INSTRUCTOR INFORMATION

Pablo Chalmeta
nrchalp@nr.edu
www.nr.edu/chalmeta
Office hours: TBA

Phone: 540-674-3600, ext. 4266
Godbey Hall 121

COURSE DESCRIPTION

Covers the topics of Algebra I including real numbers, equations and inequalities, exponents, polynomials, factoring. Cartesian coordinate system, and applications. Develops the mathematical proficiency necessary for selected curriculum entrance. Credits not applicable toward graduation. Prerequisite: Placement recommendation for MTH 03.

COURSE MATERIALS

- **Textbook:** The Personal Academic Notebook (including CDs). See Course Information I, Part D for more information.

- **Calculator:** A scientific calculator is required. See Course Information I, Part D for more information.

- 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* (Includes telephone listing for DE Staff/Offices)
TESTING CENTERS INFORMATION

Testing Center - Martin Hall
Extension: 4439
FAX: 540-674-3643

Testing Center - Christiansburg Site
Extensions: 4222, 4350, 4459
FAX: 540-381-7128

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday &amp; Thursday</td>
<td>8 a.m. - 9 p.m.</td>
<td>Monday-Thursday</td>
<td>8 a.m. - 9 p.m.</td>
</tr>
<tr>
<td>Tuesday &amp; Wednesday</td>
<td>8 a.m. - 6 p.m.</td>
<td>Friday</td>
<td>8 a.m. - 5 p.m.</td>
</tr>
<tr>
<td>Friday</td>
<td>8 a.m. - 5 p.m.</td>
<td>Saturday</td>
<td>8:30 a.m. - 1 p.m.</td>
</tr>
<tr>
<td>Sunday</td>
<td>2 p.m. - 5 p.m.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*TESTS MUST BE REQUESTED BEFORE LAST HOUR OF OPERATION*

IMPORTANT SEMESTER DATES

Last day to add class without instructor approval .............................................................. Friday, August 26
Last day to drop with full refund .................................................................................... Friday, September 2

Holiday (Labor Day) - College Closed**............................................................... Monday, September 5

**See special note: The DE Testing in Martin Hall will be closed Sunday, September 4.
If you need to submit work over the holiday weekend, please do so at the Christiansburg
site on Saturday, September 3, 8:30 a.m. - 1:00 p.m.; or use the DE Assignment Drop
Box located at the main campus Security Office in Godbey Hall.

Faculty Research (No Day/Evening Classes)*....................................... Wednesday-Friday, October 12-14

*Testing Centers open only 8 a.m. - 5 p.m.

Last day to withdraw and receive a “W”.............................................................. Thursday, October 20

Faculty In-Service (No Day/Evening Classes)*.................................. Monday-Wednesday, November 21-23
*Testing Centers open only 8 a.m. - 5 p.m.

Thanksgiving Break - College Closed*........................................................... Thursday-Friday, November 24-25

*Testing Centers closed November 24-27.

Classes End..................................................................................................................... Friday, December 9

Last day to submit DE work.................................................................................. Monday, December 12

ESSENTIAL PHONE NUMBERS

NRCC Main Number............................................................................................................... 540-674-3600
NRCC Toll Free ................................................................................................................. 1-866-462-6722
Distance Education Office.............................................................................................. 540-674-3614
DE Voice Mail System................................................................................................. extension 3632
DE Voice Mail Help Desk............................................................................................ extension 4341
Blackboard Technical Help ...................................................................................... extensions 4344, 4389
College Bookstore ...................................................................................................... extension 3638

For bookstore operational hours and other information: www.nr.edu/bookstore

Visit the Distance Education website at http://de.nr.edu
Dear Student,

Welcome to the IDL version of Math 03, Elementary Algebra. I am looking forward to having a productive semester with you and I hope that you will find the course informative and useful. As you continue with your college level courses you will find that the skills you will gain from this class will serve you well not only in other math classes you may take but in all sciences and many technical classes.

When learning math it is very important to try to work out the problems on your own and to attempt the homework. Since this is a distance education class, most of the instruction comes from the software and the textbook that you have been given. While working these problems there will be occasions when you will find that neither the CD-ROM nor the textbook have the information you are looking for. Do not let this stop you from asking me questions; in fact those would be the perfect opportunities to call, email or stop by my office. You should always feel free to ask about specific points in the lectures, the homework, what might be on the tests or anything else. I am always willing to answer any questions you may have.

