



## MATHEMATICS FOR LIBERAL ARTS I (MTH 151-30) Semester: Spring 2007

### INSTRUCTOR INFORMATION

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Office hours: MWF 10 am – 11 am 12:30 pm – 2:30 pm  
Tues 1:30 pm – 2:30 pm  
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Phone: 540-674-3600, ext. 4264  
Godbey Hall 43

### COURSE DESCRIPTION

**CREDITS 3**

Presents topics in sets, logic, numeration systems, geometric systems, and elementary computer concepts. A placement recommendation for MTH 151 and Algebra I, Algebra II, and Geometry or equivalent.

### COURSE MATERIALS

- ◆ **Textbook:** Mathematical Ideas, 10<sup>th</sup> Edition by Miller Hereen, Hornsby.
- ❖ **Math XL Access Code:** Student Access Kit is packaged with the text. It may be purchased separately through the NRCC bookstore.
- ◆ **CD-ROM:** CD-ROM is packaged with the text.
- ◆ Scientific calculator with algebraic logic (TI-30 or 36 recommended).
- ◆ The following attached supplements: **Project, Handouts, Handout Keys, Quizzes, and Extra Credit.**
- ◆ Additional resource materials for some NRCC classes can be found on the NRCC Web-based learning site at [www.nr.edu/learninglinks](http://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**

#### **Christiansburg Site**

**Extensions: 4222, 4350, and 4459**

**FAX: 540-381-7128**

Monday & Thursday 8 a.m. - 9 p.m.  
Tuesday & Wednesday 8 a.m. - 6 p.m.  
Friday 8 a.m. - 5 p.m.  
Sunday 1 p.m. - 5 p.m.

Monday-Thursday 8 a.m. - 9 p.m.  
Friday 8 a.m. - 5 p.m.  
Saturday 8:30 a.m. - 1 p.m.

**\*TESTS MUST BE REQUESTED BEFORE LAST HOUR OF OPERATION**

### IMPORTANT SEMESTER DATES

Last day to add class without instructor approval .....Friday, January 26

Last day to drop with full refund .....Friday, February 2

#### **Faculty Research and Spring Break**

**NO CLASSES\* .....Mon. – Fri. March 19 - 23**

**\*(Testing Center and Christiansburg site open 8 a.m. – 5 p.m. March 19-23. Both locations closed Saturday and Sunday, March 24-25.)**

Last day to withdraw and receive a “W” .....Monday, April 2

**Sunday, April 8\*\* .....Library and DE Testing Center (Martin Hall) closed.**

**\*\*The Christiansburg site will be open Saturday, April 7 from 8:30 a.m. – 1:00 p.m. for DE students who need to complete tests. The assignment drop box for the main campus Testing Center will be located next to the Security Office in Godbey Hall for assignment submission on April 7 and 8.**

Classes End .....Friday, May 4

**Last Day to Submit DE Work .....Monday, May 7**

### 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](http://www.nr.edu/bookstore)

Visit the Distance Education website at <http://de.nr.edu>

## WELCOME!

Welcome to MTH 151, Math for Liberal Arts II!

This math course will probably be different from any other math course you have taken. It is a survey of math topics that are not usually covered in the typical high school curriculum. Much of the material will quite likely be new to you. I hope you have fun with it. I think math is fun, but I understand if you don't share my opinion. Nevertheless, it's hard to beat the deep satisfaction you get from successfully puzzling through a difficult problem. Of course, the frustration you feel when you don't succeed after struggling with a problem for a long time is also significant. In this course, the struggles and frustrations bring rewards as well because one of the primary overarching objectives is for you to develop your problem-solving, critical-thinking, and logical-reasoning skills. I think that you will find that you gain more in these areas from your failures than from your successes. The successes will simply confirm for you what you learned from your failures.

