Math 118 - Precalculus Algebra, Sections 01, W01

Professor Info:	Class Meets	Zoom Drop-In Hours
Mick Veum SCI D351 mveum@uwsp.edu	M, Tu, W, Th 11:00 – 11:50 am CBB 269 Wausau Campus 220	Su, Mo, Th 6:00 – 6:50 pm *or by appointment*

Math 118 - Precalculus Algebra: 4 cr.
Topics include concepts, graphs, and properties of functions, inverse and algebraic functions, techniques of graphing, conic sections, linear and nonlinear systems, arithmetic and geometric series, mathematical induction and the binomial theorem. Preparation for Math 225 if you did not place into Math 225.

Prerequisites: Math 107 or suitable placement test score

Text: <u>Precalculus: Mathematics for Calculus</u>, 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.

Attendance: <u>Regular participation is expected</u>. Actively engaging yourself in the class is your best bet for doing well. Missing class regularly is a good bet for struggling in the class. 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.

Getting Help Outside of Class:

Homework: Homework is assigned once per week and will consist primarily of problems from the text. Homework will be submitted on Canvas <u>in a single PDF file</u>. 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 a correct answer without supporting work will be worth little if any credit. 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 two lowest scores will be dropped. More information will be provided during the semester.

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 six 50-minute midterm exams and a cumulative final. Each of the midterm exams will be worth 10% of your final semester grade. The final will be worth 15%. Exams are frequent to keep students from falling behind in between exams. More detailed information on exams will be provided during the semester. Midterm exams are tentatively scheduled for Mondays. 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:

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

Homework: 25%
Midterm Exams: 60%
Final Exam: 15%

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. 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 will be responsible (i.e. required, expected) for reading all messages and assignments posted on any of the above and in lecture.

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.

Week	Monday's Date	Text Sections, Topics (*Tentative Math 118 Schedule*)
1	09/04/23	1.1, Introduction; Real Numbers 1.2, Exponents; Radicals 1.3, Algebraic Expressions
2	09/11/23	1.4, Rational Expressions 1.5, Equations 1.5, Equations (Continued)
3	09/18/23	Exam 1 1.8, Solving Inequalities 1.8, The Boundary Point Method 1.9, The Coordinate Plane; Graphs of Equations; Circles
4	09/25/23	1.10, Lines 1.11, Solving Equations & Inequalities Graphically 2.1, Functions 2.2, Graphs of Functions
5	10/02/23	Exam 2 2.3, Getting Information from the Graph of a Function 2.4, Average Rate of Change of a Function 2.5, Linear Functions & Models
6	10/09/23	2.6, Transformation of Functions (Vertical & Horizontal Shifts) 2.6, Transformation of Functions (Stretching & Shrinking) 2.6, Transformation of Functions (Even & Odd 2.7, Combining Functions
7	10/16/23	Exam 3 2.8, One-to-One Functions 3.8/3.1, Inverses Functions/Quadratic Functions & Models 3.1/3.2, Quadratic Functions & Models/Polynomial Functions & Their Graphs
8	10/23/23	3.2/3.3, Polynomial Functions & Their Graphs/Dividing Polynomials 3.3, Dividing Polynomials (Continued) 3.4, Real Zeros of Polynomials
9	10/30/23	Exam 4 3.6, Rational Functions 3.6, Rational Functions (continued) 3.7, Polynomial & Rational Inequalities
10	11/06/23	4.1, Exponential Functions 4.2, The Natural Exponential Function 4.3, Logarithmic Functions 4.4, Laws of Logarithms
11	11/13/23	Exam 5 4.5, Exponential & Logarithmic Equations 10.1, Systems of Linear Equations in Two Variables 10.2, Systems of Linear Equations in Severable Variables
12	11/20/23	10.3, Matrices & Systems of Linear Equations (Graphing Calculator) 10.7, Partial Fractions (Cases #1 & #2) 10.7, Partial Fractions (Cases #3 & #4) Thanksgiving
13	11/27/23	11.2 (& 1.9), Ellipses (& Circles) 11.3, Hyperbolas 11.1, Parabolas 11.4, Shifted Conics
14	12/04/23	Exam 6 12.1, Sequences & Sigma Notation 12.2, Arithmetic Sequences 12.3, Geometric Sequences
15	12/11/23	12.6, The Binomial Theorem 12.6, Pascal's Triangle Review & Review
	Final Exam	Final Exam: As scheduled in your lecture classroom