

MA 130-001 Precalculus Fall 2009

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Class Time: TR 8:00 – 9:15 am
Classroom: Parkinson Hall 122

Office Hours: MTWR 1:00-2:00pm, T 11:00-12:00pm
or, by appointment

I should always be the first person you come to with your questions. You can also contact Academic Support Services to set up a tutoring time with a mathematics tutor at no charge to you.

Textbook and MyMathLab Student Access Code: *Precalculus* (4th Edition) by Lial, Hornsby, & Schneider; Pearson Addison-Wesley. Chapters 4-11 will be covered as time permits. You need Student Access Code to register for MyMathLab. See page 6 for details.

Graphing Calculator: A graphing calculator is highly recommended for this course. The symbolic calculators (such as the TI-89 and TI-92 or their Casio or Sharp equivalents), cell phones, and personal digital assistants (PDAs) may **not** be used for in-class assessments in this class. If you have questions concerning this requirement, please see me. I will be using a TI-83 for demonstrations in class.

Prerequisite: MA 113 College Algebra or 3 years high school mathematics including 2 years of algebra

Nature of Course Content: This course covers exponential and logarithmic functions, trigonometric functions, the circular functions and their graphs, trigonometric identities and equations, applications to trigonometry, system of matrices, sequences and series. Emphasis will be given on knowledge, skill, and techniques needed in higher level mathematics courses such as Calculus I.

Disabilities Statement: Students with Disabilities: It is the responsibility of students who have professionally diagnosed disabilities to notify the instructor so that necessary and appropriate modifications can be made to meet any special learning needs.

Homework Assignments: Homework will be assigned in MyMathLab and graded by the work submitted in a timely fashion. ***Please get your MyMathLab account set up immediately. No late homework submission is accepted.*** The system itself will not allow you to submit your work after a deadline. It is ***your responsibility*** to set up an active MyMathLab account and familiarize with this system. It is also ***your responsibility*** to check homework deadlines and make sure your work is submitted in timely fashion.

Desired Student Goals and Outcomes: After successful completion of the course, the student should be able to:

1. evaluate exponential, logarithmic, and trigonometric functions;

2. solve exponential, logarithmic, and trigonometric equations;
3. recognize and understand fundamental trigonometric identities;
4. understand trigonometric identities, and double angled identities;
5. find the function values of inverse trigonometric functions;
6. apply trigonometric identities and equations to any other general triangles to establish the Sine and Cosine laws;
7. solve systems of linear equations;
8. apply matrix solution method to solve linear systems;
9. apply determinant solution method to solve linear systems;
10. find partial fractions;
11. solve some nonlinear systems of equations;
12. recognize and understand the concept of sequences (arithmetic and geometric) and series of numbers;
13. recognize conic sections (parabolas, ellipses, hyperbolas) and understand their definitions along with defining equations; and

meets the University Core learning objective stated as: “Demonstrate fundamental skills and understand mathematical concepts sufficient to do complex computations in Algebra, Trigonometry, Calculus, or Discrete Mathematics.”

Requirements of the Course/Method of Evaluation/Makeup Policy:

The student is expected to:

1. attend and participate in at least 70% of all class meetings (maximum of 8 absences);
2. read the text and other related reading assignments;
3. complete daily homework assignments;
4. submit and/or turn in all assignments when due or receive no credit; and
5. take and pass the following tentatively scheduled tests and a comprehensive final examination.

Test 1	Tuesday, September 8	15%
Test 2	Thursday, October 1	15%
Test 3	Thursday, October 29	15%
Test 4	Thursday, November 19	15%
Homework (MyMathLab) http://www.coursecompass.com Course ID: adhikari53038	26 assignments	15%
Comprehensive Final Exam	Tuesday, December 1, 8:00 – 11:00am	25%

All tests and final exam are closed book, closed notes; graphing calculators will be allowed. ***There will be no makeup tests*** unless one encounters an emergency situation (not just a minor headache, etc). A possible excuse **MUST** be documented and a relatively harder makeup test might be arranged under the instructor’s discretion. Otherwise, a grade of zero will be assigned for each missed test. If you need to leave a test for any reason, the test will be turned in and scored as is. ***There will be no makeup***

for final exam. Under no circumstances will the final exam be given on an earlier date.

Final exam percentage may be used to replace your lowest test score if it helps your average. Only one test score can be replaced by your final exam percentage. There will be no extra credit in this course. Work hard to achieve and maintain the grade you want out of the course through the regular assignments and tests that are given.

