SYLLABUS (MA 107-QL)

MA 107 – Pre - Calculus Algebra/Trigonometry

Semester: Summer 2014

Section: 107-QL

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 are TBA.

Course Description: (3 semester hours). The course will cover: 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.; trigonometric functions (circular functions) and their inverses, graphs and properties; right triangle trigonometry and applications; analytic trigonometry, trigonometric identities and equations; polar coordinates; laws of sine and cosines; conic sections.

Learning Outcomes:

Upon successful completion of MA 107, a student

- understands functions from an algebraic, geometric (graphical), and numerical viewpoints, in particular polynomial, rational, exponential, logarithmic, and trigonometric functions and their inverse functions;
- can apply distance and midpoint formulas for solving geometric problems algebraically;
- recognizes and is able to 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;
- is able to solve rational and polynomial inequalities;
- is able to apply trigonometric principles to solve problems involving triangles;
- can interpret the plane from the viewpoint of both rectangular coordinates and polar coordinates and knows how to move between these representations;
- understands conic sections, their definitions, and their graphs;
- is able to translate verbal descriptions into mathematical form in the solution of problems;
- is able to construct and interpret tables, graphs, and algebraic representations of functions, and move among them;
- is able to draw relevant conclusions from algebraic models and applications, and communicate them in appropriate ways to an audience.

In addition to developing specific algebraic skills relevant to an understanding of functions, these learning outcomes promote students’ development of quantitative literacy.
Materials: Precalculus Algebra & Trigonometry MA 107 package, which includes a UAB Math 107 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 107 workbook as a stand-alone item if you are retaking MA 107 previously taken in Fall 2013. In this case you need to contact your instructor to get access to the course.

Prerequisite: Undergraduate level MA 102 Minimum Grade of B or (ACT Math Score 24 and High School GPA 3.5) or (ACT Math Score 25 and High School GPA 3) or (ACT Math Score 26 and High School GPA 2.5) or ACT Math Score 27, or 85% or higher on the UAB MA 107 Placement Test.

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.

Attendance policy: Attendance at the Midterm Exams and Final Exam is mandatory unless the student chooses the remote proctoring option. 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.

Please Note: In this version of MA 107, 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 on-line 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 or using the remote proctoring option. 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.

Getting Started: The first thing you must do is access for your on-line course materials.
Access for a Course in MyMathLabPlus

All homework assignments, quizzes, and tests for this course will be available using MyMathLabPlus. You can only ACCESS YOUR COURSE through BlazerNet. No other login pages will work.

Your account has already been established in MyMathLabPlus and must be activated. In order to activate your account, log in to BlazerNet and click on the MyMathLab Plus link.

To gain access to your course assignments, you must purchase a MyMathLab Plus access code. You can use a temporary access to your course until you purchase your course materials. Remember, the temporary access will expire in about two weeks.

If you have any questions regarding your MyMathLabPlus account or access to your account, email your course instructor, or you may stop by the Math Learning Lab in HHB202.

TROUBLESHOOTING TIPS:

If you have difficulty accessing your assignments in MyMathLab Plus, try the following steps:

- Close the browser and start over logging into BlazerNet. You can only access through BlazerNet.
- Run the Browser check to make sure you have all needed components.
- Try a different browser. Some work better than others (use Mozilla Firefox!)
- Contact Pearson technical support via chat.
- Have a backup plan: Go to the MLL in HHB 202 and do your work there. Ask the staff for help.
- If the above steps do not work, email your instructor or stop by the Math Learning Lab in HHB202.

STUDENT EXPECTATION STATEMENT

The Course Syllabus and Schedule serve as a Contract by which the student must comply. An excuse of "not knowing" information covered in these documents is not an acceptable excuse for making mistakes in this class.

- Students are required to complete weekly assignments. All deadlines are based on Central Time. There are NO EXTENSIONS of DEADLINES.

- Students are expected to check their UAB e-mail daily and respond within 48 hours to instructor emails. Regular communication via e-mail with the Course Instructor is expected. Be sure to include your name, the course and section number in all communications with your instructor.

