UAB Department of Mathematics

SYLLABUS (MA 105-QL)

MA 105 – Pre - Calculus Algebra

Semester:  Fall 2011       Section: 105-QL       Course ID: kravchuk07614       UAB zip code: 35294

Instructor:  Dr. Elena Kravchuk       Instructor e-mail:  kravchuk@uab.edu

Office phone:  934-2119       Office location CH 459B

Instructor Office Hours:  Available upon request.  The course instructor will answer student questions by email. Additional office hours TBA.

UAB email:  It will be necessary that you establish a BlazerID and a UAB email address.  Official course communications will be sent to that address.  (They can be forwarded to another email account of your choosing.)  Go to www.uab.edu/blazerid for information on establishing your BlazerID.  For UAB email account assistance, send an email to userservices@uab.edu, or call (205)934-3540.

NOTE: All instructor office hours are conducted in the UAB Math Learning Laboratory (MLL), on campus in room 202 Heritage Hall.

Attendance policy:  Attendance at the Course Orientation, Midterm Exam and Final Exam is mandatory. Roll will be taken. Students must present a current Photo ID Card for identity verification. Students may not sign the roll for another student. Violation of this policy will result in a grade of F.

Prerequisite  Grade of “C” or better in MA 102, or beginning freshmen meet Math Screening requirements (see ACT/SAT Math Subscore/GPA Grid in the latest UAB Class Schedule). Transfer students must have an appropriate score on the Advanced Screening Test in order to be eligible for MA 105.

Please Note:  In this version of MA 105, the student does not have instructor-led lectures to assist in learning the course material.  The course is designed primarily for working students whose schedule does not permit them to attend a lecture session, and for students who live a considerable distance from the campus. Students who are generally weaker in mathematics, or who feel the need for more instructor contact, should not take this version of the course.

Course Structure:  This course is primarily computer-based. All homework assignments and quizzes are online and can be completed either on your own computer or using one of the computers in the UAB Math Learning Lab (MLL) anytime before the scheduled deadline. The MLL is on campus in room 202 of Heritage Hall. The Midterm Exams and Final Exam are also done on the computer, but they must be taken in the MLL during your lab meeting time. In order to receive credit for homework and quizzes, the work must be done on or in advance of course deadline dates. See the course schedule for the course deadline dates. Students are STRONGLY advised to complete assignments BEFORE deadline dates. Computer problems, Internet problems, and student personal problems are not accepted as excuses for missing deadline dates.
Materials: *Precalculus Algebra MA 105 package*, which includes a *UAB Math 105 Student Workbook*, by *Elena Kravchuk*, 2010, Pearson/Prentice Hall, and MyMathLab ACCESS CODE, is required. You do not need an access code and can purchase the UAB MA 105 workbook as a stand-alone item if you are *retaking MA 105*.

**Getting Started:** The first thing you must do is register for your on-line course materials. You cannot complete any assignments until you have registered in CourseCompass. Go to [www.coursecompass.com](http://www.coursecompass.com) and click the Register button for students. Follow the instructions provided in the MyMathLab handout attached to the back of this syllabus. To register, you will need the following:

1. Your **BlazerID@uab.edu** email address. Every student at UAB is required to have an @uab.edu email address for official university and instructor communications, and for registration in this course. The Math Department standard for the required student login name is your **BlazerID followed by @uab.edu**; for example, if your BlazerID is goblazers, your login name should be goblazers@uab.edu. **USE THIS COMPLETE UAB EMAIL ADDRESS FOR YOUR LOGIN NAME.**
2. The Course ID for this particular section of MA 105. Your Course ID is **kravchuk07614**
3. A Student Access Code. This is the access code that you purchase with your text, or that you purchase as a stand-alone item, or that you purchase online. It comes inside an 8 ½ by 10 inch cardboard package labeled *MyMathLab Student Access Kit*.
4. The zip code for UAB. The zip code is **35294**.

**Math Help.** Tutoring assistance is available on campus in the Math Learning Lab (MLL) located in room **202 Heritage Hall**. The hours of operation are posted on the door and can also be viewed on-line at [www.math.uab.edu](http://www.math.uab.edu), under *Math Lab: Hours of Operation*. Students can work on their homework, take quizzes, obtain tutoring assistance, and listen to course video lectures in the MLL. *(To watch and listen to computer video lectures, students can bring their own headsets or can check out a headset from the MLL.)*

When you come into the MLL, you must log on to the course homework system. To log on, click on the appropriate course box. Then you will be prompted to enter your BlazerID and password.

**Calculator policy.** Scientific calculators may be used for homework and quizzes. **Students may not use personal calculators during testing.** Note that all tests for this course are administered in the MLL during your scheduled lab meeting times, and there is an on-screen calculator available for your use when testing. Your instructor will not assist you with the on-screen calculator during a test, so it would be to your advantage if you familiarized yourself with the use of the Microsoft Explorer on-screen calculator at home or in the Math Learning Lab, before you have to take a test.