If this is your first time taking a Distance Education class keep in mind that this course will probably require more of your time each week than a lecture class. There is a great deal of material to be covered and there are many homework problems to be done. Do not wait till the week before the test to start working on the lessons. Treat this course the way you would any other and try to work on it several times a week. In general, for college level courses it is expected that you will work 1 to 2 hours per week outside of class for each credit hour. In the case of this course since it is 5 credits you can expect to require a minimum of 10 hours a week and more likely much more than that to successfully complete the course.

I hope that you find your experience with Distance Education rewarding and informative,

Pablo Chalmeta
I. COURSE INFORMATION

Prepared By:  Pablo Chalmeta, Fall 2005  Approved By:

Reviewed By:  __________________________  __________________________

A. INTRODUCTION

This is Distance Education course designed specifically for those students whose learning styles are best served by providing instructional opportunities beyond the traditional classroom setting.

This class expands upon topics of Algebra I including rational expressions, radicals and exponents, quadratic equations, functions, and applications. It develops mathematical proficiencies necessary for selected curriculum entrance. Credits are not applicable toward graduation.

B. COURSE OBJECTIVES

Upon the successful completion of this course, the student will be able to:

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 mathematics and study skills you will develop in MTH 03, you should be able to move to the next mathematics course with a higher expectation of success.

You will complete MTH 03 using the Intermediate Algebra software called Mediated Learning from Academic Systems. The algebra curriculum from Academic Systems is a comprehensive, individualized program. It has been designed to help you advance at your own speed for understanding and applying algebra. You will be able to progress at your own rate through the software to complete the objectives for the course unless your instructor tells you otherwise. Within each topic you see lessons. You should complete and pass each lesson in the order listed in the attached “Assignment Schedule.” This Assignment Schedule is intended to help you monitor and record your progress. The dates on the schedule are the LAST day to complete the assignments, you can always finish any assignment early.

C. COURSE CONTENT

1  Real Numbers and Their Graphs
2  Fractions
3  Exponents and Order of Operations
4  Adding and Subtracting Real Numbers
5  Multiplying and Dividing Real Numbers
6  Algebraic Expressions
7  Properties of Real Numbers
8  Solving Basic Equations
9  Solving More Equations
10 Simplifying Expressions to Solve Equations
12 Motion and Mixture Problems
13 Solving Inequalities
14 The Rectangular Coordinate System
15 Graphing Linear Equations
16 Slope of a line
17 Writing Equations of Lines
18 Solving Systems of Equations by Graphing
19 Solving Systems of Equations by Substitution
20 Solving Systems of Equations by Addition
21 Application of Systems of Equations
22 Solving Systems of Linear Inequalities
23 Natural-Number Exponents
24 Zero and Negative-Integer Exponents
25 Adding and Subtracting Polynomials
26 Multiplying Polynomials
27 Dividing Polynomials
28 Factoring polynomials

D. COURSE MATERIALS

Textbook: The Personal Academic Notebook: You will be required to have the Personal Academic Notebook. These are provided as part of your user fee. Homework is important in this course. Each online lesson has a corresponding lesson in the Personal Academic Notebook. The Notebook allows you access to the course materials when you are away from the computer. The Notebook contains the following features:

1. Topic review
2. Summaries of all lesson concepts
3. Worked and partially worked sample problems.
4. Homework problems. **It is imperative that you do the homework problems!**
5. Enrichment activities which require you to examine concepts in greater detail or to apply concepts to new situations.
6. A lesson practice test which helps you prepare for the final lesson Evaluate (complete solutions to each problem are included).
7. Answers to the odd numbered problems.
8. CDs for the lesson topics*. Also included is an install diskette for use on your own computer.
   *Replacement CDs for lost or damaged CDs will be available from your instructor for a small replacement fee.

Academic Systems Software: You will complete MTH 03 using the Intermediate Algebra software called Mediated Learning Systems from Academic Systems. If you have a Windows based computer at home you can use it to run the software. If you wish to work on campus the Library has the software on several machines and the computer lab in Godbey 151 is specifically dedicated to the Academic Systems software. This software has been designed to help you advance at your own rate (but still within a time frame) for understanding and applying algebra. Within each topic there are lessons. You should complete and pass each lesson in order listed in the syllabus. Using this method of learning you must be actively involved in your learning. You are not a “math spectator”! The instructor’s role will be more of a coach or mentor.

Keep a notebook and take notes as you work through the problems on the computer. These can be studied later when you do not have access to a computer.

