

MTLC SYLLABUS FOR MATH 112 - FALL 2003

COURSE TITLE: Precalculus Algebra

CREDIT: 3 semester hours

PREREQUISITE: Grade of “C-“ or better in Math 100 or a minimum of 310 (or 31) on the math placement test.

COURSE DESCRIPTION: This is a course in Precalculus mathematics. These sections are computer-assisted sections in which students will use the computer (along with the instructor) to complete the course. Topics include linear, quadratic, and rational equations and inequalities, the algebra of functions (including polynomial, rational, exponential, and logarithmic functions), the graphs of these functions, systems of equations, and the binomial theorem.

COURSE OBJECTIVE: Upon completion of this course, the student will be able to perform operations on polynomial, rational, exponential, and logarithmic functions. The student will also be able to graph these functions using techniques and information gathered about the functions, solve linear, quadratic, exponential, logarithmic, and absolute value equations, solve systems of equations, and expand binomials using the binomial theorem. Evaluation will be based on quizzes, tests, and attendance.

Text: Precalculus 2nd Edition with MyMathLab **Authors:** Lial/Hornsby/Schneider **Publisher:** Addison Wesley

CALCULATOR: A scientific calculator is needed for some exercises, and may be used on all quizzes, tests, and the final exam. **Sharing of calculators is not allowed on tests.**

DISABILITY ACCESS STATEMENT: For those students wishing to request disability accommodations, please contact the Office of Disability Services at 348-4285. After initial arrangements are made with that office, then contact your professor. Your professor will be glad to work with you to make sure your needs are properly met.

TEST DEADLINES:

Test 1	Monday or Tuesday	September 15 or 16
Test 2	Monday or Tuesday	October 6 or 7
Test 3	Monday or Tuesday	October 27 or 28
Test 4	Monday Tuesday, or Wednesday	November 24, 25, 26
Final Exam	Monday Tuesday, Wednesday, or Thursday	December 8, 9, 10, 11

REGISTRATION DEADLINES:

Friday, September 12 at Noon
Friday, October 3 at Noon
Friday, October 24 at Noon
Friday, November 21 at Noon
Friday, December 5 at Noon

Test times available: 8:00 am, 9:45 am, 11:30 am, 1:15 pm, 3:00 pm, 4:45 pm, 6:30 pm

Final Exam times available: 8 am, 11 am, 2 pm, 5 pm

- You **must** make a reservation for a computer for these test days. The website for registering is www.mtlc.ua.edu. All test reservations must be made during open registration on the web the week before the test. The deadline for registering is Noon on the Friday preceding the test deadline. Reservations can be made **in person** in the lab from Noon to 5:00 pm on Friday, but a 5-point deduction will be assessed. There will be a 10-point deduction for failure to reserve a test time by 5:00 pm Friday. Reservations are not needed for tests taken before the deadline.
- No tests will be given on Sundays or after 8:30 pm any evening or 3:30 on Friday.
- You will be given 75 minutes for each of the 4 tests. You will be given 2½ hours to complete your final. Do not be late for your tests. Any tardiness will cost you working time on your test.

COURSE GRADES: This course is under the “A, B, C, NC” policy, +/- grades will be given. The course grade is determined by points earned as follows:

<table border="0"> <tr> <td>4 Tests</td> <td>400 points (100 points each)</td> </tr> <tr> <td>Final Exam</td> <td>300 points</td> </tr> <tr> <td>Quizzes</td> <td>160 points (40 points each test period)</td> </tr> <tr> <td>Homework</td> <td>68 points (17 points each test period)</td> </tr> <tr> <td>Lab Attendance</td> <td>42 points (3 points for each week)</td> </tr> <tr> <td>Class Meetings</td> <td>26 points (2 points for each week)</td> </tr> <tr> <td>Surveys & email requirement</td> <td>6 points</td> </tr> <tr> <td>Total</td> <td>1002 points</td> </tr> </table>	4 Tests	400 points (100 points each)	Final Exam	300 points	Quizzes	160 points (40 points each test period)	Homework	68 points (17 points each test period)	Lab Attendance	42 points (3 points for each week)	Class Meetings	26 points (2 points for each week)	Surveys & email requirement	6 points	Total	1002 points		<p style="text-align: center;"><i>COURSE GRADE SCALE</i></p> <table border="0" style="width: 100%;"> <tr> <td><i>A+</i></td> <td><i>980 - 1001,</i></td> <td><i>A</i></td> <td><i>920 - 979,</i></td> <td><i>A-</i></td> <td><i>900 - 919</i></td> </tr> <tr> <td><i>B+</i></td> <td><i>880 - 899,</i></td> <td><i>B</i></td> <td><i>820 - 879,</i></td> <td><i>B-</i></td> <td><i>800 - 819</i></td> </tr> <tr> <td><i>C+</i></td> <td><i>780 - 799,</i></td> <td><i>C</i></td> <td><i>720 - 779,</i></td> <td><i>C-</i></td> <td><i>700 - 719</i></td> </tr> <tr> <td colspan="6"><i>NC - Below 700</i></td> </tr> </table>	<i>A+</i>	<i>980 - 1001,</i>	<i>A</i>	<i>920 - 979,</i>	<i>A-</i>	<i>900 - 919</i>	<i>B+</i>	<i>880 - 899,</i>	<i>B</i>	<i>820 - 879,</i>	<i>B-</i>	<i>800 - 819</i>	<i>C+</i>	<i>780 - 799,</i>	<i>C</i>	<i>720 - 779,</i>	<i>C-</i>	<i>700 - 719</i>	<i>NC - Below 700</i>					
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Note: The last day to drop this course is August 27, 2003. No withdrawals from this course can be made after this date.

Each student is required to have an e-mail address in order to register on the computer in the appropriate class. If a student needs an e-mail address, one can be activated by going to the help desk at Seebeck in Gordon Palmer Hall.

QUIZZES: There will be a quiz given on each section covered. There will also be a **comprehensive** quiz on test material before each test. For each test period you will be allowed to drop two section quiz grades. The grade on the comprehensive quiz CANNOT be dropped. The remaining quizzes will be averaged and converted to the 40 points you earn for each test period.

HOMEWORK: Homework will be assigned for each section. For each test period students will be allowed to drop two homework grades. The homework grade will be calculated by taking the average of each of the remaining grades on the homework sections assigned and converting this to the 18 points you earn for each test period. Homework must be completed before the expiration date and **you must click the “hand in homework button” in order for it to count.**

The Math 112 software can be installed on the student’s personal computer. Internet access is required in order to reach the website where the notes, homework, and exercises are found. **All graded work should be completed in the MTLC. Students doing graded work from home risk grades not being properly saved. The correct TestGen plugins must be downloaded to successfully take quizzes from home. If grades are not successfully sent from home the student will NOT be able to make up this work at a later date. Tests must be taken in the MTLC.**

MAKE-UP POLICY: No makeup work will be allowed. The two lowest quiz grades and two lowest homework grades will be dropped in each period to account for any missed assignments due to illness or any other circumstances. If a test is missed due to a serious verifiable circumstance, the zero test grade will be replaced with the final exam grade. Students who must miss work or tests due to official University business must make arrangements for makeup work **beforehand**. Excuses must be taken to the math department (345 Gordon Palmer) within 2 days of the missed work.

REPLACEMENT POLICY: Everyone will be allowed to replace his/her lowest test grade with the grade made on the final exam. However, zeros due to an unexcused absence or academic misconduct will not be replaced. Students who miss a test and have an excuse will have the missed test replaced if the petition request panel approves the excuse.

ATTENDANCE: You will be required to attend your regular scheduled class times from Aug. 20 – Aug. 29 for orientation. After orientation, you are required to work in the lab a minimum of 3 hours each week and attend your regularly scheduled class meeting for 1 hour each Wednesday. **Attendance credit will start on Sunday August 24, 2003.** Lab attendance points are determined as follows: 3 hours – 3 points, 2 hours – 2 points, 1 hour – 1 point, less than 1 hour – 0 points. Class attendance is worth 2 points each week. For the weekly class meetings students will report to the classroom listed on their schedule. Weekly Lab attendance is counted from Sunday through Friday.

