Math 12001: Algebra and Trigonometry. Spring 2013

CRN 15272 Section 600

MW: 11.00-11:50am TR: 11.00-12:15 pm. Main 221

**Instructor:** Dr. Gro Hovhannisyan, Office: 440, Main Hall.

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**Office Hours**: MTWR 12:15-1:15 pm , other time by appointment

**Text: Algebra and Trigonometry by Beecher, Penna, Bittinger**

ISBN 978-1-256-76815-9 This book (package) is coming with the software that has the text and the code for My Math Labs Plus ( MMLP).

**Course:** Chapters 2, 3-5, 11 (some sections will be skipped)

**Prerequisite:**  minimum C (2.0) grade in MATH 10007 or MATH 10024; or 40-49 on ALEKS level two assessment; or 55-66 on ALEKS singular assessment

**Class requirement and expectations:** You need at least a scientific calculator. Regular attendance and consistent studying are required through the term. If you have to miss a class you still remain responsible for making up what you missed.

**Regular homework.** Regular homework should be done by using homework assignments from My Labs Plus: website <http://kent.mylabsplus.com>

If you have difficulties try to get help in the Tutoring Center, or in class, or see me during my office hours. Some extra homework assignment given in the chart below.

**Exams.** There will be four tests and a comprehensive final exam. All exams are in class with closed books and notes. Retakes or make-ups are possible, on exceptional basis and with a valid excuse. If you have to miss a test, you have to talk to me and justify your absence. If you are absent when tests are returned, it is your responsibility to get your work back, and to discuss it with me.

**Grade Distribution**

**93% will guarantee an A (excellent) 90% will guarantee an A-**

**87% will guarantee a B+ (very good) 83% will guarantee a B (good)**

**80% will guarantee a B - 77% will guarantee a C+ (average)**

**73% will guarantee a C 70% will guarantee a C-**

**63% will guarantee a D+ 60% will guarantee a D (poor but passing)**

**0-59.9% F (failure)**

**Borderline Cases:** If your total score is less than 1% away from a higher grade, you may get that grade if you deserved it by your overall performance or extra credit points in the class throughout the term**.**

**Academic Honesty**: Use of the intellectual property of others without attributing it to them is considered a serious academic offense.  Cheating or plagiarism will result in a failing grade for the work or for the entire course.  Repeat offenses result in dismissal from the University. University guidelines require that all infractions be reported to the Student Conduct Officer on our campus.

**Students with Disabilities:** University policy 3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services (contact 330-244-5047 or visit<http://stark.kent.edu/student/resources/accessibility.cfm>  for more information on registration procedures).

**Classes Canceled – Campus Closings:** Announcements of class cancellations and/or campus closings will be made on the campus home page.  In the case of an emergency, weather-related or otherwise, please check the web page at stark.kent.edu for information on the buildings and times of the closing. While information may be broadcast by radio and television, this should be confirmed by the web page, which is the official announcement of the campus and which will be the information used to determine issues related to student attendance, rescheduling of tests, and other concerns.

**How to succeed in your math class.** If you want to succeed, you will attend this class regularly, study consistently throughout the term, do homework on your own and seek out help every time you need it.

Learn from your and others mistakes. Every returned test is an opportunity to learn from your mistakes made. To learn from the mistakes of others (your teacher) is a higher level of learning.

Be critical of your work. Sometimes students say they do all the homework, understand everything in class and follow all my guidelines, but still fail. If you are experiencing this I would suspect that you need to work harder, and practice more problems that is assigned.

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**Algebra and Trigonometry Spring 2013 Class Schedule**

