MATH 1213 Plane Trigonometry
Spring 2014

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Course Co-Coordinator: Dr. Allan C. Cochran
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Office Hours: MWRF 1:00-2:30

Instructors: Dr. Brad A. Lutes, Mr. Gregory Palma
All of the instructors for this course have multiple years of experience teaching at this level.

Your specific lecture room, section number, and instructor will be on your enrollment materials. Your instructor is here to help and you should know his office hours, as well as office locations.

Prerequisites:
Credit will be allowed for only one of either MATH 1213 or MATH 1284C.
Corequisite: Lab component. Prerequisite: MATH 1203 or MATH 1204 with a grade of C or better, or a score of at least 80% on the University of Arkansas Mastery of Algebra Exam, or a score of at least 26 on the math component of the ACT exam, or a score of at least 600 on the math component of the SAT.

Text: *Algebra and Trigonometry* by R. Blitzer, 4th Edition. (Pearson)

Note: The text is included as an electronic version in the My Math Lab subscription. YOU DO NOT NEED TO PURCHASE A BOOK SEPARATELY unless you want the print version.

Testing Center: The testing center is located at SCEN 203.

Free Tutoring: Student tutors are available in SCEN 209, 211, and 212.
                            Enhanced Learning Center (see http://www.elc.uark.edu for details)

Required Software: MyLabsPlus software

HOW TO ACCESS THE ONLINE PORTION OF THE COURSE:

The information below is key to using the software to do homework and take some of the quizzes. Please follow these directions:
(1) Go to the URL: http://uark.bb.mylabsplus.com

(2) Find and click the "Forgot your password?" link.

(3) Enter in the first part of your uark email address in the box labeled "User ID:" (e.g., if your email is mathstudent@uark.edu, you would enter "mathstudent").

(4) Check your email for a message with subject "Password Reset Information" from PasswordReset@ResetCredentials.com, and follow the directions in the email.

Problems with the Software: If your login fails, please check that you typed in the correct web address for MLP: **uark.bb.mylabsplus.com .** Be sure that your browser will support the MLP software (e.g., be sure to run the browser check once you get started). On campus assistance is available in the MRTC located on the second floor of SCEN. From time to time, you may receive messages that your session has timed out. This is often due to the cookies downloaded to your computer from the MLP website. To resolve this issue, either delete the cookies from your computer or try logging in with a different browser (e.g., Chrome, Firefox, Safari, etc.)

Course Topics: We will cover most of Chapters 5, 6, 7, and 4 (in that order) with preliminary review and reminders from Chapters P, 1, and 2 when needed.

"Know how, but also know why" - Liping Ma of the University of California – Berkeley
This is a good approach to your study of trig. It is well-known and used by elementary teachers in China. (*Knowing and Teaching Elementary Mathematics*, Lawrence Erlbaum Associates)

Calculator Policy: For all on-line tests, the Mathematics Department will supply TI-30X IIS calculators. The calculators provided by the department are the only ones you will be allowed to use. NO personal calculators will be allowed. You should be familiar working with this calculator: proctors WILL NOT answer questions about the operation of the calculator. On written exams you may bring a TI-30X IIS with you—no notes or written material inside.

It is a good idea to have a graphing calculator, although this is not required. If you take calculus after this course, it will be used then.

Recommended: TI-82, TI-83, TI-84 (I like this one), TI-85, TI-86, or similar versions.
Unacceptable: TI-89, TI-92, laptops, palmtops, and corresponding models.

Decorum: All electronic devices including cell phones, iPods, laptops, etc., will not be allowed in classes nor on the desks during exams. These items must be turned off and secured in the student's possession during all class and exam times.

Grading: Grades are determined based on points as follows:

1. Exam 1 will have a computer part (MLP) worth 75 points and a written part worth 75 points.   150 points
2. Exam 2 will only have a written part worth 100 points   100 points
3. Exam 3 is structured like Exam 1.   150 points

4. Final Exam will be written only worth 200 points.   200 points
5. Quizzes (both written and MLP)   150 points
6. Group Work   50 points
7. Attendance, Lab Time (25 points each)   50 points
8. Homework and Review Sections   <u>50 points</u>

    TOTAL: **900 points**

Grade Scale:

There are 900 points available for this course; they are distributed as described above.
General guidelines for letter grades are as follows:

    A: 810-900   (90% – 100%)
    B: 720 – 809   (80% - 89%)
    C: 630 – 719   (70% - 79%)
    D: 540 – 629   (60% - 69%)
    F: 539 and below (59% and below)

The coordinator reserves the right to scale the final totals, but any scaling will be in your favor. That is to say, you might get an A with an 88%, but you will not get a B with 90% or better!

Please keep up with your scores on graded work. The grade that is displayed in MLP is an APPROXIMATION of your grade. You should be able to determine your standing in this course at any time with regard to grades.