Students will complete assigned work in the MTLC during the following hours:

Sunday	4:00 pm – 10:00 pm
Mon – Thurs.	8:00 am – 10:00 pm
Friday	8:00 am – 5:00 pm

Lab hours are counted Sunday – Friday
You must swipe your ACT card to receive credit for your attendance. No exceptions.

MTLC INFORMATION
Phone number: 348 – 2592
Website: www.mtlc.ua.edu

The lab will be closed on Sunday 8/31 and Monday 9/1 for the Labor Day Holiday. The lab will be closed Wednesday 11/26 at 5:00 pm for the Thanksgiving Holiday and will reopen at 8:00 am, Monday, December 2.

<i>Test 1 Material</i>		
Section	Title	Completion Deadline
	Syllabus Quiz	Wednesday 8/27 by Noon
	Email Requirement	Wednesday 8/27 by Noon
2.1	Linear Equations	Wednesday 8/27 by Noon
2.2	Linear Applications and Modeling	Wednesday 8/27 by Noon
2.3	Complex Numbers	Wednesday 8/27 by Noon
2.4	Quadratic Equations	Wednesday 9/3 by Noon
2.5	Quadratic Applications and Modeling	Wednesday 9/3 by Noon
2.6	Other Types of Equations	Wednesday 9/3 by Noon
2.7	Inequalities	Wednesday 9/10 by Noon
2.8	Absolute Value Equations and Inequalities	Wednesday 9/10 by Noon
	<i>Comprehensive Quiz for Test 1</i>	Wednesday 9/10 by Noon

Test 1 : Test 1 deadline is Monday 9/15 or Tuesday 9/16. Students **must** reserve a test time by Noon on Friday 9/12. Students who fail to register by the Noon deadline can make a reservation **in person** in the MTLC between noon and 5:00 pm on Friday 9/12, but a 5-point penalty will be assessed to the test score. Students who fail to register at all will have a 10-point penalty assessed to the test score.

<i>Test 2 Material</i>		
Section	Title	Completion Deadline
3.1	Relations and Rectangular Coordinate System; Circles	Wednesday 9/17 by Noon
3.2	Functions	Wednesday 9/24 by Noon
3.3	Linear Functions	Wednesday 9/24 by Noon
3.4	Equations of Lines	Wednesday 9/24 by Noon
3.5	Graphs of Relations and Functions	Wednesday 9/24 by Noon
3.6	General Graphing Techniques	Wednesday 10/1 by Noon
3.7	Operations and Compositions	Wednesday 10/1 by Noon
	<i>Comprehensive Quiz for Test 2</i>	Wednesday 10/1 by Noon

Test 2 : Test 2 deadline is Monday 10/6 or Tuesday 10/7. Students **must** reserve a test time by Noon on Friday 10/3. Students who fail to register by the noon deadline can make a reservation **in person** in the MTLC between Noon and 5:00 pm on Friday 10/3, but a 5-point penalty will be assessed to the test score. Students who fail to register at all will have a 10-point penalty assessed to the test score.

<i>Test 3 Material</i>		
Section	Title	Completion Deadline
4.1	Quadratic Functions	Wednesday 10/8 by Noon
4.2	Synthetic Division	Wednesday 10/15 by Noon
4.3	Zeros of Polynomial Functions	Wednesday 10/15 by Noon
4.4	Polynomial Functions: Graphs, Applications, and Models	Wednesday 10/15 by Noon
4.5	Rational Functions: Graphs, Applications, and Models	Wednesday 10/22 by Noon
5.1	Inverse Functions	Wednesday 10/22 by Noon
	<i>Comprehensive Quiz for Test 3</i>	Wednesday 10/22 by Noon

Test 3: Test 3 deadline is Monday 10/27 or Tuesday 10/28. Students **must** reserve a test time by Noon on Friday 10/24. Students who fail to register by the noon deadline can make a reservation **in person** in the MTLC between Noon and 5:00 pm on Friday 10/24, but a 5-point penalty will be assessed to the test score. Students who fail to register at all will have a 10-point penalty assessed to the test score.

