KRSN MAT1010 - College Algebra

For specific Institutional Transfer Articulation information visit: <u>kansasregents.org/institutional-transfer-information.</u>

| INSTITUTION | COURSE ID | COURSE TITLE | CREDIT HOURS |
|------------------|------------|----------------------------------|--------------|
| Allen CC | MAT 105 | College Algebra | 3 |
| Barton County CC | MATH 1828 | College Algebra | 3 |
| | MATH 1826 | Intermediate and College Algebra | 5 |
| Butler CC | MA 131 or | College Algebra with Review | 5 |
| | MA 135 or | College Algebra | 3 |
| | MA 132 & | College Algebra I & | 1 |
| | MA 133 & | College Algebra 2 & | 1 |
| | MA 134 | College Algebra 3 | 1 |
| Cloud County CC | MA 111 | College Algebra | 3 |
| Coffeyville CC | MATH 104 | College Algebra with Review | 5 |
| | MATH 105 | College Algebra | 3 |
| Colby CC | MA 178 | College Algebra | 3 |
| Cowley CC | MTH 4420 | College Algebra | 3 |
| Dodge City CC | MATH 106 | College Algebra | 3 |
| Fort Scott CC | MAT 1083 | College Algebra | 3 |
| | MAT 1084 | College Algebra with Review | 4 |
| Garden City CC | MATH 108 | College Algebra | 3 |
| Highland CC | MAT 104 | College Algebra | 3 |
| Hutchinson CC | MA 106 | College Algebra | 3 |
| Independence CC | 02MAT 1023 | College Algebra | 3 |
| | 02MAT 1025 | College Algebra | 5 |
| JCCC | MATH 171 | College Algebra | 3 |
| КСКСС | MATH 0105 | College Algebra with Review | 5 |
| | MATH 0106 | College Algebra | 3 |
| Labette CC | MATH 115 | College Algebra | 3 |
| Neosho County CC | MATH 111 | College Algebra Workshop | 5 |
| | MATH 113 | College Algebra | 3 |
| Pratt CC | MTH 178 | College Algebra | 3 |
| Seward County CC | MA 1173 | College Algebra | 3 |
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| FHTC | MA 110 | College Algebra | 3 |
| Manhattan Tech | MAT 135 | College Algebra | 3 |
| NCK Tech | MA 111 | College Algebra | 3 |
| NWKTC | MATH 115 | College Algebra | 3 |
| SATC | MAT 150 | College Algebra | 3 |
| WATC | MTH 112 | College Algebra | 3 |
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| ESU | MA 110 | College Algebra | 3 |
| FHSU | MATH 110 | College Algebra | 3 |
| KSU | MATH 100 | College Algebra | 3 |
| KU | MATH 101 | College Algebra | 3 |
| PSU | MATH 113 | College Algebra | 3 |
| | MATH 111 | College Algebra with Review | 3 |
| WSU | MATH 111 | College Algebra | 3 |
| Washburn | MA 116 | College Algebra | 3 |
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Revised 09/08/2017

College Algebra - MAT1010 CORE OUTCOMES

Course Approval Date: Fall 2016 Course Review Date: Fall 2021

Students will be expected to use appropriate technology as one tool to achieve the following outcomes:

Analysis and Graphing of Functions and Equations

- Use functional notation.
- Recognize and distinguish between functions and relations (equations).
- Use concepts of symmetry, intercepts, left- and right-hand behavior, asymptotes, and transformations to sketch the graph of various types of functions (constant, linear, quadratic, absolute value, piecewise-defined, square root, cubic, polynomial, rational, exponential, and logarithmic) or relations (circle) given in description.
- Determine the domain and range of a function.
- Write the equation that describes a function (for types given above) or circle given its description.
- Use graphs of functions for analysis.
- Find arithmetic combinations and composites of functions.
- Find the inverse of a function.

Solutions of Equations and Inequalities

- Solve equations listed in the third bullet above, i.e., literal equations, quadratic equations by factoring and the quadratic formula, equations involving rational expressions, equations involving radicals, and equations involving absolute value expressions, along with equations involving exponential or logarithmic functions.
- Solve inequalities of the following types: linear (in one and two variables), polynomial, rational, absolute value.
- Solve systems of inequalities by graphing.
- Apply equations from the first bullet in this core outcome to real-world situations, including but not limited to depreciation, growth and decay, and max/min problems.
- Examine and analyze data, make predictions/interpretations, and do basic modeling.
- Solve systems of equations by various methods, including matrices.