Exams:

Written exams are taken as a group, with all trig sections. This will require evening exams. All three are scheduled from 6:00 pm – 7:30 pm on the designated dates as noted in the Weekly Schedule at the end of this syllabus. (Each one is on a Wednesday.) This portion of the exam will be in "pencil/paper" form, which requires explanations and showing all work.

The MLP portion of each exam will be given in the Testing Center (SCEN 203) and will be available for a two and one-half day period. It will be necessary to meet that deadline since the exam will not be available to you after the last scheduled day. **You must have the REVIEW ASSIGNMENT completed at 90 PERCENT to be allowed to take the corresponding exams (MLP and written).**

You must show your University issued ID in order to take a test.

THERE WILL BE NO MAKE-UPS FOR MISSED TESTS!!!   If you have a problem, see your instructor first and then see Dr. Lutes.

Final Exam: Monday, May 15, 2014 from 6:00pm to 8:00pm. 200 points.

Quizzes:

Some of the quizzes will be on-line and others will be given during class time. NO MAKE UPS will be given.

Group Work:

There will be at least five group work assignments, where you will be working in groups to solve problems. Each group work will be worth 10 points.

Homework and Review Sections:

All homework assignments are done on the computer. The computer grades the homework and posts your score immediately in the gradebook. If you believe an error was made in the grading, please notify your instructor as soon as possible. You may work on each assignment to improve your grade until it is due by clicking on the navigational tab HOMEWORK. After the assignment is due, the computer will not allow you to access the homework in order to improve your score. However, you may review your homework at any time without changing your grade by clicking on the GRADEBOOK navigational tab. Homework will not be accepted late for credit. At least one homework grade will be dropped.

There is a mandatory review for each exam, including the final. If you have not completed the review with a grade of **at least 90%**, you will not be allowed to take the test.

ATTENDANCE POLICY – CLASS AND LAB: I expect all students to attend every class. The participation points (25 points possible) count toward your final grade. Attendance will be monitored by the use of sign-in sheets.   If you are absent, it is your responsibility to determine what we did in class that day and be prepared for the next class meeting.

You need to complete an average of 60 minutes of lab time per week. There are 25 points possible for meeting the lab requirement. If you do not meet the lab requirement, points will be prorated based upon the number of minutes completed. The lab sessions must be done in one of the designated computer labs in SCEN. These labs are clearly marked. NOTE: You can only acquire lab minutes in the correctly designated computer lab on the second floor SCEN. Lab minutes may be acquired in SCEN 209, 211, or 212. Lab minutes are monitored by a program. You MUST login by using your university ID and then you MUST logout when leaving the lab. If you fail to login, you will NOT receive credit for those minutes in lab. If you fail to logout, you will not receive credit for any minutes for that lab session. If you need to leave the lab room for <u>any reason</u> you MUST logout and then you will have to login again. The lab supervisors will be monitoring the room when students leave for short periods of time. Also, the use of cell phones, text messaging or any activity other than working on this math course is not permitted in the labs. Failure to abide by these rules WILL RESULT in the loss of all lab minutes for <u>that</u> day and is considered Academic Dishonesty and may result in referral to the University Committee on Academic Dishonesty.   It is strongly suggested that you keep track of your minutes in the labs since your instructor will not be able to give you a weekly update on your minutes.

Also, you cannot get lab minutes during class time. You are required to go to class during the designated class time, not the labs. If you are logged into the lab and attend class at the same time you are logged in, you will receive no lab minutes for that session which includes class time.

COURSE ENTRY QUIZ: Before you can begin working on any assignment in the course you must take the COURSE ENTRY QUIZ and make 100% before any assignment will open. You must read the Official Course Syllabus and the Testing Lab Guidelines. After reading these documents you should take this Quiz. The Course Syllabus and Testing Lab Guidelines are located by clicking on the tab called COURSE DOCUMENTS. The quiz is found by clicking on the navigational tab QUIZZES/TEST and then clicking on COURSE ENTRY QUIZ.

ACCOMMODATIONS: Under University policy and federal and state law, students with documented disabilities are entitled to reasonable accommodations to ensure the student has an equal opportunity to perform in class. If any member of the class has such a disability and needs special academic accommodations, please report to the Center for Educational Access (CEA). Reasonable accommodations may be arranged after CEA has verified your disability. **Make sure that CEA knows the name and email address of your instructor.** You must submit your paperwork to your instructor as soon as possible. **Do not wait until the last minute! We cannot accommodate you if we do not have paperwork on file.** You MUST meet with your instructor in person to discuss and finalize your accommodations. **Meet with your instructor to ensure that everyone is on the same page with respect to any reasonable accommodations you may require.** This must be done BEFORE you take a test/online quiz/exam. Do not hesitate to contact your instructor or Dr. Lutes if any assistance is needed in this process.

ACADEMIC HONESTY POLICY: The Academic Honesty Policy applies to all aspects of this course and is not limited to just Testing and Homework**.** Please refer to the Academic Honesty Policy in the University of Arkansas Student Catalog.

