Course Syllabus

ALGEBRA I
MTH 3 Online
Revised: Spring 2008

INSTRUCTOR INFORMATION

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COURSE DESCRIPTION

Description: Covers the topics of Algebra I including, real numbers, equations and inequalities, exponents, polynomials, Cartesian coordinate system, rational expressions, and applications. Develops the mathematical proficiency necessary for selected curriculum entrance. Credits not applicable toward graduation. Prerequisites: a placement recommendation for MTH 03 and Arithmetic or equivalent.

Credits: 5 – Graded as S (satisfactory) and U (unsatisfactory)
Submissions: Certifications (and Tests) through Software provided with the Textbook
Assessments: 8
Proctored Assessments: None
Online Activities: Required

COURSE MATERIALS

Bundled with the Hawkes Learning System (HLS) Software CD and license.
Website: http://www.hawkeslearning.com/

Other Materials:
- Calculator: A scientific calculator is suggested; either a TI-36X (basic) or a TI-83, (graphing).
- Notebook and graph paper
- Computer storage device (recommended): Floppy disk or flash drive

Additional resource materials for some NRCC classes can be found on the NRCC Web-based learning site at www.nr.edu/learninglinks.

The Student’s Guide to Distance Education also available at http://de.nr.edu/de/stuguide.pdf.
COURSE INFORMATION

Prepared By: Harriette Roadman             Approved By: Carol Hurst

I. INTRODUCTION

This is a Distance Education course designed specifically for those students whose learning styles are best served by providing instructional opportunities beyond the traditional classroom setting. The student will be working with a textbook and computer software. The computer software is not Internet based. The software must be installed on the student’s home computer. The learning components of the software are available without Internet access; however, Internet access is required for registering Certification Codes and for testing. Installation and use of the software is fully explained in the Course Documents in Blackboard.

II. COURSE OBJECTIVES

Upon the successful completion of this course, the student will be able to perform basic algebra skills and be prepared to succeed in Algebra II. In addition to developing a strong base of algebra skills, this course is intended to help you learn "how to learn" mathematics. It is intended to help relieve your anxiety and build your confidence in your mathematics skills. With the understanding of mathematics and the study skills you will develop in Math 03, you should be able to move to the next mathematics course with increased confidence and a higher expectation of success.

III. COURSE COMMUNICATION

Additional information regarding the structure of the course is posted in Blackboard.

Communications throughout the semester will be through announcements in Blackboard, via email, or telephone. Responses to email and questions will be posted in the Discussion Board in Blackboard. You are encouraged to use the Discussion Board for information exchange with your classmates. Please read all course documents posted in Blackboard.
IV. COURSE CONTENT

Chapter 1 Real Numbers
   1.1 The Real Number Line and Absolute Value
   1.2 Addition with Integers
   1.3 Subtraction with Integers
   1.4 Multiplication and Division with Integers
   1.5 Exponents, Prime Numbers, and Order of Operations
   1.6 Multiplying and Dividing Fractions
   1.7 Adding and Subtracting Fractions
   1.8 Decimal Numbers and Change in Value
   1.9 Properties of Real Numbers

Chapter 2 Algebraic Expressions, Linear Equations, and Applications
   2.1 Simplifying and Evaluating Algebraic Expressions
   2.2 Translating English Phrases and Algebraic Expressions
   2.3 Solving Linear Equations: $x + b = c$ and $ax = c$
   2.4 Solving Linear Equations: $ax + b = c$
   2.5 Applications: Number Problems and Consecutive Integers
   2.6 Applications: Percent Problems

Chapter 3 Formulas, Applications, and Linear Inequalities
   3.1 Working with Formulas
   3.2 Formulas in Geometry
   3.3 Applications
   3.4 Ratios and Proportions
   3.5 Linear Inequalities

Appendix A.1 Absolute Value Inequalities

Chapter 4 Straight Lines and Functions
   4.1 The Cartesian Coordinate System
   4.2 Graphing Linear Equations in Two Variables
   4.3 The Slope-Intercept Form: $y = mx + b$
   4.4 The Point-Slope Form: $y - y_1 = m(x - x_1)$
   4.5 Introduction to Functions and Function Notation
   4.6 Graphing Linear Inequalities in Two Variables

Chapter 5 Exponents and Polynomials
   5.1 Exponents
   5.2 More on Exponents and Scientific Notation
   5.3 Identifying and Evaluating Polynomials
   5.4 Adding and Subtracting Polynomials
   5.5 Multiplying Polynomials
   5.6 Special Products of Polynomials
   5.7 Dividing Polynomials

Appendix A.2 Synthetic Division

Chapter 6 Factoring Polynomials and Solving Quadratic Equations
   6.1 Greatest Common Factor and Factoring by Grouping
   6.2 Special Factoring Techniques I
   6.3 Special Factoring Techniques II
   6.4 Solving Quadratic Equations by Factoring
V. INSTRUCTIONAL PROCEDURES

Course Deadlines:
This course is designed for the student to master the material in Chapters 1 - 6 of the textbook utilizing the textbook and the software as learning tools, and utilizing the software for testing. Due dates for the completion of the assigned material are posted in Blackboard and in the software. The student may work ahead and complete the material before the given dates. A lesson certification may be submitted late with a 50% penalty. Except in extenuating circumstances, a test may not be submitted after the specified due date. Extensions will be made on an individual basis.