Topics in the Order They Will be Covered as Time Permits

Weeks 1-2 Chapter 4: Inverse, Exponential, and Logarithmic Functions

Inverse Functions; Exponential Functions; Logarithmic Functions; Evaluating Logarithms and the Change-of-Base Theorem; Exponential and Logarithmic Equations; Applications and Models of Exponential Growth and Decay

Weeks 3-4 Chapter 5: Trigonometric Functions

Angles; Trigonometric Functions; Evaluating Trigonometric Functions; Solving Right Triangles

Weeks 4-6 Chapter 6: The Circular Functions and Their Graphs

Radian Measure; The Unit Circle and Circular Functions; Graphs of the Sine and Cosine Functions; Translations of the Graphs of the Sine and Cosine Functions; Graphs of the Tangent, Cotangent, Secant, and Cosecant Functions

Week 7-9 Chapter 7: Trigonometric Identities and Equations

Fundamental Identities; Verifying Trigonometric Identities; Sum and Difference Identities; Double-Angle and Half-Angle Identities; Inverse Circular Functions; Trigonometric Equations; Equations Involving Inverse Trigonometric Functions

Week 10-11 Chapter 8: Applications of Trigonometry

The Law of Sines; The Law of Cosines; Parametric Equations, Graphs, and Applications

Week 11-13 Chapter 9: Systems and Matrices.

Systems of Linear Equations; Matrix Solution of Linear Systems; Determinant Solution of Linear Systems; Partial Fractions; Nonlinear Systems of Equations; Systems of Inequalities and Linear Programming; Properties of Matrices; Matrix Inverses

Week 14 Chapter 9: Chapter 11. Further Topics in Algebra

Sequences and Series; Arithmetic Sequences and Series; Geometric Sequences and Series; The Binomial Theorem

Week 15 Chapter 10: Analytic Geometry

Parabolas; Ellipses; Hyperbolas

Attendance Policy: Students must attend at least 70% of the classes in a Department of Sciences and Mathematics course. This means that you may have a maximum of **8**

absences, and if more classes than that are missed, the grade given must be an F, regardless of the quality of your work in the course. Repeated late arrivals to class are a distraction to the instructor and other students. Please do not leave class early for any reason other than due to an emergency.

Classroom Behavior: All cell phones must be turned off in the classroom. You are expected to arrive on time, be ready to begin class at the specified class time, and not be disruptive during class. Instructor may ask you to leave the class for any disruptive behavior and report this to the academic early alert program of the university.

Early Alert Program: As one part of the academic early-alert program, students who perform poorly at midterm (falling below a midterm semester GPA of 2.0) will have holds placed on their accounts. The early-alert holds for poor midterm performance serve not as a punitive measure, but rather as an opportunity for students to seek the advice of their faculty advisors at a crucial moment in the semester. Students who have early-alert holds on their accounts for poor midterm performance should schedule meetings with their faculty advisors, who will work with the students to draw up action plans for academic success. Once those plans are in place, the early-alert holds for poor midterm performance will be released.

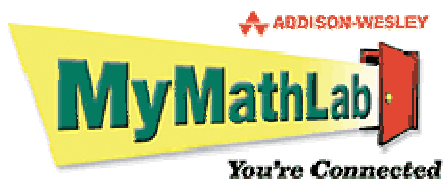
Academic Dishonesty: The Academic Dishonesty section under Academic Information in the MUW Student Handbook clearly defines cheating and plagiarism. In the event of academic dishonesty, you will be held to the Academic Standards described under Student Rights and Responsibilities.

Grading Scale: Final letter grades will be assigned according to the following scale:

A	90% to 100%
B	80% to 89.9%
C	70% to 79.9%
D	60% to 69.9%
F	below 60%

Important Dates:

8/18 is last day to add, change AU to CR, or change to P/F
9/16 is last day to drop a class with a W or to change major
10/14 is last day a course may be dropped
11/6 is last day to withdraw from MUW



**Student Registration for MyMathLab
MA 130-001 TR 8:00 Fall 2009**

MyMathLab is an interactive website where you can:

- Take tests or do homework assigned by your instructor
- Self-test, work practice problems, and get tutorial help to improve your math skills
- View videos for further understanding
- Explore interactive animations in the Multimedia Textbook
- Use customized materials prepared by your instructor

What do you need to get started?

<input checked="" type="checkbox"/>	A Valid Email Address	<i>Don't have it yet?</i> Contact your school's technology center, or set up an e-mail account through a free service such as Hotmail or Yahoo.
<input checked="" type="checkbox"/>	Course ID	The Course ID for your section is: adhikari53038
<input checked="" type="checkbox"/>	Student Access Code	Your textbook for the course has been packaged with a free Student Access Kit for MyMathLab. To register for MyMathLab, open your access kit to obtain your Student Access Code.

You may go to the link

http://www.coursecompass.com/help/WebHelp/how_students_enroll.htm
for more detail.

What steps do you take next?

Go to <http://www.coursecompass.com/> and click on Student: Register.

Follow the on-screen instructions to enter your student access code and Course ID, provide contact information, and create your own unique login name and password.

IMPORTANT!!!: Install required plug-ins on EVERY computer from which you plan to access MyMathLab. The plug-ins you will need to install can be found at <http://mathxl.com/bothmmlwiz/default.htm> or from the link for the “Installation Wizard” on your announcements page when you log in to your course

After you've registered, Log In with your new login name and password at <http://www.mymathlab.com> (bookmark this URL).

To access an online orientation for the student registration process, visit <http://www.aw-bc.com/orientation/math.html#mymathlab>

If you need Technical Support, e-mail support@coursecompass.com or call 1-800-677-6337.