TESTING LAB ACADEMIC POLICY: The use of cell phones, including text messaging, and any personal media devices (including iPods, PDAs, personal calculators, etc.) in any of the testing labs is strictly prohibited. Turn off all these devices <u>BEFORE</u> entering the Testing Lab and store them with your other belongings. Do not take out or turn on these devices until you have left the Testing Lab. No belongings, including purses or backpacks, may be brought to the testing machines. **The only items allowed at the testing machine are a pen/pencil, the official testing lab calculator, the official testing lab scratch paper and your id.** There is space allotted for such materials on the shelves in the Testing Lab or in the lockers outside of SCEN 203. A violation of this policy could result in a non-replaceable zero on the quiz/test/exam being taken. In addition, the student might be required to report to the Office of Community Standards and Student Ethics (OCSSE).

Disclaimer: WE RESERVE THE RIGHT TO MAKE CHANGES TO THE SYLLABUS DURING THE SEMESTER. If changes are made, you will be notified of the changes in class, on MLP, and/or an email will be sent to your University email address. It is your responsibility to check your email regularly and to check for postings on the MLP course page.

Emergency Preparedness
As we begin this semester, I want to take a few minutes and discuss emergency preparedness. The University of Arkansas is a very safe campus and there is a low probability that a serious incident will occur here. However, we want to emphasize our emergency procedures for evacuation and shelter in place incidents. Our preparedness will be critical IF an unexpected event occurs!

Instructions for specific emergencies, such as severe weather, active shooter or fire, can be found at emergency.uark.edu. However, there are some simple things you should do in the event an emergency occurs during our class.

- Always follow the directions of the instructor or emergency personnel
- If told to evacuate, do so immediately.
- If told to shelter-in-place, find a room, in the center of the building with no windows, on the lower level of the building.
- If told to lockdown, lock and barricade the door. Turn off the lights and wait for police to arrive.

EMERGENCY PROCEDURES

Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at **emergency.uark.edu**.

Severe Weather (Tornado Warning):
- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):

- **CALL-** 9-1-1

- **AVOID-** If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.

- **DENY-** Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it's safe.
- **DEFEND-** Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

MATH 1213-Plane Trigonometry
Tentative Weekly Schedule-Spring 2014

Week 1. January 13, 15, 17

P2, P3, P6 (all algebra review); 2.6 Combinations of Functions
5.1.   Angles and Radian Measure
5.2.   Right Triangle Trigonometry

Week 2. January 22, 24
Monday, January 20-MLK Day. No classes.
5.3   Trigonometric Functions of Any Angle
2.1, 2.5. Functions--Review
5.4   Trigonometric Functions of Real numbers; Periodic Functions

Week 3. January 27, 29, 31
5.4(2) Continued
5.5   Graphs of Sine and Cosine Functions
5.6   Graphs of Other Trigonometric Functions

Week 4. February 3, 5, 7
2.7   Inverse Functions--Review
5.7   Inverse Trigonometric Functions

Week 5. February 10, 12, 14
EXAM 1 MLP -- February 9, 10, 11 (SCEN 203)
EXAM 1 WRITTEN – February 12 6:00pm-7:30pm
5.8   Applications of Trigonometric Functions
6.1   Trigonometric Identities

Week 6. February 17, 19, 21
6.2   Sum and Difference Formulas
6.3   Double-Angle, Power-Reducing, and Half-Angle Formulas
6.4   Overview. Not on the testing regimen.

Week 7. February 24, 26, 28
6.5   Trigonometric Equations
7.1   Law of Sines

Week 8. March 3, 5, 7
7.2   Law of Cosines
7.3   Polar Coordinates
7.4   Graphing Polar Equations

Week 9. March 10, 12, 14
7.4(2) Continued
7.5   Complex Numbers in Polar Form; DeMoivre's Theorem

Week 10. March 17, 19, 21
EXAM 2 WRITTEN ONLY – March 19 6:00pm-7:30pm
7.5(2) Continued

7.6   Vectors

Spring Break March 24-28 – No classes

Week 11. March 31; April 2, 4
    7.7   Dot Product/Work
    4.1   Exponential Functions

Week 12. April 7, 9, 11
    4.2   Logarithmic Functions
    4.3   Properties of Logarithms

Week 13. April 14, 16, 18
EXAM 3 MLP -- April 13, 14, 15 (SCEN 203)
EXAM 3 WRITTEN – April 16
    4.4   Exponential and Logarithmic Equations
    4.5   Exponential Growth and Decay

Week 14. April 21, 23, 25
    Continue Chapter 4

Week 15. April 28, 30
    Catch Up if needed. Begin Review for Final Exam
    Friday May 2 – Dead Day. No classes.

Finals Week May 5-9.
Final Exam is Written only (200 pts) and will be <u>Monday, May 5</u> from 6:00 pm-8:00 pm