Math 13 Outline (2 units)
Essential Topics from Intermediate Algebra

[TEXT: College Algebra, 12th Edition, Lial/Hornsby/Schneider/Daniels]

Approved: October 2017   **Effective: Summer 2018**

MATERIAL TO BE COVERED	SECTIONS FROM TEXT	TIME LINE
Exponent rules (integer and rational), algebraic expressions, polynomials and their operations, factoring polynomials, rational expressions and their operations, complex fractions, radicals and their operations, simplifying radicals, rationalizing denominators [NOTE: Topics from Math 71]	R.2 - R.7	9 hours
Linear equations (identities, conditional equations, contradictions), literal equations, applications [NOTE: Topics from Math 71. Just-in-time support for 1.1, 1.2]	1.1, 1.2	2 hours
Complex numbers, quadratic equations (zero-factor property, square root property, completing the square, quadratic formula), applications [NOTE: Topics from Math 71. Just-in-time support for 1.4 -1.5]	1.3 - 1.5	4.5 hours
Rational equations, radical equations, equations quadratic in form, literal equations, applications [NOTE: Topics from Math 71. Just-in-time support for 1.6]	1.6	2 hours
Solving linear inequalities [NOTE: Topics from Math 71. Just-in-time support for 1.7]	1.7	1 hour
Rectangular coordinates and graphs, distance formula, midpoint formula, equations of lines (point-slope, slope-intercept, vertical and horizontal, parallel and perpendicular) [NOTE: Topics from Math 71. Just-in-time support for 2.2-2.5]	2.1, 2.5	3 hours
Polynomial functions, quadratic functions, graphing techniques, finding the vertex using completing the square and the vertex formula [NOTE: Topics from Math 71. Just-in-time support for 3.2-3.4]	3.1	3 hours
Inverse functions, exponential functions, logarithmic functions, properties of logarithms, exponential and logarithmic equations [NOTE: Topics from Math 71. Just-in-time support for Ch.4]	4.1 - 4.5	4 hours
Solving systems of linear equations, graphing linear and nonlinear inequalities [NOTE: Topics from Math 71. Just-in-time support for 5.1, 5.6]	5.1, 5.6	2.5 hours
Sequences, series and summation notation, binomial theorem, kth term of a binomial expansion [NOTE: Topics from Math 71. Just-in-time support for Ch.7]	7.1, 7.4	2.5 hours
FINAL EXAM		2.5 Hours

- This outline does not include time for exams (other than the final exam time). This does not imply that you should only give a final exam.
- Instructors should emphasize review chapter (Chapter R), test preps, review exercises, chapter tests, mid-chapter quizzes and skills for success.
- This is a Pass/No Pass course and is not subject to department grading policy.

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