- It is the student’s responsibility to make sure a valid e-mail address is provided. Failure on the student’s part to do so can result in the student missing important information that could affect his grade. Students are responsible for the information that is sent to their UAB e-mail account. The Course Instructor will not accept e-mails sent from e-mails accounts than other UAB.
• Students are expected to devote an average of 8 to 12 hours per week to the assignments.

• Students are expected to have a back-up plan in the event their computer has operational problems, there is loss of electricity, or there is loss of Internet access. These are not an excuse for late or incomplete submission of assignments, nor are they acceptable reasons for an assignment deadline extension. UAB’s MLL, most public libraries, school libraries, university libraries, etc. have computers with Internet access and are available for use by the public.

• The Math Learning Lab (MLL) in 202 Heritage Hall is available for student use Monday through Friday. Students in this course may use the computers to complete assignments, and they may get assistance from math tutors. Go to the math department website and click on Student Resources tab for details (http://www.uab.edu/mathematics).

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, 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. You must also use the on-screen calculator on your personal computer if testing remotely.

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 https://secure.cas.uab.edu/mlldb/ to review the status of their grades in the course. Note that grades are awarded by points earned, not by percentages.

<table>
<thead>
<tr>
<th>Number of Points</th>
<th>Grade Element</th>
<th>Points</th>
<th>Quantity</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>880 to 1000</td>
<td>Homework</td>
<td>15</td>
<td>14</td>
<td>210</td>
</tr>
<tr>
<td>750 to 879</td>
<td>Quizzes</td>
<td>10</td>
<td>14</td>
<td>140</td>
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<tr>
<td>620 to 749</td>
<td>Tests</td>
<td>200</td>
<td>2</td>
<td>400</td>
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<tr>
<td>500 to 619</td>
<td>Final Exam</td>
<td>250</td>
<td>1</td>
<td>250</td>
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<tr>
<td>Below 500</td>
<td>Total points</td>
<td></td>
<td></td>
<td>1000</td>
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</tbody>
</table>
**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. **NOTE:** There is a set of prerequisite media (reading) assignments for each homework assignment.

**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 or using the remote proctoring option. 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).

**Two Options for Taking Tests:**

**OPTION 1:** Students can take the course tests under the supervision of the instructor on the following dates:

- Midterm Test 1: Friday, 6/27 (4:40-6:40 pm) in HHB202
- Midterm Test 2: Friday, 7/25 (4:40-6:40 pm) in HHB202
- Final Exam: Friday, 8/01 (4:30-7:00 pm) in HHB202

If you choose this option you are required to be on time to the testing sessions. If you are late, you will not be able to test. Please note that remote testing is not available if you miss the above test sessions.
OPTION 2: Students can take the course tests using remote proctoring services through ProctorU on or before the dates listed above. You will find the information regarding ProctorU on Blackboard. Please read the ProctorU handout information carefully before choosing this option for testing. Students are responsible for the additional costs involved with this option and are responsible for the technical requirements needed for this option. **The deadline for each test under this option is the same deadline listed under option 1.** Do not wait until the test due date to take and/or schedule your test. If you choose to wait until the due date to take your test, you are assuming the risk that some situation may prevent you from taking your test. Power outages, technical issues, and student personal problems are not acceptable reasons for missing a test deadline.

**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 special accommodations to students who qualify. The UAB DSS office location is 1701 9th Avenue South, 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.

**Withdrawal:** The last day for withdrawing from this course without the payment of full tuition and fees is **June 9, 2014.** The last day to withdraw from this course with a grade of **W** is **July 3, 2014.** Students withdraw from a course online using Blazernet or by completing the appropriate paperwork in the UAB Registrar’s Office in the Hill University Center. The signature of the instructor is not required.
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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<thead>
<tr>
<th>Homework/Quizzes</th>
<th>Major Tests</th>
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<tbody>
<tr>
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<td>3.1, 3.5, 3.6</td>
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<td>7</td>
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<tr>
<td></td>
<td>Final Exam</td>
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** Note that each homework assignment is worth 15 points and each quiz is worth 10 points.

<table>
<thead>
<tr>
<th>Tests</th>
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<tbody>
<tr>
<td>Assignment</td>
</tr>
<tr>
<td>Midterm 1</td>
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<tr>
<td>Midterm 2</td>
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<tr>
<td>Final Exam</td>
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</table>