Keep in mind that you might hit a trouble spot somewhere so you should MOVE AS FAST AS YOU COMFORTABLY CAN, BUT AS SLOWLY AS YOU NEED TO in order to meet the deadlines for the
written tests. The written tests MUST be taken on or before the scheduled dates; however, you’ll be free to “work ahead.” If you want to take a test before the scheduled date, you must give me a 24-hour notice.

Academic Assistance (tutoring center) on the main campus also has qualified tutors who can work with you on a regular basis.

**Calculator:** A scientific calculator is required. Students may wish to purchase and use a graphing, menu-driven calculator, specifically a Texas Instrument TI83 or higher. This will carry you through higher level courses. Otherwise, a TI-36X is recommended.

E. **GRADING/EVALUATION**

The grade for this course will be derived from two sources:

- Five written tests: 65%
- Evaluate Quizzes: 15%
- Final Exam: 20%

**NOTE:**
If the school is closed on a test day, then the test will be due on the first day the school opens.

**Grading Scale:**

- **Final Grade:** $0.65 \times \text{Test Avg.} + 0.15 \times \text{Evaluate Avg.} + 0.20 \times \text{Final Exam} = \text{Final Average}$

- S = Satisfactory: You must have a final average of 75 or higher.
- U = Unsatisfactory: You must have a final average below 75.
- I = Incomplete: 80% of the course must be completed with an average of 75 or higher. Therefore, 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.
- W = Withdrawal: The college Withdrawal Policy will be followed

**Note:** I do not curve grades. I do not “give” grades. You earn what you get, so plan to work accordingly.

Tests may be taken in the DE Testing Center in Martin Hall, at the Christiansburg Site, or through an approved proctor. Please check **II. Course Schedule** in this course plan and take the tests on or before the scheduled dates to remain on track for successful completion of this course. Refer to the Testing Information folder in Blackboard for more information about on and off campus testing.

Graded tests will be kept in the student’s folder in the DE Testing Center or at the Christiansburg Site depending on where the student requested it be housed. Students can contact their instructor through a variety of avenues: phone, voice mail, E-mail, mail, face-to-face during office hours or by appointment.

**NOTE:** This course will not use individual voice mailboxes or the course info mailbox to give feedback on tests and assignments. General announcements for the course will be made on an as-needed basis. All updates to course information will be done through the course webpage at http://www.nr.edu/chalmeta.

**Evaluate Quizzes:** It will be required to take the "Evaluate" quizzes on the CD since 10% of the final grade comes from them. You may do the Evaluate quizzes from anywhere you would like, there is no
need to come to the testing center. However, you must complete the "Evaluate" portion of the lessons **BEFORE** the test which they cover. For example:

If test 4 covers lessons 6.1, 6.2, 6.3, 7.1, 7.2, and 7.3 then those Evaluates MUST be completed before taking the test to get credit for them and you MUST have a working internet connection to get credit for the Evaluates.

**Homework:** Although it will not be collected giving your best effort on homework is the single best thing you can do to help you learn mathematics.

**Academic Systems Software:** You will complete MTH 163 using the College Algebra software called **Mediated Learning Systems** from Academic Systems. If you have a Windows based computer at home you can use it to run the software. If you wish to work on campus the Library has the software on several machines and the computer lab in Godbey 151 is specifically dedicated to the Academic Systems software. This software has been designed to help you advance at your own rate (but still within a time frame) for understanding and applying precalculus. Within each topic there are lessons. You should complete and pass each lesson in order listed in the syllabus. Using this method of learning you must be actively involved in your learning. You are not a “math spectator”! The instructor’s role will be more of a coach or mentor.

You may need individual tutoring. The Tutoring Connection has qualified tutors who can work with you on a regular basis.

Keep a notebook and take notes as you work through the problems on the computer. These can be studied later when you do not have access to a computer.

Keep in mind that you might hit a trouble spot somewhere so you should MOVE AS FAST AS YOU COMFORTABLY CAN, BUT AS SLOWLY AS YOU NEED TO in order to meet the deadlines for the written tests. The written tests MUST be taken on or before the scheduled dates; however, you’ll be free to “work ahead.” If you want to take a test before the scheduled date, you must give me a 24-hour notice.

