Instructor: Douglas B. Aichele
Office: 426 MS
Office Hours: TTh, 1:30-3:00 p.m. (426 MS); If you have a conflict with these times, please make an appointment to see me at another time.
Telephone: (405) 744-5688
e-mail: aichele@math.okstate.edu
Web Pages: Course information is available through my home page at:
http://www.math.okstate.edu/~aichele
The OSU Syllabus Attachment for 2007 Fall semester is available at:
http://osu.okstate.edu/acadaffr/aa/syllabusattachment-Fall.htm

Course Objectives. 1) To understand the definitions and principles of trigonometry and their applications to problem solving. 2) To complete the college mathematics requirement for further study of mathematics and courses in business, social science, or engineering which are mathematics dependent.

Among the academic deficiencies regularly observed by instructors of entry level mathematics courses are the problems that students have with (1) dealing with mathematical problems presented in prose style, i.e., reading mathematical statements for meaning, (2) modeling mathematical applications geometrically and algebraically, and (3) communicating their results in writing. The application of Trigonometry to the biological sciences is particularly fertile ground for addressing these deficiencies because of the nature of this course of study; it enables us to describe periodic phenomena through readily available mathematical models.

We have written specially designed on line materials to help you read and model mathematical problems in the biological sciences. The name of our project is Reading and Modeling Mathematical Problems, or simply RaMMP. The purpose of the RaMMP materials is to contribute directly to improving your critical thinking skills by developing units to train you in techniques of reading applied mathematical problems in prose form, developing mathematical models, and drawing conclusions. The problems involve applications related to: (1) blood pressure, (2) biorhythms, (3) body temperature, and (4) predator-prey analysis. The RaMMP materials are on line at the website http://www.math.okstate.edu/~aichele/RaMMP/rammp.html

Later in the course you will be required to submit two assigned homeworks on line using Maple TA involving these applications; we will help you get comfortable with Maple TA later on. You should click on this website TODAY just to check it out.

Textbook/Scientific Calculator.

- A scientific calculator is required that is capable of evaluating the trigonometric functions (sine, cosine, and tangent) and their inverse functions, in both degrees and radians. A graphing calculator would be very helpful to complete some of the homework problems, but will not be required for examinations. I will be using a TI-83 Plus graphing calculator for some class demonstrations. You may check out a TI-83/TI-83 Plus graphing calculator from the Mathematics Department (401 MS) for use during the semester while the supply lasts; there is NO charge.
MLRC: Mathematics Learning Resource Center - NEW LOCATION. The MLRC is an invaluable resource to support your mathematical learning. I encourage you to go there regularly to do your homework and to use the materials that we have made available to you.

Location: 4th Floor of the Classroom Building
Learning Aids/Services: Tutoring, Videotaped lectures, and Microcomputers with mathematics software

Examinations. There will be three (3) fifty-minute examinations with a maximum possible score of 100 points each and a 100 point comprehensive final examination which will be recorded twice. Make-up examinations will be given only for very serious and unavoidable conflicts, and only if your request to present a make-up examination is approved by your instructor in advance. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided. In the instance that a make-up examination is appropriate, it will be given the last day of Finals Week during the period scheduled for make-up exams. Bring your student ID to each examination.

Homework Grade. There are two types of homework assignments: Written Homework (9 assignments) and On Line Homework (2 assignments).

Written Homework assignments will be collected and selected problems will be graded. Homework must be turned in during class on the date it is due; you must be present for the entire class session to turn in homework. The staff in the mathematics office has been instructed not to accept homework papers. NO LATE HOMEWORK WILL BE ACCEPTED BY THE INSTRUCTOR.

Written Homework assignments must be submitted in the following manner:
1. Your name will be prominently displayed on each page.
2. Textbook page and problem numbers will be prominently displayed.
3. Problems will be submitted in the order in which they were assigned.
4. The pages will be stapled together.
5. You must show all work to receive credit.
If these conditions are not met, your work will not be evaluated; it will be returned to you with the assigned grade of 0.

On Line Homework will be completed using Maple TA on a computer of your choice; there are many available at the MLRC for you to use. On Line Homework must be completed by the date it is due.

Important Note. There is a total of 110 points possible on the eleven (11) homework assignments; however, your homework grade will not exceed 100 points.