**Course Grades:** Students earn their grade in the course by accumulating points. There is a maximum of 1000 points available. Student letter grades are awarded as follows. Students can go to [info.math.uab.edu](http://info.math.uab.edu) to review the status of their grades in the course. Note that grades are awarded by points earned, not by percentages.
Homework: There are 14 homework assignments. For each assignment you can earn up to 15 points, based on your homework score. An unlimited number of attempts can be made on each homework problem. If you miss a problem, click on similar exercise to work another problem correctly for full credit. You can go in and out of the homework as many times as you like before the deadline (all of your work is automatically saved). You earn points for homework completed on or before the due date. After the due date, you can review homework assignments and work similar exercises, but you cannot change your score. If you have a question about a homework problem, click on Ask My Instructor from the page containing the homework problem.

MLL Attendance: There are scheduled lab meetings for the Course Orientation, the Midterm Exams and the Final Exam. See Course Schedule for details.

Quizzes: There are 14 quizzes. Each quiz is worth 10 points. You take the quizzes on your own computer and on your own schedule, but you can only earn the quiz points if the quiz is taken on or before the due date. The quizzes are timed. Once you begin a quiz you have 30 minutes to complete it. Each quiz can be taken a maximum of two times. The higher grade attained will count. Do not hit the BACK button on your browser when taking a quiz. This will end your quiz and you will not be able to get back into it. You are given two attempts at each quiz to account for a network outage during a quiz, hitting the back button by mistake, your computer going down, making careless mistakes, etc. Click submit when you finish a quiz.

Tests: There are two Midterm Exams and the comprehensive Final Exam to be taken. Exams will be taken in 202 Heritage Hall during scheduled computer laboratory meeting times. All tests are timed. Midterm Exams are 120 minutes long and Final Exam is 150 minutes long. Students are required to keep a government issued photo ID on their desks during testing (UAB student ID, driver's license, etc).

Make-up policy: No make-ups are allowed for quizzes. There is no appeal for missed homework or quiz deadlines. If a major test deadline is missed due to a serious verifiable circumstance, the student may submit an Appeal Form (available in the Math Department Office in room 452 of Campbell Hall) to the Math Department Appeals Committee. The completed Appeal Form, along with supporting documentation attached, may be submitted to Room 452 of Campbell Hall. The Appeal Form with supporting documents attached must be received no later than one week after the missed deadline. The appeal will be reviewed by the Director, the course instructor, the course coordinator and the Supervisor of the MLL. The student will receive a prompt reply as to the adjudication of the appeal but should continue working in the course.
**Course Completion:** The course is complete once the student takes the Final Exam. No other points may be earned after the Final Exam has been taken.

**Cell Phones.** Student cell phones must be TURNED OFF and PUT AWAY during ALL class and lab meetings.

**Disability Support Services (DSS).** DSS offers tutoring and special accommodations to students who qualify. The UAB DSS office is located on the fifth floor of the Hill University Center, telephone: 934-4205, e-mail: dss@uab.edu. Students who have a DSS-approved accommodation for extended test times will take quizzes and tests that have a longer time duration. See your instructor for further information.

**Course Description:** (3 semester hours). Functions from algebraic, geometric (graphical), and numerical points of view, including polynomial, rational, logarithmic, and exponential functions; inverse functions; quadratic and rational inequalities; complex and real roots of polynomials; applications and modeling, both scientific and business.

**Learning Outcomes:**

- Students can apply distance and midpoint formulas for solving geometric problems algebraically. Students recognize and graph equations of circles, and can identify the center and radius of a circle given the standard equation or the general equation of a circle.

- Students understand the concept of a relation and a function and the meaning of their domain and range. Students understand the algebra of functions, composite functions, and inverse functions.

- Students can read and interpret data presented in a graphical form, recognizing intervals of increasing or decreasing function value, and identifying maximum or minimum values of a function.

- Students can apply basic graphing principles in graph sketching. Students can graph quadratic functions identifying the vertex, intercepts, axis of symmetry, and can use the graph for solving quadratic inequalities.

- Students can graph polynomial functions when their zeros can be found. Students can use long division and synthetic division to divide polynomials, and understand the Factor and Remainder Theorems.

- Students are familiar with the graphs of basic rational and radical functions. Students can solve polynomial and rational inequalities by doing sign analysis.

- Students recognize the graphs of basic exponential and logarithmic functions, and can find their domain, range, and asymptotes. Students can solve exponential equations. Students can evaluate logarithms, simplify logarithmic expressions, and use the properties of logarithms to solve logarithmic equations.