<i>Test 4 Material</i>		
Section	Title	Completion Deadline
5.2	Exponential Functions	Wednesday 10/29 by Noon
5.3	Logarithmic Functions	Wednesday 11/5 by Noon
5.4	Evaluating Logarithms and Change-of-Base Theorem	Wednesday 11/5 by Noon
5.5	Exponential and Logarithmic Equations	Wednesday 11/5 by Noon
5.6	Applications and Models of Exponential Growth and Decay	Wednesday 11/12 by Noon
9.1	Linear Systems of Equations	Wednesday 11/12 by Noon
9.5	Nonlinear Systems of Equations	Wednesday 11/19 by Noon
	<i>Comprehensive Quiz for Test 4</i>	Wednesday 11/19 by Noon

Test 4: Test 4 deadline is Monday 11/24, Tuesday 11/25, or Wednesday 11/26. Students **must** reserve a test time by Noon on Friday 11/21. Students who fail to register by the noon deadline can make a reservation **in person** in the MTLC between Noon and 5:00 pm on Friday 11/21, but a 5-point penalty will be assessed to the test score. Students who fail to register at all will have a 10-point penalty assessed to the test score.

<i>Final Exam Material</i>	
Test 4	
Review for the Comprehensive Final Exam	

Final Exam: The Final Exam is comprehensive. The final exam deadline is Monday 12/8, Tuesday 12/9, Wednesday 12/10, or Thursday 12/11. Students **must** reserve a test time by Noon on Friday 12/5. Students who fail to register by the noon deadline can make a reservation **in person** in the MTLC between Noon and 5:00 pm on Friday 12/5, but a 5 point penalty will be assessed to the test score. Students who fail to register at all will have a 10-point penalty assessed to the test score.

Classroom Rules

1. The MTLC is a math classroom. Please be quiet during your visit to the MTLC.
2. The monitor will swipe your ACT card when you enter the MTLC and swipe it when you leave, even for a short break. Do not present an ACT card other than your own. **Violators will be charged with academic misconduct and reported to the dean's office.**
3. Cell phones, food, drinks (including water), tobacco products, and companions are NOT allowed in the Center. **A cell phone violation will cause your cell phone to be detained until you leave the MTLC. Your cell phone needs to be out of sight and turned off.**
4. No work other than mathematics, such as talking, surfing the Internet, playing computer games, typing a paper, sleeping, etc. is allowed in the MTLC. **Any violation will cause your attendance credit to be 0 for that day and you will be asked to leave the MTLC.**
5. The use of a computer in the MTLC is on a first-come first-serve basis; no reservation can be made for normal course work.
6. No attendance credit will be given to students who do not have their ACT cards.
7. Please do not hesitate to ask questions in the MTLC. Staff members in the MTLC are here to help you.

Test Rules

1. There are four 75 minutes tests and a comprehensive final exam. Test dates are listed on the front page of the syllabus.
2. Reserve a test time on the mtlc website (www.mtlc.ua.edu) by the deadlines listed in the syllabus. **Failure to do so will result in a 10 point deduction from your test grade.** If you fail to reserve a time during open registration on the website, you have until 5:00 pm Friday to report **in person** to the MTLC and sign up manually with the instructor on duty. The **in-person** registration will result in a 5-point deduction from your test score. Failure to register will result in a 10-point deduction from your test score. No phone calls or email arrangements will be accepted. Reservations are not needed for tests taken earlier than the deadline.
3. Show up at your reserved test time. When taking a test early, show up any time before 8:30pm (3:30pm Fridays).
4. Show up on time for tests. Any tardiness will cost you working time on the test. **Failure to show up at your reserved time will result in a deduction of 10 points from your test score.**
5. On test days, before your reserved time, if you decide you need to change your registered test time to another time, you may do so, but it will result in a 5-point deduction from your test score. You may fill out a petition request form to avoid the deduction if you have a valid excuse.
6. Bring your ID, and pencils. The MTLC will provide you with scratch paper. No other paper is allowed. Place all belongings on the floor.
7. You will be allowed to review your test before you leave the lab. You may not write down any information pertaining to test questions to take with you when you leave the MTLC after an exam. You may not share any test information with anyone who hasn't taken the test. **Violators will be charged with academic misconduct.** You will be given the chance to look over your test after all tests have been given.
8. No tests will be given on Sundays or after 8:30 pm any evening or 3:30 pm on Friday.