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| HARTNELL COLLEGECOURSE OUTLINE  |
| CC Approval: Board of Trustees: 11/10/2009Last Revised:  |
| DESIGNATOR & NUMBER: MAT 123L2 |
| COURSE TITLE: Intermediate Algebra Level 2 |
| CREDIT UNITS: 1 |
| FACULTY INITIATOR: Kelly Locke |
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| CONTACT HOURS PER SEMESTER: |

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| Lecture: 0 |
| Lab: 48 – 54 |
| DHR: 0 |
| Other:  |

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| GRADING BASIS: |
| Grade Only  |
| PREREQUISITE:* MAT 123L1: Intermediate Algebra Level 1 with a grade of "C" or better

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| COREQUISITE: |
| ADVISORY: |
| COURSE DESCRIPTION:The second course in a four-course sequence that is equivalent to MAT 123. A study of relations and functions, variation, polynomials and factoring, and solving equations by factoring. Not open to students who have completed Math 123 with a grade of "C" or better. |
| COURSE OBJECTIVES:Upon satisfactory completion of the course, students will be able to:

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|   | 1.  | recognize, analyze and employ the most effective strategies to solve polynomial equations and judge the reasonableness of the results.  |
|   | 2.  | compare and contrast relations, functions, equations and expressions.  |
|   | 3.  | compare and contrast the equations and graphs of linear and polynomial functions.  |
|   | 4.  | simplify, manipulate, and evaluate expressions and functions.  |
|   | 5.  | model real world situations found in various fields of study related to polynomials.  |
|   | 6.  | solve applications related to polynomials.  |
|   | 7.  | use appropriate technology to enhance their mathematical thinking.  |
|   | 8.  | communicate the mathematics of the topics of this course in both oral and written form.  |

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| COURSE CONTENT:1. Relations, Functions, and Graphs
	1. Definitions and identification of functions
	2. Evaluating functions
	3. Graphing functions
2. Exponents and Polynomials
3. Quadratic Equations
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| INSTRUCTIONAL METHODOLOGY: |
| CLASSROOM |
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| Lab Activity |
| Individual Assistance |
| Audiovisual (including PowerPoint or other multimedia) |
| Computer Assisted Instruction |
| Demonstration |
| Requires a minimum of three (3) hours of work per unit including class time and homework. |

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| METHODS OF EVALUATING OBJECTIVES OR OUTCOMES: |
| Methods of evaluation to determine if students have met objectives may include, but are not limited to the following: |
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| CLASSROOM | EXPLANATION |
| Class Activity | Demonstration of mathematical techniques in small groups and individually, as needed. |
| Lab Activity | Problem solving using computer software or textbook that provides immediate feedback about the answers. |
| Written Assignments | Problem solving using computer software or textbook that provides immediate feedback about the answers. |

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| EXAMS | EXPLANATION |
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| Comprehensive Final | Students will take a proctored final exam that covers materials from all topics from the course. A comprehensive final is required for all sections. Final exam will consist of a combination of problem types including problem solving, multiple choice, and true/false.  |
| Problem Solving | Assignments and tests will include problems that require the use of problem solving strategies. Types of problems will include, but are not restricted to, solving real-world problems using the concepts learned in the class.  |
| Skill Demonstration | Assignments and tests will include skill demonstration problems including those simulating real-world scenarios.  |
| Objective Test | All exams will be proctored and will include completely worked problems. Exams may also include some multiple choice and true/false.  |
| Quizzes | Quizzes may be used at the discretion of the instructor.  |
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| MINIMUM STUDENT MATERIALS: Textbook(s) similar to:* Miller, J., M. O'Neill, & N. Hyde. *Intermediate Algebra.* 1st ed. New York: McGraw Hill, 2007.
* Scientific calculator
* Online materials such as ALEKS web-based learning system for mathematics.http://www.aleks.com/highered
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