- Students can solve real-life applied problems involving polynomial, exponential or logarithmic functions.
Withdrawal: The last day for withdrawing from this course without the payment of full tuition and fees is August 23, 2011. The last day to withdraw from this course with a grade of $W$ is October 28, 2011. Students withdraw from a course by completing the appropriate paperwork in the UAB Registrar’s Office in the Hill University Center. The signature of the instructor is not required.

Education Technology Services (ETS). ETS is another lab on campus that has the MyMathLab software installed. Students may do homework, take quizzes, or review their work on the computers in ETS when the MLL is closed. Please note that tutors are not available. The ETS hours of operation can be found at www.mhsl.uab.edu/ets/.

Registering for a Course in Coursecompass

II. Click on Register under Students
III. Choose one of the following:
   - Get access to a new course
   - Continue a course, re-take a course, or switch to a different course section.
IV. Next
V. Enter your CourseID and click Find Course
VI. Choose one of the following
   - Access Code
   - Buy Now
VII. Follow the directions to complete your registration.
VIII. You must use the following:
   A. Login Name must be BlazerID@uab.edu
   B. UAB’s zip code is 35294.
IX. Questions? Ask your instructor or someone in the MLL.
SYLLABUS (MA 105-QL)

**IMPORTANT FACTS ABOUT MA 105**

When you create your account on CourseCompass you must use your BlazerID followed by @uab.edu as your LOGIN name.
Example: If your BlazerID is goblazers use goblazers@uab.edu

REQUIRED Meetings:
1. The Course Orientation Meeting: 3:00 pm-3:50 pm on August 19.
2. The Midterm Test 1: 3:00 pm -5:00 pm on September 30.
3. The Midterm Test 2: 3:00 pm -5:00 pm on December 2.
4. The Final Exam: 4:00 pm - 6:30 pm on December 9.
   Location: Math Learning Lab (Heritage Hall, Rm 202).

MA 105 is a 3-hour course, with scheduled lab meetings for the Orientation, two Midterm Tests, and Final Exam. See Course Schedule for details on due dates for all assignments. Students are welcome in the Math Learning Lab (202 Heritage Hall) for assistance with coursework but may complete all homework and quiz assignments from personal computers.

The Midterm Tests and the Final Exam will be taken under the supervision of the course instructor during the scheduled lab meeting times in 202 Heritage Hall.
Midterm Tests are limited to 120 minutes, Final Exam is 150 minutes.
On test days, you must bring a UAB photo ID, driver’s license, or gov’t-issued ID.

Quizzes and Homework are completed in the MLL or at home. Quizzes are limited to 30 minutes.

There are no make-ups for missed deadlines for homework and quizzes. This is because the work should be done IN ADVANCE of the deadline dates.

There is a formal appeal procedure if a student misses a test deadline. Appeals are approved only if there is a serious, verifiable circumstance.

Students are required to check their blazerID@uab.edu email address for official course communications.
**DEADLINE DATES**

Work should be completed before deadline dates **but cannot be completed after deadline dates.**

Deadlines for homework, quizzes, and tests are INDEPENDENT of one another.

You do not have to complete homework to take quizzes or tests. (However, it is recommended.)

There are no prerequisites for any of the graded assignments.

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**DEADLINE DATE SUMMARY**

<table>
<thead>
<tr>
<th>No.</th>
<th>Homework</th>
<th>Date</th>
<th>No.</th>
<th>Quizzes</th>
<th>Date</th>
<th>No.</th>
<th>Major Tests</th>
<th>Date</th>
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<tbody>
<tr>
<td>1</td>
<td>F.1, F.2</td>
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<td>8/25/11</td>
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<tr>
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<td>9/15/11</td>
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<td>2.4, 2.5</td>
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<td>12/01/11</td>
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<td>Review</td>
<td>12/01/11</td>
<td></td>
<td>Final Exam</td>
<td>12/9/11</td>
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<tr>
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<td></td>
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<td></td>
<td>4:00-6:30 pm</td>
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</table>
HOW YOUR GRADE IS CALCULATED

Your grade is calculated based on the number of points that you earn.

You can earn a maximum of 1000 points.

<table>
<thead>
<tr>
<th>Number of Points</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>880 to 1000</td>
<td>A</td>
</tr>
<tr>
<td>750 to 879</td>
<td>B</td>
</tr>
<tr>
<td>620 to 749</td>
<td>C</td>
</tr>
<tr>
<td>500 to 619</td>
<td>D</td>
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<tr>
<td>Below 500</td>
<td>F</td>
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</table>

Note that 879 points earns you a grade of B, not a grade of A, etc.

WHERE DO THE POINTS COME FROM?

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<th>Grade Element</th>
<th>Points</th>
<th>Quantity</th>
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<tbody>
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<tr>
<td>Quizzes</td>
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<td>Final Exam</td>
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<tr>
<td>Total points</td>
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