**Textbook: The Personal Academic Notebook:** You will be required to have the **Personal Academic Notebook**. These are provided as part of your user fee. Homework is important in this course. Each online lesson has a corresponding lesson in the Personal Academic Notebook. The Notebook allows you access to the course materials when you are away from the computer. The Notebook contains the following features:

1. Topic review
2. Summaries of all lesson concepts
3. Worked and partially worked sample problems.
4. Homework problems. **It is imperative that you do the homework problems!**
5. Enrichment activities which require you to examine concepts in greater detail or to apply concepts to new situations.
6. A lesson practice test which helps you prepare for the final lesson Evaluate (complete solutions to each problem are included).
7. Answers to the odd numbered problems.
8. CDs (which you must bring with you to class each day) for the lesson topics*. Also included is an install diskette for use on your own computer. *Replacement CDs for lost or damaged CDs will be available from your instructor for a small replacement fee.
More Information About Lessons in Academic Systems:

Within each topic there are lessons. Each lesson contains the following 6 modules (See page 6 in your Personal Academic Notebook.):

1. **Explain**- Mathematical concepts and procedures are presented through text, sound, graphics, animations and video. Each “Explain,” includes a short video “(The sections numbered 0.) that illustrates how the concepts in the lesson relate to real-life situations, an explanation of mathematical concepts and procedures that include problems for you to try, and a summary.

2. **Apply**- This is where your “practice” problems are located. When you need help, you can “link” directly to those pages in “Explain” that teach the concepts or procedures you are practicing.

3. **Overview**- “(Not included in the E sections) If you feel that you are already familiar with a topic then you can test your skills in “Overview,” which provides a pretest. When you finish the pretest, a customized Learning Plan is developed to help guide and focus your study throughout the lesson so you can spend your learning time most effectively and efficiently.

4. **Explore (optional)**- This section allows you to investigate mathematical concepts using tools such as the Grapher and the Solver. It reinforces the concepts introduced in Explain and challenges you to extend your knowledge.

5. **Homework** (See attached schedule for assigned problems.)

6. **Evaluate**- This is the final lesson quiz and the one that is computed into your final grade for this course. It is designed to be a quick “spot-check” of your understanding of the lesson concepts. It, by no means, is designed to be a complete test of your knowledge.

   **Caution:** Good grades on the evaluates do not necessarily mean that you have completely mastered the material. You must do the homework problems. To help you prepare you may want to take the lesson practice tests in the Personal Academic Notebook. You should be ready to complete the Evaluate in the time that you have since you cannot leave in the middle of it. You must score it when you have finished it. After scoring the quiz, review the questions to see where you made mistakes. The written tests are often more difficult than the Evaluates.

**How will my instructor monitor my progress in academic systems?**

Academic Systems has a very sophisticated management system. You (and your instructor) will be able to print reports at any time that will give information about your progress. You (and your instructor) will be able to see how much time (an on what dates) you have spent on a lesson and which lessons you have mastered. Quiz (Evaluates) scores are also included in the report.
F. WITHDRAWAL POLICY

Student Initiated Withdrawal
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:

a. 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.

b. 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.

c. 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 revised and a decision made by the Coordinator of Student Services.

Instructor Initiated Withdrawal
Students who have not attended class or picked up/accessed distance learning materials by the last day to drop the class and receive a refund must be deleted by the instructor during the following week. No refund will be applicable.

If you are not passing the class at the drop date, I may withdraw you from the class.
II. COURSE SCHEDULE

The Distance Education Program is designed for students to adapt the course requirements to individual schedules taking into consideration any penalties resulting from missed deadlines. If your course has deadlines with penalties they are listed below. Also listed below is the schedule of dates and work to be completed for this course.

<table>
<thead>
<tr>
<th>DEADLINE</th>
<th>ASSIGNMENT/TEST</th>
<th>PENALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 16</td>
<td>Test 1</td>
<td>Not accepted</td>
</tr>
<tr>
<td>October 7</td>
<td>Test 2</td>
<td>Not accepted</td>
</tr>
<tr>
<td>October 26</td>
<td>Test 3</td>
<td>Not accepted</td>
</tr>
<tr>
<td>November 16</td>
<td>Test 4</td>
<td>Not accepted</td>
</tr>
<tr>
<td>December 7</td>
<td>Test 5</td>
<td>Not accepted</td>
</tr>
<tr>
<td>December 12</td>
<td>Final Exam</td>
<td>Not accepted</td>
</tr>
</tbody>
</table>
III. COURSE ASSIGNMENTS

A. INTRODUCTORY LETTER

The purpose of the Introductory Letter is to introduce yourself to the instructor so that she will know you individually. The letter should include the following:

- A cover sheet with the following information:
  - Name
  - Attn: MTH 03-3F
  - Introductory Letter

- Your background (if you are a full-time student, your program year; if you work, the kind of work you do).