First Assignment:
Review the instructions for the First Assignment in the Course Documents in Blackboard. You must complete this assignment by the posted due date, or you will be dropped from the course.

Sequence of Study:
1. Read the chapter in the text.
2. Work a representative sample of the problems in the textbook.
3. Work through each part of the software lessons - Overview, Instruct, Practice, and Tutor
   • You do not have to be online to complete these lessons.
4. Attempt the Certify when you are confident that you know the material.
   • You will be allowed multiple attempts.
   • You do not have to be online to complete the certifications.
5. Log the Certification Code.
   • If you are logged onto the Internet at the time you complete a Certify, the code will be registered into my grade book.
   • If you are not logged on, you will need to save the Certification Codes on a storage device to be registered at a later date.
   • The date of completion is recorded as the date a Certification Code is registered in the grade book, not the date the Certify is completed.
6. Complete each Chapter Test, located under the WebTest tab in the software.
   • These are NOT the Chapter Tests in the HLS software.
   • Internet access is required for the duration of testing.
   • Complete the test by midnight of the due date; tests will not be available after the due date.
   • You will be allowed two attempts on each test but you must complete both attempts by the posted due date. The higher score will be recorded.
   • Each test will have a specified time limit and will be automatically scored.
   • You must complete the test once it is started.
7. Complete the Final Exam.
   • The Final Exam is comprehensive over all material covered.

**If you have intermittent problems with Internet access, consider testing at the Dublin campus or NRV Mall site.**
VI. GRADING/EVALUATION

1. The final grade for the course will be determined as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Quiz</td>
<td>0.5%</td>
</tr>
<tr>
<td>Certifications</td>
<td>19.5%</td>
</tr>
<tr>
<td>Chapter Tests</td>
<td>60%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Total:</td>
<td>100%</td>
</tr>
</tbody>
</table>

2. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Final Average</th>
</tr>
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<tbody>
<tr>
<td>S</td>
<td>A final average of 75 or higher.</td>
</tr>
<tr>
<td>U</td>
<td>A final average below 75.</td>
</tr>
<tr>
<td>I</td>
<td>An “I” grade can only be given if a student has an average of 75 or higher, and is unable to take the Final Exam.</td>
</tr>
<tr>
<td>W</td>
<td>The college Withdrawal Policy will be followed.</td>
</tr>
</tbody>
</table>

If a student has an overall average of 95% on all Certifications and Tests prior to the Final Exam, that student will be exempt from the Final Exam.

You may monitor your progress and grade records through the HLS software by clicking on the tab labeled Progress Report.

VII. DIVERSITY STATEMENT

The NRCC community values the pluralistic nature of our society. We recognize diversity including, but not limited to, race, ethnicity, religion, culture, social class, age, gender, sexual orientation and physical or mental capability. We respect the variety of ideas, experiences and practices that such diversity entails. It is our commitment to ensure equal opportunity and to sustain a climate of civility for all who work or study at NRCC or who otherwise participate in the life of the college.

VIII. DISABILITY STATEMENT

If you are a student with a documented disability who will require accommodations in this course, please register with the Disability Services Office located in the Counseling Center in Rooker Hall for assistance in developing a plan to address your academic needs.
IX. CHEATING/PLAGIARISM POLICY

A grade of zero will be awarded to any writing assignments or tests that show cheating or plagiarism. To plagiarize is “To use and pass off as one’s own the ideas or writings of another.” (Definition adapted from the American Heritage Dictionary.) Remember that plagiarism includes lifting words or ideas from Internet sites, as well as copying from print sources.

X. WITHDRAWAL POLICY

Student Initiated Withdrawal Policy
A student may drop or withdraw from a class without academic penalty during the first sixty percent (60%) of a session. For purposes of enrollment reporting, the following procedures apply:

1. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student will be removed from the class roll and no grade will be awarded.

2. After the add/drop period, but prior to completion of sixty percent (60%) of a session, a student who withdraws or is withdrawn from a course will be assigned a grade of "W." A grade of "W" implies that the student was making satisfactory progress in the class at the time of withdrawal, that the withdrawal was officially made before the deadline published in the college calendar, or that the student was administratively transferred to a different program.

3. After that time, if a student withdraws from a class, a grade of "F" will be assigned. Exceptions to this policy may be made under documented mitigating circumstances if the student was passing the course at the last date of attendance.

A retroactive grade of “W” may be awarded only if the student would have been eligible under the previously stated policy to receive a “W” on the last date of class attendance. The last date of attendance for a distance education course will be the last date that work was submitted.

Late withdrawal appeals will be reviewed and a decision made by the Coordinator of Student Services.

Instructor Initiated Withdrawal
Students who have not posted ALL materials by the last day to drop the class and receive a refund must be withdrawn by the instructor during the following week. No refund will be applicable.

The instructor will withdraw students who have not completed ALL assignments on Blackboard by the last day to receive a “W”.

Students who do not turn in assignments will be withdrawn at any point in the semester. Failure to turn in assignments is considered non-attendance in the course.