Math 119, Section 2 Precalculus Trigonometry Fall 2016 Syllabus

Maggie Milkovich Office: D260 SCI Phone: (715) 346 – 4124 Email: mmilkovi@uwsp.edu	**Office Hours** 11:00 – 11:50 Mon/Wed 2:00 – 2:50pm Mon - Thurs Other times by appointment or discovery. I will often be in my office from 5-6pm, Mon – Wed.	**Class Meets** Monday to Thursday 12:00 – 12:50pm in SCI D228 for the first 8 weeks of the semester. **Final Exam** – last day of class

MATH 119   Precalculus 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 100 or suitable placement score.

Text: PRECALCULUS: MATHEMATICS FOR CALCULUS, 7TH EDITION, STEWART, REDIN & WATSON (CENGAGE)
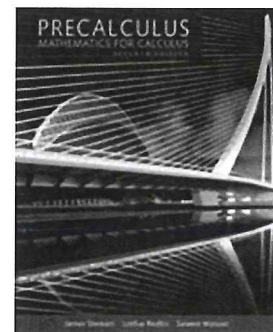
Calculators: A graphing calculator is required for this course. Recommended calculators are the TI-83 (Plus), TI-84, and TI-86.

Objectives for students in this course: To gain a basic understanding of most of the topics in Chapters 5 – 8 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:

22% for homework (done on WebAssign)   16% for quizzes – four quizzes, 5% each
42% for Exams – 14% each   20% for the comprehensive final exam
                                                                      (note that a portion of the final may be a take-home exam)

Grading Scale:

A:	≥ 92%		A – :	≥ 90% but < 92%		
B + :	≥ 88% but < 90%	B :	≥ 82% but < 88%		B – :	≥ 80% but < 82%
C + :	≥ 78% but < 80%	C :	≥ 72% but < 78%		C – :	≥ 70% but < 72%
D + :	≥ 68% but < 70%	D :	≥ 62% but < 68%		F :	< 62%

Dates for the **quizzes** and **exams** are listed in the tentative schedule.

Homework will be done using WebAssign. Assignments will have due dates, so pay attention to them. The lowest four homework grades will be dropped. Automatic extensions will be granted if you miss a due date, upon request. Any points earned after the due date will incur a 20% penalty.

When you do your homework, it is advisable that you do your work on paper in an organized way (I suggest keeping a notebook so all your work is together), just as you would do if you were doing the problems directly from the textbook and handing it in. Your exams and quizzes will be on paper, and I expect to have well written and organized work to grade, so take my advice and develop that skill when doing the homework! I will model for you what organized, well written work is in class when I show examples.

Attendance is expected at every class meeting. It is the student's responsibility to make prompt arrangements with me for finding out what was missed and for making up any assigned work in the case of an absence. 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 before or 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 (through the TLC) are available for this course. More specifics will be provided in class when they become available.

General Course Policies
1) Pagers and cell phones should be turned off during class.
2) Special consideration may be made for students with disabilities. 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 http://www.uwsp.edu/disability/Pages/default.aspx . To request any accommodations relevant to this class, you should first discuss the matter first with the staff at the Center. Details regarding the documentation necessary to qualify for accommodation can be found at http://www.uwsp.edu/disability/Pages/toQualifyForDisabilityServices.aspx .
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 Covered:

Note. The order of the sections listed below is not necessarily the order in which they are covered.

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

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 (OPTIONAL)

8.2   Graphs of Polar Equations (OPTIONAL)

9.   VECTORS IN TWO AND THREE DIMENSIONS
9.1   Vectors in Two Dimensions (OPTIONAL)

9.2   The Dot Product (OPTIONAL)

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FIRST 8 WEEKS: FALL SEMESTER 2016

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	
10:00:00 AM					
11:00:00 AM	office	Math 119-1 A 225	office	Math 119-1 A 225	(meets for first 8 weeks)
12:00:00 PM	Math 119-2 D 228	Math 119-2 D 228	Math 119-2 D 228	Math 119-2 D 228	
1:00:00 PM	Math 105-3 D 228	Math 105 - Tutor	Math 105-3 D 228	Math 105-3 D 228	
2:00:00 PM	office	office	office	office	
3:00:00 PM	Math 355-10 A202	Math 355-10 A202	Math 355-10 A202	Math 355-10 A202	
4:00:00 PM	Math 355-11 A202	Math 355-11 A202	Math 355-11 A202	Math 355-11 A202	