

## Course

MATH 100 – Applied General Math

## General Course Objective

To help students develop and refine job related math skills.

## Duration

48 Clock Hours    3 Semester Credits

## Instructor

Bob Larson

## Course Topics

The topics covered in this class will be derived from the class text chapters and additional handouts.

1. Computational Review [ Hand-out material ]
2. Whole numbers, fractions, and decimals.
3. Percent, decimals, and fractions.
4. Problem-solving.
5. Graphs, charts, and tables.
6. Geometry.
7. Ratio and proportions.
8. Signed numbers and vectors.
9. Measurement in metric and English units. [ Hand-out material ]
10. Powers and roots [ Hand-out material ]
11. Trigonometry [ Hand-out material ]

## Classroom Procedure

The typical unit will cover one of the above eleven topics. These will be covered using the following procedure:

1. Introduce new material using textbook examples and classroom discussion.
2. Individual unit or topic diagnostic test.
3. Lab activities involving problem-solving exercises to enhance your math skills and checkpoint quiz.
4. Post unit or topic diagnostic test to assess your comprehension of the new math skills.

**Unit Test Out:** Each unit or topic consists of a diagnostic test. If you score a letter grade of a “B”, 87% or higher, you do not need to attend further classes on that unit to perform steps 3 and 4. The purpose behind the third step is to help you grasp the skills necessary for the day-to-day problem-solving activities found in a normal job. The fourth step will re-evaluate your comprehension of the skills gained from the assigned activity exercises.

**Class Test Out:** Should you already have the skills necessary to perform all of the problem-solving tasks, as outlined above, you may attempt to test out of the entire class. To test out of the entire class, you need to register with Heidi in the Front Office for the Applied General Math Test. The test costs \$30 and is **non-refundable**. If you do pass the test with a score of an 80% or better, you will be given a grade of a “TO” (test-out) and issued a tuition refund **credit** for the class. The “TO” grade and three credits will not be used to calculate your over all GPA. After paying and registering for the test, you will need to bring the registration sheet to your instructor. The instructor will then initial it and place it with a copy of the test in the Library. You will need to see Educational Services in the Library to take this test during normal operations hours of 8am to 4pm. You must complete this test by the **final day to drop for full refund**. Class test outs will be **not available** after this date.

**Evaluation**

Evaluation is based upon the work completed on the 11 units. Each unit consists of 100 points. As outlined in the classroom procedure, a student may test out of an individual unit at the scheduled unit diagnostic test, if the score is an 87% or better. This grade will be used for your score for the whole unit. If you do not test out of the unit, you will be assigned lab activity exercises and given check point quizzes and a post unit test. These items will total up to 100 points. The proposed points for this class consist of:

|                    |     |
|--------------------|-----|
| Assignments .....  | 30% |
| Quizzes .....      | 30% |
| Tests .....        | 40% |
| Total Points = 550 |     |

**Due Dates:** All work must be completed for each unit within 3 class hours of the proceeding next scheduled unit diagnostic test. Any missing work after this point will be entered as a zero.

**Grading scale:** 94% - 100% = A  
87% - 93% = B  
80% - 86% = C  
75% - 79% = D  
Below 75% = F  
  
TO = Class Test Out

**Attendance:** Attendance is a critical factor for success in Technical Mathematics, other classes, and on the job. In Math 100, a student may be absent six (6) hours of the required class time without penalty. Above six hours, the student will be automatically dropped from the course. You may appeal this drop with the Satisfactory Progress Committee. Should you wish to do this, please attend any required classes until the outcome is determined. MATH 100 meets two days a week for 90 minutes over 18 weeks for a total of 34 sessions. Under special circumstances such as extended illness, exceptions may be made. School-related absences are not counted in the six hours. You must attend on the day of the unit diagnostic test. If you test out, you will be excused from attending until the next diagnostic test, unless you have incomplete work in the prior unit which must be completed within 3 class hours (i.e. 1 week).

**Resources and Instructional Materials**

**Text Required:** *Mathematics Foundations Fundamentals*, 2<sup>nd</sup> edition, Cord.

**Calculator Required:** Scientific calculator with parentheses keys and memory, as part of the keyboard. Examples that will work: Casio FX250 or FX300, TI 30 or TI 30 x II S.

**Tutoring:** If you have questions, *please* ask them. If you need extra help see me or go to the Educational Services Center in the Library, room 210.

**Statement:** Without my permission, you do not have the authority to record any of my class, its class members, or any content expressed here.