|  |  |
| --- | --- |
| *Approved: May 11 , 2012 (Rev. Dec 2014)* | *Effective: FALL 2015* |
| **MATERIAL TO BE COVERED** | **SECTIONS**  | **TIME LINE** |
| Rounding, tables, charts, graphs. Introduction to solving equations. Introduction to exponents. Order of operations. Mean and median. Perimeter, area, volume of geometric figures. | 1.1 - 1.6 | 3.5 Hours |
| Operations with integers. Exponents, square roots, order of operations. Applications. | 2.1 - 2.6 | 5 Hours |
| Simplifying algebraic expressions. Adding, subtracting, multiplying polynomials. Laws of exponents. Prime factorization, Greatest Common Factor. Introduction to factoring. | 3.1 - 3.7 | 6.5 Hours |
| Solving equations. Translating word sentences to equations. | 4.1 - 4.5 | 4 Hours |
| Operations with rational expressions: simplifying, evaluating, solving equations. Least Common Multiple. Irrational numbers. Circumference and area of a circle. | 5.1 - 5.8 | 7 Hours |
| Operations with decimals: simplifying, evaluating, solving. Converting between decimals and fractions. Scientific notation. Pythagorean Theorem.  | 6.1 - 6.6 | 3.5 Hours |
| Ratios, proportions, unit conversion (American). Optional: conversion of metric units. Optional: uniform motion applications. | 7.1 - 7.3 Optional: 7.4 - 7.6 | 3 Hours |
| Percents. Conversion between percent, fraction, decimal. Percent equations. Percent applications. | 8.1 - 8.4 | 4 Hours |
| Rectangular coordinate system. Graphing linear equations. Optional: Points, lines and angles; applications with graphing. | 9.2 - 9.3 Opt: 9.1, 9.4 | 1.5 Hours |
| 3-unit class: hours total 42.5 (15 x 2 hours 50 minutes) – hours for exams + 2.5 hour finalThis outline allows for 4.5 hours of exams |
| NOTES: |  |  |
| 1. It is imperative to follow the timeline listed above to ensure adequate coverage is given to **ALL** topics listed. |
| 2. This course should be taught as an algebra course and not an arithmetic course. Student success in Math 51 and Math 51A depends on the algebra skills they develop in this course. Arithmetic problems should be assigned as homework, but tests and quizzes should emphasize algebra concepts. |
| 3. Please refer to the attached Math 50 Final Exam Sample Problems as a guide for the difficulty level at which this course is expected to be taught. |
| 4. Conversion of American units should be taught using the unit conversion fraction, memorization of American units is not required. |
|  |  |  |
| Submitted by: Chan, Chavez, Hosea, Johnson, Kirchgraber, McMullin, Nitta, Perez, Tamayo, Terreri, Vasquez-Celaya, Rivers. Rev: Dec 2014Math Department Policy can be found at: <https://www.mtsac.edu/math/departmentpolicy.html>  |