Math053 Introduction to Trigonometry with Geometry
Syllabus-Individualized Study Sections

Course Description: Introduces basic trigonometric and geometric techniques beyond those covered in
MTH052, as well as applications of these techniques. Includes Pythagorean theorem, similar
triangles, volumes of common geometric figures, and right and oblique triangle trigonometry.

Prerequisite: MTH052 Introduction to Algebra and Geometry or equivalent with a C or better

Textbook: MTH 053 TEXTBOOK MATERIALS

Calculator: A scientific calculator is required for this course. See your instructor for more details.

Web Address: http://faculty.chemeketa.edu/tmerzeni/mathcenter/

Class Procedures:

A. Introduction:
   1. This is a one-term course that takes place in the Math Learning Center (MLC) in building 3,
      room 277. While there are firm deadlines throughout the term (see MODULE DEADLINES),
      the individualized format allows for total flexibility in your daily schedule. You may attend the
      MLC during any of the hours of normal operation, which are posted on the front window, on
      the web site, and on the bookmark you receive during orientation. It is recommended that you
      attend the MLC at least 4 hours per week, but you are not limited to those hours, as you may
      need to attend more often. It is not unusual for successful students to spend between 10 and 15
      (or more) hours per week in the MLC.
   2. The course is divided into five modules and each module contains several sections. You
      receive a study guide for each module indicating the pages to study, assignments, and tests.
   3. You are responsible for a reading and homework assignment for each section covered. You
      may come to the MLC at any time to ask questions over your reading and homework
      assignments. There is an instructor or lab assistant available during all MLC hours. You may
      do as much work outside of the MLC as you wish.
   4. You are responsible for completing work in a timely fashion as described by the module
      Deadlines. **Failure to meet the module deadlines will result in a failing grade in this course.**
      If you are concerned about meeting a deadline, you should see your instructor
      immediately. If you are industrious, you might complete the course early.

B. Assignments:
   1. **Homework** assignments are self-checked. Work the problems as directed in the module study
      guides, then use the answer key in the back of the textbook to check your answers. Rework
      any problems that you missed and discuss any difficulties with an instructor or qualified lab
      assistant. Continue with the next assignment after all corrections are made and all questions
      are answered. Assignments must be completed in order, and no homework is accepted for a
      module until the previous module is completed.
      **To receive credit, homework must be completed and turned in before the review
      assignment.**

   2. **Review** assignments are checked by one of the qualified staff behind the counter in the MLC.
      If you miss any problems on the review go back to the text and review the section containing
      the type of problems you missed and rework those problems. Bring the corrections, along with
      the original review paper, and have the review checked again.
Continue this process until all problems are correct. If, after several attempts, you are still unable to get the correct answer on a problem, you may discuss your difficulties with an instructor but do not ask lab assistants for help on the review. Credit for the review is earned only when you get all the problems correct. **To receive credit for the review you must have it completed and corrected no later than one day before the module deadline.** Please notice that the review assignments are not sample tests. The review assignments are designed to get you started on your review for the test. Be sure to study the homework and the textbook readings for a more complete review.

C. **Tests:**

1. There is a test for each module. If you complete a test and are not satisfied with the score you may retake it one time. Your grade is the average of the two test scores. **All module tests and retests must be taken on or before the module deadlines.** You are not allowed to take a test and the retake on the same day, so try to take the module tests a few days before the deadline to allow time for a retake, if desired.

   All testing for a module must be completed on or before the module deadline. If you miss a deadline you are not allowed to continue in the course and you must see your instructor immediately.

   You may be allowed to make up one missed exam during finals week if you make arrangements with your instructor in advance. Subsequent missed deadlines will result in a test score of zero.

2. A Final Exam is taken after you have completed all of the modules. The final exam must be taken to receive a passing grade in this course. Please see the due dates for the current term.

D. **Evaluation:**

1. **Homework Assignments**
   - 17@ 1 point 17 points
2. **Review Assignments**
   - 5@ 5 points 25 points
3. **Application Tests**
   - 5@ 100 points 500 points
4. **Final Exam**
   - 1@ 150 points 150 points
   - **Total** 692 points

2. Final grades are determined using the following scale. Percentages are calculated out of the total points possible.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
</tr>
<tr>
<td>B</td>
<td>80 - 89%</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
</tr>
<tr>
<td>F</td>
<td>0-59%</td>
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</tbody>
</table>

3. Grades of Incomplete (IF) are rare, and given at your instructor’s discretion. Below is a list of some criteria that are considered:
   - you are missing one key element of the coursework, eg. all work is complete except the final exam
   - all modules were completed on or before the due dates throughout the term
   - you must be passing the course at a 70% level or above
   - you are spending enough time in class to show significant effort toward completion of the course
   - you have special accommodations through the disability services office
E. **Academic Honesty**

If a student is caught cheating, the first offense will result in a score of zero on the test with no retake possible and the incident will be reported to the dean of students. A second offense will result in a failure grade (F) in the course and the incident will be reported to the dean of students.

**Learner Outcomes:** Upon successful completion of the course, students should be able to:

1. Use mathematical problem solving techniques involving formulas, measurements, and geometric and trigonometric concepts. Techniques include the use of symbolic, narrative, tabular, and diagram representations.

2. Create mathematical models of abstract and real world situations using formulas, measurements, and geometric and trigonometric concepts.

3. Use inductive reasoning to develop mathematical conjectures involving formulas, measurements, and geometric and trigonometric concepts. Use deductive reasoning to verify and apply mathematical arguments involving these algebraic and geometric concepts.

4. Make mathematical connections to, and solve problems from, other disciplines involving formulas, measurements, and geometric and trigonometric concepts.

5. Use oral and written skills to communicate about formulas, measurements, and geometric and trigonometric concepts.

6. Use appropriate technology to enhance mathematical thinking and understanding, to solve mathematical problems involving formulas, measurements, and geometric and trigonometric concepts, and judge the reasonableness of results.

**Disability:** If you have a documented disability that may impact your ability to succeed in this course, please contact Disability Services at 503-399-5192 (voice/TTY) or visit them in Building 2, room 109 on the Salem campus. They can help assess your educational needs and provide you with an action plan that includes recommendations on how we can best support you.

**Diversity:** We are enriched by the diversity of our students, staff, and community. We welcome diverse perspectives and encourage the free exchange of ideas. Chemeketa Community College provides an environment that celebrates the freedom to learn and the freedom to teach. In that celebration of teaching and learning it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.