Disciplinary Procedures, and the Non-Academic Standards and Disciplinary Procedures.

## TOPICS:

STARRED TOPICS (\*) WILL BE COVERED IF WE HAVE TIME.

### 5. TRIGONOMETRIC FUNCTIONS: UNIT CIRCLE APPROACH

- 5.1 The Unit Circle
- 5.2 Trigonometric Functions of Real Numbers
- 5.3 Trigonometric Graphs
- 5.4 More Trigonometric Graphs
- 5.5 Inverse Trigonometric Functions and Their Graphs
- 5.6 Modeling Harmonic Motion

\* Focus on Modeling: Fitting Sinusoidal Curves to Data

### 6. TRIGONOMETRIC FUNCTIONS: RIGHT TRIANGLE APPROACH

- 6.1 Angle Measure
- 6.2 Trigonometry of Right Triangles
- 6.3 Trigonometric Functions of Angles
- 6.4 Inverse Trigonometric Functions and Right Triangles
- 6.5 The Law of Sines
- 6.6 The Law of Cosines

### 7. ANALYTIC TRIGONOMETRY

- 7.1 Trigonometric Identities
- 7.2 Addition and Subtraction Formulas
- 7.3 Double-Angle, Half-Angle, and Product-Sum Formulas
- 7.4 Basic Trigonometric Equations
- 7.5 More Trigonometric Equations

### 8. POLAR COORDINATES AND PARAMETRIC EQUATIONS

- 8.1 \* Polar Coordinates
- 8.2 \* Graphs of Polar Equations

### 9. VECTORS IN TWO AND THREE DIMENSIONS

- 9.1 \* Vectors in Two Dimensions
- 9.2 \* The Dot Product

**SPRING SEMESTER 2019 1st 8 weeks**  
**Maggie Milkovich SCI B127**

	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
<b>11:00 AM</b>	<b>USUALLY HERE BY 11:30...</b>				
<b>12:00 PM</b>	<b>Math 355-5 A202</b>	<b>Math 355-5 A202</b>	<b>Math 355-5 A202</b>	<b>Math 355-5 A202</b>	<b>not</b>
<b>1:00 PM</b>	<b>Math 355-6 A202</b>	<b>Math 355-6 A202</b>	<b>Math 355-6 A202</b>	<b>Math 355-6 A202</b>	<b>on</b>
<b>2:00 PM</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>campus</b>
<b>3:00 PM</b>	<b>Math 119-1 A225</b>	<b>Math 119-1 A225</b>	<b>Math 119-1 A225</b>	<b>Math 119-1 A225</b>	<b>on</b>
<b>4:00 PM</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>OFFICE</b>	<b>Fridays</b>
<b>5:00 PM</b>	<b>Other office hours by discovery or appointment.</b>				