Class Attendance Score. Class attendance involving active participation is a very important element in your success in learning trigonometry. YOU ARE EXPECTED TO ACTIVELY PARTICIPATE IN EACH CLASS SESSION. The Class Attendance Score (100 points maximum) is achieved by your regular attendance at class sessions. Experience has shown a definite correlation between good class attendance and good grades. Your Attendance Score is determined by your total number of absences during class sessions. Attendance will be taken during each class session; you must be present for the entire class session in order to be counted as present. For each absence, 4 points will be deducted from the maximum of 100 points. Note. Signing the class Attendance Sheet for another student is not permitted; if it is determined that a student signed in for another student, this unethical conduct will be regarded as a violation of Academic Integrity and the appropriate University policies will be employed.
Because of the value I place on our class sessions as active learning opportunities, I ask that you assume responsibility for being physically present no later than 2:30 pm. If you are late for whatever reason, please respect your classmates and do not interrupt the class session already in progress by coming in. If you do miss a class session, you should get the class notes from a classmate; after you have reviewed the notes, please feel free to see me to answer any questions. I also realize that you may have a class that follows this one; I will dismiss each class session promptly at 3:20 pm.

Trigonometry Performance Summary Sheet. Record your progress in the course on the attached Trigonometry Performance Summary Sheet. Remember to keep all of your returned homework papers and examinations in case there is a discrepancy in the recorded grades. IT IS YOUR RESPONSIBILITY TO RETAIN THESE PAPERS.

Drop and Withdrawal Policy (General University Policy 2-0206). "Dropping" means withdrawing from a specific course while "withdrawal" means withdrawing from all courses and leaving the University for the balance of the term. The drop and withdrawal dates are noted on the attached calendar. IT IS YOUR RESPONSIBILITY TO KNOW AND COMPLY WITH ALL DEADLINES. Reasons similar to those listed below will NOT result in approval for dropping a course after the deadline (from OSU Policy 4.03):

a. Student's lack of knowledge or misunderstanding of the deadline.

b. Student waited to get the results of an exam or other assignment.

c. Student's grades have declined since the deadline.

d. Student doesn't need the course for graduation.

e. Different deadlines existed at a previous school.

Incomplete Grade. The grade of "I" is given to students who satisfactorily completed the majority of the course work and whose work averages "D" or better, but who have been unavoidably prevented from completing the remaining work of the course. A condition that the students must repeat the course in order to remove the "I" is not permitted. The maximum time allowed for a student to remove an "I" is one calendar year.

Academic Integrity. The university has explicit rules governing academic integrity. Please consult the OSU Fall 2007 Syllabus Attachment mentioned above on the web.

Working with another person or in study groups on problems can be helpful in learning the material. I encourage you to work together if you find it helpful. However, all written and online work submitted must be your own. Copying someone else's problem solution, showing your written solution to someone else, or having another person complete your on line work is prohibited; such behaviors are regarded as violations of academic integrity and will be treated according to the University’s policy. In order to be successful in learning the material and doing well on the examinations you must think very hard about the problems themselves before discussing them with anyone else.

Special Accommodations for Students. "If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services (315 Student Union). Please advise your instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations." (OSU Fall 2007 Syllabus Attachment)
Course Evaluation. Course grades will be determined according to the following distribution.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>100</td>
</tr>
<tr>
<td>Examination 1</td>
<td>100</td>
</tr>
<tr>
<td>Examination 2</td>
<td>100</td>
</tr>
<tr>
<td>Examination 3</td>
<td>100</td>
</tr>
<tr>
<td>Final Examination</td>
<td>100</td>
</tr>
<tr>
<td>Final Examination</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

Letter grades will be assigned according to the following scale.

<table>
<thead>
<tr>
<th>Points Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>540 - 600 points</td>
<td>A</td>
</tr>
<tr>
<td>480 - 539 points</td>
<td>B</td>
</tr>
<tr>
<td>420 - 479 points</td>
<td>C</td>
</tr>
<tr>
<td>360 - 419 points</td>
<td>D</td>
</tr>
<tr>
<td>0 - 359 points</td>
<td>F</td>
</tr>
</tbody>
</table>

Notes.
1. Final grades will not be curved.
2. Your class attendance record will be reported along with your course grade.
3. Your Attendance Score (100 points maximum) will be used to replace any one of the three (3) examination scores or one of the two (2) Final Examination scores provided it improves your letter grade and you earned at least one passing grade on these assessments. The Attendance Score will not be used to replace a homework score.

Some Thoughts on How to be Successful in Trigonometry

Here are several suggestions for being successful this semester. Read them and see if they work for you.

1. Attend all class sessions on time.
2. Read the textbook.
3. Work problems every day and check your answers.
4. Do it on your own.
5. Review every day.
6. Don't expect to understand every new topic the first time you see it.
7. Spend as much time as it takes to master the material.
8. Relax and enjoy the experience of learning mathematics.

A final note. I am genuinely committed to your success in trigonometry this semester and care about your general welfare as a student. I hope you will take advantage of my open invitation to see me whenever I can be of help to you.

Final Note. Any changes in this syllabus will be communicated to you in class by the instructor.