Here are several recommendations:

- Keep up to date. Read the course plan. Know the due dates.
- Get help early and as often as needed. I answer emails, reply to Blackboard forum entries, and return phone calls.
- Work problems until they are correct and understood.
- Work on the course every day, even if it is only for 15 minutes.
- Know your level of understanding. Get to level 3 before you take quizzes. Get to level 4 before you take tests.

Levels of understanding math:

- Level 1 – You read the textbook or watch someone else solve a problem, but you have no clue what you are reading or the person is doing. I expect there will be areas in this course where you will begin at this level.
- Level 2 – You read the textbook or watch someone else solve a problem and sort of understand what you are reading about or what the person is doing, but you could not do it on your own even with an example to follow. I expect that you will often begin a section at this level or will attain this level after a second or third reading of some examples.
- Level 3 – You can solve the problems as long as you have examples to follow or someone guiding you. This is the level you need to be at when you take the quizzes. The homework assignments are intended to help you reach this level.
- Level 4 – You can solve the problems independently. I expect you to be at this level when you take the tests. The best way I know to attain this level is to keeping working problems until you can do them without any outside help.

I look forward to working with you in this course. Please contact me any time you have questions.

Sincerely,

Caroline M. Abbott



## I. COURSE INFORMATION

**Prepared By:** Caroline Abbott, Spring 2007      **Approved By:** Ms. Carol Hurst

**Reviewed By:** \_\_\_\_\_

### A. 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.

This is a survey course. This course is intended for transfer students in majors other than sciences, business, engineering and other mathematics related areas.

### B. COURSE OBJECTIVES

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

1. Distinguish between deductive and inductive reasoning.
2. Determine the most probable next term in a list of numbers.
3. Use inductive reasoning to predict the next equation in a list.
4. Use the method of Gauss to find sums.
5. Use successive differences to determine the next number in the sequence.
6. Use formulas to find sums.
7. Use formulas to find numbers in a pattern.
8. Use strategies for problem solving.
9. Explore properties of prime and composite numbers.
10. Find natural number factors.
11. Use divisibility tests.
12. Find prime factorization.
13. Explore perfect and amicable numbers.
14. Determine whether numbers are abundant or deficient.
15. Write even numbers as the sum of two primes.
16. Find twin primes.
17. Describe sets, list elements and use set-builder notation.
18. Identify finite and infinite sets.
19. Find  $n(A)$  for each set.
20. Use set symbols.
21. Determine whether two sets are equal, equivalent, both, or neither.
22. Identify subsets and proper subsets.
23. Find the number of subsets and proper subsets.
24. List the subsets of a set.
25. Find complements of sets.
26. Find intersections, unions, and complements of given sets.
27. Describe sets in words.
28. Find Cartesian products.
29. Use Venn diagrams to find intersections, unions, and complements.

30. Write descriptions of Venn diagrams.
31. Give cardinality of unions, intersections, and Venn diagram regions.
32. Solve survey problems.
33. Explore transformation geometry.
34. Explore non-Euclidean geometry, topology, and networks.
35. Explore chaos and fractal geometry.
36. Identify statements.
37. Write negations of statements containing quantifiers.
38. Use Euler diagrams to determine whether an argument is valid or invalid.
39. Identify compound statements.
40. Convert between statements and symbols.
41. Find truth values of compound statements.
42. Construct truth tables.
43. Use conjunction, disjunction, and exclusive disjunction.
44. Use De Morgan's Laws to negate compound statements.
45. Tell whether conditionals are true or false.
46. Write converse, inverse, or contrapositive.
47. Write "if then" statements.
48. Tell whether biconditionals are true or false.
49. Negate conditional statements.
50. Rewrite a conditional as a disjunction.
51. Use truth tables to decide whether a pair of statements is equivalent.
52. Use a truth table to decide whether an argument is valid or invalid.
53. Convert Egyptian numerals to Hindu-Arabic form and vice versa.
54. Convert Chinese numerals to Hindu-Arabic form and vice versa.
55. Use the Egyptian algorithm to find products.
56. Write numbers in expanded form.
57. Simplify numbers in expanded form.
58. Add and subtract in expanded form.
59. Identify numbers represented on abaci.
60. Use the lattice method, Napier's rods, and the Russian peasant method to find products.
61. Use the nines complement method to perform subtractions.
62. Practice basics of different numeric bases.
63. Convert between decimal form and other bases.
64. Convert between non-decimal bases.

