MATH 1113, Precalculus, Summer 2019

Section: 02 **Hours Credit:** 4 hours

Room and Hours: Pafford 109: M, 1:45 pm – 3:35 pm and T, Th, 2:00 pm – 4:30 pm

Prerequisite: MATH 1111 with D or better, or SAT Math score of 500 or better, or ACT Math score of 20 or better

Instructor: Dr. Kwang Shin

Office Hours: M (11:45 am – 1:45 pm) and T, Th(10am -- 11am &1:30 pm – 2pm) or by appointment.

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E-mail: kshin@westga.edu through your campus e-mail.
Course Webpage: http://www.westga.edu/~kshin/1113/

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.

Text: *College Algebra and Trigonometry, Abramson, Openstax.* Student can download for free at https://openstax.org/details/books/algebra-and-trigonometry. Students should go to "Download a PDF" and download the High Resolution version. We plan to cover sections 2.1, 2.2, 3.1--3.7, 4.1, 5.1--5.6, 6.1—6.7, 7.1—7.4, 8.1—8.3, 9.1—9.5, 10.1—10.4.

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

Hour Exams: Exam 1 (Thu, June 13), Exam 2 (Tue, July 2), Exam 3 (Thu, July 18).

Final Exam: Thursday, July 25, 3:00 pm -- 5:00 pm. The final exam will be cumulative.

Homework: Homework will be assigned every day and posted at the course website (www.westga.edu/~kshin/1113). Homework will be collected at the beginning of the next class for grade. Doing homework before the next class is essential for the success in this course. You need to show how to get your final answer to get any credit for the homework. Partial credit will be considered for incomplete work. However, **late submission will receive zero point.** The total homework score will be converted to a 70 point scale at the end of semester.

Quizzes: There will be a quiz on almost every day consisting of problems that are *almost identical* to

homework problems. Each quiz will be 10 points and two lowest scores will be dropped. If needed, the total quiz score will be converted to an 80 point scale at the end of semester.

Grade Scale:	3 hour exams	210 points (70 points each)
	Quizzes	80 points
	Homework	70 points
	Class Participation	90 points
	Final	200 points
	Total	650 points

A: 585 - 650, B: 520 - 584, C: 455 - 519, D: 357 - 454, F: 0 – 356

No graphic calculators are allowed during exams and quizzes.

June 27 is the last day to withdraw from a class with a grade of W.

Attendance and Pop-up Quizzes: Attendance is required and expected. Students are responsible for all material covered in class and all announcements made. An undetermined number of pop-up quizzes may be given for extra points. Such a quiz will consist of one problem, discussed during the same class. *It will count as absent if you are not present when the attendance is checked. Attendance can be used for bonus points at the end.* If you have no absence, you will get 10 bonus points and for each absence, you will get 5 points less. For example, if you miss 3 classes in total, you will get 10 minus 15, resulting -5 points and if you miss 5 classes, you will get -15 points. These absences exclude absences due to official university activities or approved by the instructor in advance or well-documented illness.

Make-up: There will be no make-up quiz. In general, make-up exams will *not* be given *after* the scheduled exam date. There will be no make-up final except when a conflict with other finals occurs. If a conflict occurs to you, please inform the instructor at least two weeks in advance. Make-up hour exams will be granted for official university activities if the student notifies the instructor at least a week in advance and for well-documented illness.

Classroom Behavior: You are expected not to disturb your classmate's learning. No phone or computer use during class without instructor's permission. **No earbuds and headphones are allowed during class (1 point will be taken away from your total score for each use of earbud or headphone).**

Also, please carefully review the following information at https://www.westga.edu/UWGSyllabusPolicies/ or https://www.westga.edu/administration/vpaa/common-language-course-syllabi.php. It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.