Course: MATH 1113 Precalculus, Section 01 4 credits

PREREQUISITE: Four years of high school mathematics including algebra and trigonometry, appropriate score on SAT or ACT, or passed MATH 1111 with a C or better.

Course Description: This course is designed to prepare students for calculus, physics, and related technical subjects. Topics include an intensive study of algebraic and transcendental functions accompanied by analytic geometry. Credit for this course is not allowed if the student already has credit for MATH 1634.

Learning Outcomes: Students should be able to demonstrate:
1. An understanding of functions and how to graph functions
2. An understanding of operations on functions including function composition
3. An understanding of polynomial and rational graphs, including intercepts and asymptotes
4. An understanding of how to find the zeros of a polynomial and how to factor polynomials
5. An understanding of inverse functions and how to find them graphically and algebraically
6. An understanding of the properties of exponential and logarithmic equations
7. An understanding of how to solve exponential and logarithmic equations
8. An understanding of how to find the values of the trigonometric functions from right triangles and circles
9. An understanding of how to graph the trigonometric functions
10. An understanding of how to prove trigonometric identities
11. An understanding of how to use the sum, difference, double-angle and half-angle formulas for sine and cosine
12. An understanding of how to solve triangle using the law of sines and law of cosines
13. An understanding of polar coordinates and graphs
14. An understanding of how to analyze and solve applied problems

Instructor: Mr. Jim Bellon (best way to contact me is through CourseDen) or jbellon@westga.edu

Office & Hours: Boyd 104C  Mondays 11:30 – 12pm and 1:45 – 3:15pm
Boyd 205  Math tutoring Center  Tue/Thur 9-11am, 2-4pm

Class Meets: in Boyd 305, Mon 12 – 1:40 pm and Tue/Thu 11am – 1:30pm

Grading: Several written quizzes (avg counts 30%), online HW assignments (avg counts 30%), participation (10%), Midterm exam (15%), Final exam (15%). Lowest HW and lowest Quiz will be dropped. Final grades determined as follows:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>89.5 % and higher</td>
<td>A</td>
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<tr>
<td>79.5 % to 89.4 %</td>
<td>B</td>
</tr>
<tr>
<td>69.5 % to 79.4 %</td>
<td>C</td>
</tr>
<tr>
<td>60 % to 69.4 %</td>
<td>D</td>
</tr>
<tr>
<td>Below 60 %</td>
<td>F</td>
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Make-up policy: There are no make-ups for online assignments or quizzes. You are expected to keep up with learning the material each week, completing assignments by the due dates, and getting help when needed. Make-ups for exams may be granted with a valid documented excuse, and only if you notify me before or on the day of the test.

Extra-credit policy: There will be NO extra credit given, period! The only opportunity to earn better grade is to take the “Are You Ready?” Quiz in MyMathLab and if you do well, it will replace a low quiz grade. All other points can be earned only as stated above.

Attendance Policy: Attendance in class is MANDATORY. You can miss ONE class without penalty for any reason. You can miss a second class without penalty for a documented valid reason beyond your control. For each absence beyond that, you will receive a zero for participation/class grade. Students are expected to login to CourseDen and view the calendar and also check for assignments on MyMathLab. Failure to do so will result in missing assignments and maybe being dropped. Students are expected to attend class and complete all work when assigned. Students are responsible for the topics covered and assignments due whether present or not. “I was not here” is NOT a valid excuse.
Course Materials:

#1 A graphing calculator is REQUIRED (preferably one of the TI-83 or 84 models).

#2 We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

You can visit the Top Hat Overview within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as an overview to get you up and running on the system. You can register by simply visiting our course website:  https://app.tophat.com/e/217780

Note: our Course Join Code is 217780

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing. Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

#3 Students are required to purchase web access to the E-book. Options are:

- get immediate access by paying with credit card during the registration process at www.pearsonmylabandmastering.com
- buy MyMathLab-Student-Access-Kit at the bookstore.
- find MyMathLab access code kit on Amazon.com (cheapest but takes a few days)

**while you are waiting for access code or funds, you can still register with temporary access.**

Once you register at the website, you need to join our course. The course ID is: bellon07294


Class Rules:

Please do not talk or text on cell phone during the class. You are not allowed to use your phone as a calculator on tests. Please respect your instructor and other students in the class. No talking or any distracting behavior. If you fall asleep in class, you will be asked to leave. It is expected that students be familiar with the Student Conduct Code, Disciplinary Procedures and Disciplinary Sanctions in the Student Handbook. Cheating and/or any conduct that disturbs the classroom, the instructor, or the students WILL NOT be tolerated!! Any serious violations will be reported.

