|  |  |
| --- | --- |
| *Approved: April 2015* | *Effective: FALL 2015* |
| **MATERIAL TO BE COVERED** | **SECTIONS FROM TEXT** | **TIME LINE** |
| Exponents, order of operations. Absolute Value. Real numbers - operations and properties. Algebraic expressions. | 1.2, 1.4-1.7 | 3 Hours |
| Rules of exponents, scientific notation. | 2.1 - 2.4 | 2.5 Hours |
| Solving linear equations. Formulas. Applications of linear equations. Proportions and percent. Solving linear inequalities. | 3.1 - 3.8 | 6.5 Hours |
| Linear equations in two variables - graphing, slope. Writing linear equations. Functions. | 4.1 - 4.6 | 5.5 Hours |
| Solving linear systems by graphing, substitution and elimination methods. Applications of linear systems. Linear Inequalities in two variables. Optional: solving systems of linear inequalities. | 5.1 - 5.5 | 6 Hours |
| Operations with polynomials. Optional: review of rules of exponents. Optional: graphing basic polynomials. | 6.2 - 6.4 Optional: 6.1 | 2.5 Hours |
| Factoring - GCF, grouping, trinomials, differences of squares, sums and differences of cubes. Solving quadratic equations by factoring. Applications of quadratic equations. | 7.1 - 7.6 | 6.5 Hours |
| Rational expressions - fundamental property, operations. Complex fractions. Solving equations involving rational expressions. Applications of rational expressions. Direct and inverse variation. | 8.1 - 8.7 | 6.5 Hours |
| Roots and radicals - evaluating, operations and simplifying. Rationalizing denominators. Solving equations with radicals. Rational exponents. | 9.1 - 9.7 | 8 Hours |
| Solving quadratic equations by the square root property, completing the square and quadratic formula, (summary of different methods). Optional: Complex numbers. Optional: Graphing quadratic equations. | 10.1 - 10.3 Optional: 10.4-10.5 | 5 Hours |
| 4-unit class: hours total 57.5 (15 x 3 hours 50 minutes) – hours for exams + 2.5 hour finalThis outline allows for 4 hours of exams. |
|  |  |  |
| Submitted by: Birca, Chavez, Khoddam, Kim, Nitta, Peng, Sun, Tamayo, Terreri, Vazquez Celaya, WakefieldMath Department Policy can be found at: <https://www.mtsac.edu/math/departmentpolicy.html>  |