- Career plans or goals that relate to this course, if any.

- Why you enrolled in this course, and what you hope to accomplish with it.

To mail this letter to NRCC. Use this address:

New River Community College
Attn: DE Testing Center - MTH 03-3F
P.O. Box 1127
Dublin, VA 24084

If you prefer to email the letter please send it to nrchalp@nr.edu.
IV. TESTING INFORMATION - PROCTOR REQUEST

IMPORTANT: Proctor Request forms (http://idl.nr.vccs.edu/de/proctoring.pdf) must be received in the DE Office NO LATER than MONDAY, AUGUST 29. You will need to contact your instructor if mitigating circumstances require that you request a proctor after the deadline.

A. TESTING OPTIONS
Tests can be taken by a variety of methods:
- in the DE Testing Center located within the library, Martin Hall
- at the Christiansburg Site
- through an approved test proctor
- through the instructor

Unless you initiate the process of requesting a proctor or arranging to take a test through your instructor, you will need to test in the DE Testing Center in Dublin or at the Christiansburg Site-- whichever is more convenient for your schedule. Please familiarize yourself with the testing procedures found in The Student’s Guide to Distance Education. You will be responsible for knowing these procedures.

B. PROCTOR DESCRIPTION
If you live outside the New River Valley and are unable to travel to campus to take your tests, you may need a proctor. A proctor is an individual who agrees to receive your tests from NRCC, administer them to you in a suitable environment, and return them to NRCC in a timely fashion. The proctor will certify in writing to NRCC that you completed the test according to all the specified directions provided.

<table>
<thead>
<tr>
<th>Proctors CAN include</th>
<th>Proctors CANNOT include</th>
</tr>
</thead>
<tbody>
<tr>
<td>College or university personnel: administrator, faculty</td>
<td>Relatives or students - regardless of their position</td>
</tr>
<tr>
<td>member, counselor, librarian, official testing center personnel</td>
<td></td>
</tr>
<tr>
<td>Public or private school personnel: superintendent, principal, guidance counselor, librarian, teacher</td>
<td></td>
</tr>
<tr>
<td>Organization or institution education personnel: training coordinator, human resource personnel</td>
<td></td>
</tr>
<tr>
<td>Other: minister or member of the clergy</td>
<td></td>
</tr>
</tbody>
</table>

Tests must be taken within an educational setting. Exceptions may be made at the discretion of the Distance Education Program.

C. PROCTOR REQUEST GUIDELINES
Requests for proctored tests and the individual proctor must be approved by the Distance Education Program and/or your faculty member. NRCC reserves the right to reject requests or proctors for any reason. To request a proctor, fill out the PROCTOR REQUEST form and return it BY THE DEADLINE so that your tests will not be delayed. You may be penalized for tests taken after the due dates.

It is your responsibility to keep in mind test deadlines when requesting a proctor. If approved, your tests will be mailed to the proctor when they become available in the DE Testing Center. Pay attention to due dates when requesting a proctor. If you have any questions about the proctoring process, contact the Distance Education Program at 674-3614.
D. **PROCTOR REQUIREMENTS**
Proctors are required to keep tests in a safe place until the student requests them; provide students with a testing-conducive environment; monitor the taking of test; mail the test, answer sheet, and Test/Assignment Receipt back to the DE Testing Center as soon as possible after completion; and mail any remaining tests back to the DE Testing Center at the end of the semester. Any fees for testing services or the return of tests to NRCC (cost of fax, U.S. Mail or UPS) are the responsibility of the student.

E. **STUDENT REQUIREMENTS**
Students are responsible for supplying Scantron answer sheets if they are required for your course. If you withdraw/drop the course after requesting a proctor, please notify the DE Office so tests will not be mailed unnecessarily.

Students should keep in touch with their designated proctor at the start of and throughout the semester to ensure that tests are available prior to due dates. If for some reason the proctor does not have tests on file, please contact the DE Office to inquire about their status. It is not the responsibility of the proctor to notify the DE Office if tests have not been received.

Because of the large number of proctor requests, please feel free to contact the DE Office (540-674-3614 or toll free at 866-462-6722, ext. 3614) to check on the status of your request at the beginning of the semester. Check your printed or online syllabus immediately to determine if a proctor will be required and submit your request by the designated due date.