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| --- | --- | --- | --- | --- |
|  |  |  | **Section** | **Extra homework** |
|  | **Jan 14** | **M** | **1.3 Linear functions** | **5-39 EOO** |
|  | **Jan 15** | **T** | **1.4 Equations of lines** | **7-55 EOO, 65** |
|  | **Jan 16** | **W** | **1.5 Linear equations** | **15-35 EOO** |
|  | **Jan 17** | **R** | **1.6 Linear inequalities** | **11-15** |
|  | **Jan 22** | **T** | **2.1 Piecewise functions** | **35-45 EOO** |
|  | **Jan 23** | **W** | **2.2 Algebra of functions** | **51-67 ODD** |
|  | **Jan 24** | **R** | **2.3 Composition of functions** | **21-37 EOO** |
|  | **Jan 28** | **M** | **2.4 Symmetry and transformations** | **7-47 EOO** |
|  | **Jan 29** | **T** | **Review** |  |
|  | **Jan 30** | **W** | **Review** |  |
|  | **Jan 31** | **R** | **Test 1** |  |
|  | **Feb 4** | **M** | **3.1 Complex number system** | **55-85 EOO** |
|  | **Feb 5** | **T** | **3.2 Quadratic equations** | **37-87 EOO** |
|  | **Feb 6** | **W** | **3.3 Quadratic functions** | **5-15 ODD** |
|  | **Feb 7** | **R** | **3.4 Rational & radical equations** | **11-71 EOO** |
|  | **Feb 11** | **M** | **3.4 Rational & radical equations** | **11-71 EOO** |
|  | **Feb 12** | **T** | **3.5 Inequalities with absolute value** | **27-57 EOO** |
|  | **Feb 13** | **W** | **4.1 Polynomials** | **11-21 ODD** |
|  | **Feb 14** | **R** | **4.2 Graphing polynomial functions** | **13-33 ODD** |
|  | **Feb 18** | **M** | **4.3 Polynomial division** | **5-10** |
|  | **Feb 19** | **T** | **4.4 Zeros of polynomials** | **55-65 ODD** |
|  | **Feb 20** | **W** | **4.5 Rational functions** | **51-61** |
|  | **Feb 21** | **R** | **4.6 Polynomial inequalities** | **53-73 ODD** |
|  | **Feb 25** | **M** | **Review** |  |
|  | **Feb 26** | **T** | **Review** |  |
|  | **Feb 27** | **W** | **Test 2** |  |
|  | **Feb 28** | **R** | **5.1 Inverse functions** | **47-65 EOO** |
|  | **Mar 4** | **M** | **5.2 Exponential Functions** | **15-35 EOO** |
|  | **Mar 5** | **T** | **5.3 Logarithmic Functions** | **5-55 EOO** |
|  | **Mar 6** | **W** | **5.4 Properties of Logarithms** | **23-73 EOO** |
|  | **Mar 7** | **R** | **5.4 Properties of Logarithms** | **23-73 EOO** |
|  | **Mar11** | **M** | **5.5 Exponential and Logarithmic Equations** | **19-59 EOO** |
|  | **Mar12** | **T** | **5.5 Exponential and Logarithmic Equations** |  |
|  | **Mar13** | **W** | **5.6 Applications** | **9-15 ODD** |
|  | **Mar14** | **R** | **Review** |  |
|  | **Mar18** | **M** | **Review** |  |
|  | **Mar19** | **T** | **Test 3** |  |
|  | **Mar20** | **W** | **6.1 Trig functions of acute angles 6.2 Applications** | **1-28, 37-56,71-97 EOO; 1-19 ODD** |
|  | **Mar21** | **R** | **6.3 Trigonometric functions of any angle** | **9-81 EOO** |
|  | **Apr 1** | **M** | **6.4 Radians, arc length** | **3-65 EOO** |
|  | **Apr 2** | **T** | **6.5 Circular functions** | **3,7,11,15, 39-47, 53** |
|  | **Apr 3** | **W** | **6.6 Graphs** | **19-31 ODD, 78,80** |
|  | **Apr 4** | **R** | **7.1 Sum & difference identities** | **1-43 EOO, 51,61 ODD** |
|  | **Apr 8** | **M** | **7.2 Double-angles and half-angle identities** | **1-31 ODD** |
|  | **Apr 9** | **T** | **7.3 Product-to-sum identities** | **3-29 ODD** |
|  | **Apr 10** | **W** | **7.4 Inverses of trigonometric functions** | **1—23 ODD, 37-67 EOO** |
|  | **Apr 11** | **R** | **7.5 Trigonometric equations** | **1-37 EOO** |
|  | **Apr 15** | **M** | **7.5 Trigonometric equations** |  |
|  | **Apr 16** | **T** | **Review** |  |
|  | **Apr 17** | **W** | **Review** |  |
|  | **Apr 18** | **R** | **Test 4** |  |
|  | **Apr 22** | **M** | **8.1 The law of sine. The area of a triangle** | **1-21 EOO** |
|  | **Apr 23** | **T** | **8.2 The law of cosine** | **1-21 EOO** |
|  | **Apr 24** | **W** | **8.6 Vectors** | **1-37 EOO** |
|  | **Apr 25** | **R** | **11.1 Sequences** | **1-39 EOO** |
|  | **Apr 29** | **M** | **11.2 Arithmetic Sequence** | **1-21 EOO** |
|  | **Apr 30** | **T** | **11.3 Geometric Sequence** | **1-39 EOO** |
|  | **May 1** | **W** | **Review** |  |
|  | **May 2** | **R** | **Review** |  |
|  | **May 7** | **T** | **Final exam 10.30 am** |  |

*Learning Outcomes*, an official document for this class, adopted by the Department of Mathematical Sciences, can be found on page 13 of the file posted at

<http://www.kent.edu/CAS/Math/undergraduate/upload/Learning-Outcomes2012-1.doc>.