For important policy information, i.e., the UWG Honor Code, Email, and Credit Hour policies, as well as information on Academic Support and Online Courses, please review the information found in the Common Language for Course Syllabi documentation at http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf.

Meeting with:

Instructor

can be beneficial and is encouraged. Meeting should occur during the instructor's office hours, whenever possible. If these hours conflict with a student's schedule, then appointments should be made. The meeting time is not to be used for duplication of lectures that were missed; it is the student's responsibility to read the textbook sections, obtain and review lecture notes before consulting with the instructor. As your instructor, I am very concerned about the student's achievement and well-being and encourages anyone having difficulties with the course to contact me for extra help.

Note: If you have a documented disability, which will make it difficult for you to carry out the course work as I have outlined and / or if you need special accommodation or assistance due to disability, please contact me as soon as possible.

Math Tutoring:

On Campus  Boyd 205  Summer Hours are Mon/Tue/Wed/Thurs 9am-4pm. You can just walk in and get help. There are 2-3 tutors on duty who will rotate between students. There are also textbooks and computers to use while you are in the tutoring center.

You can also get 1-1 tutoring appointments through the Center for Academic Excellence in the UCC.
This is a tentative schedule of assignments and topics to be covered in class sessions. Changes will be made as needed. Once we finish a section, we will immediately move along to the next section. You need to read over text sections BEFORE we cover them in class. After we cover topics, you should complete assignments and do any extra practice or get help as needed. Don’t wait until it’s too late (like after doing bad on a quiz or exam).

DURING FIRST 2 WEEKS, please take the “Are you ready?” quiz online in MyMathLab. It will tell you how much work you need to do reviewing college algebra material, so that you can handle the regular precalculus material. You can take it 3 times and review each time to make sure you know the algebra review material. Your score does not officially count as a grade, HOWEVER, if you do well on your best attempt, I will count it to replace a low quiz score during the course.

Mon June 6th   Introduction, review algebra material from chapter P
Tue June 7th   review algebra material from chapter P and chapter 1
Thu June 9th   Cover sections 1.7 Composite Functions, 1.8 inverse functions
Mon June 13th  Cover sections 2.6 Rational Functions, 2.7 Polynomial and Rational Inequalities
Tue June 14th  **QUIZ #1**, Cover sections 3.1 Exponential Functions, 3.2 logarithmic functions
Thu June 16th  Cover sections 3.3 properties of logarithms 3.4 exp/log equations, 3.5 growth & decay
Mon June 20th  **QUIZ #2**, Cover sections, 4.1 Angles, 4.2 The Unit Circle
Tue June 21st  Cover sections 4.3 Right Triangle Trigonometry, 4.4 Trig Functions
Thu June 23rd  **QUIZ #3**, Cover sections 4.5 Graphs of Sine/Cosine, 4.6 Other Trig Functions
Mon June 27th  Cover sections 4.7 Inverse Trig functions, 4.8 Applications of Trig Functions
Tue June 28th  **QUIZ #4**, finish any material needed
Thu June 30th  Review for midterm
Mon July 4th   **INDEPENDENCE HOLIDAY – NO CLASS**
Tue July 5th   **MIDTERM EXAM in class** (chapters 1, 2, 3, 4)
Thu July 7th   Cover sections 5.1 Trig Identities, 5.2 Sum and Difference, 5.3 Double/Half Angle
Mon July 11th  **QUIZ #5**, Cover sections 5.5 Trig Equations
Tue July 12th  Cover sections 6.1 Law of Sines, 6.2 Law of Cosines, 6.3 Polar Coordinates
Thu July 14th  **QUIZ #6**, Cover sections 6.4 Graphs of Polar Equations, 6.6 Vectors
Mon July 18th  Cover section 7.2 Systems of Equations in Three Variables
Tue July 19th  **QUIZ #7**, Cover section 7.4 Systems of Nonlinear Equations
Thu July 21st  Cover section 8.1 Matrix solutions to linear systems
Mon July 25th  **QUIZ #8**, course evaluations, start final review
Tue July 26th  **FINAL REVIEW** (chapters 5, 6, 7, 8)

***FINAL EXAM (all chapters) on Thursday July 28th 12:30 – 2:30pm in our classroom Boyd 305.***