### **C. COURSE CONTENT**

- Unit 1: Approach to Problem Solving (Chapter 1) and Topics in Number Theory (Chapter 5)
- Unit 2: Sets (Chapter 2)
- Unit 3: Logic (Chapter 3)
- Unit 4: Numeration and Mathematical Systems (Chapter 4)
- Unit 5: Topics in Geometry (selected sections of Chapter 9)

**D. STUDENT HELP**

The online homework assignments in Math XL provide step-by-step help and examples.

Help is available to students in several forms including:

- ◆ A videotape series on CD-ROM is provided with the text for student convenience.
- ◆ Math Tutor Center <http://www.awl.com/tutorcenter>
- ◆ Live one-on-one tutoring is available to students who purchase the text. A Tutor Center registration number is bundled with the text. Students can contact the Tutor Center via toll-free phone, fax, e-mail, or Internet.
- ◆ I am available for help by phone, fax, e-mail, or voice mail.
- ◆ Other students taking the course are often a good source of help.

**E. GRADING/EVALUATION**

You will take a test after each of the units. Deadlines are specified in **II. Course Schedule** for each test and assignment. The test or assignment must be delivered to one of the DE campus sites or must be mailed to arrive on campus by this date. Assignments and tests which are more than 3 days late will receive a 10% penalty.

Your final grade will be the mean of four 100-point unit tests, eleven 10-point quizzes, a 25-point cumulative quiz, a 150-point project, 16 five-point MathXL assignments, miscellaneous assignments totaling 50 points and a 200-point comprehensive final exam. One-half of the final exam grade can be used to replace a unit test grade if a unit test grade is less than one-half of the final exam grade.

If a student has a final average of at least 90 (A) on all four (4) unit tests, all 12 quizzes, the project, the MathXL homework, and all miscellaneous assignments, prior to the exam, the student will not be required to take the final exam and will receive an "A" for MTH 151-30.

The following grading scale will be used:

90 - 100	= A
80 - 89	= B
70 - 79	= C
60 - 69	= D
0 - 59	= F

Tests may be taken in DE Testing Center in Martin Hall, at the Christiansburg Site, or through an approved proctor. Please check **II. Course Schedule** in this packet and take the tests on/or before the scheduled dates to remain on track for successful course completion. Be sure to include your name and course number on each of your test answer sheets.

Graded tests and assignments can be mailed to students upon request; otherwise, they 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. Test and assignment grades can also be e-mailed to students upon request. Grades will **not** be provided to students using the DE voice mail system. If you would like to review a test with your instructor, please schedule an appointment. 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.

#### F. **ASSIGNMENT SUBMISSION**

Assignments can be submitted using any of the following options:

<b>Hand delivered</b>	DE Testing Center on the main campus, or at the Christiansburg site
<b>Mailed</b>	New River Community College Attn: DE Testing Center - MTH 151-30 P.O. Box 1127 Dublin, VA 24084
<b>Faxed</b>	540-674-3643
<b>E-mailed</b>	<a href="mailto:nrabboc@nr.edu">nrabboc@nr.edu</a>

If you hand deliver your assignments, you will be requested to complete a *Test/Assignment Receipt* as proof of homework submission. If you mail or fax your work, a *Test/Assignment Receipt* will be completed for you and your copy placed in your student folder. You may pick this up anytime or request that it be mailed to you if you do not frequent the campus. **If you e-mail your work, please request confirmation from your instructor that your work was received and keep this as your receipt until the end of the semester. *Test/Assignment Receipts* will NOT be completed for work submitted by e-mail.**

**If you fax your work to the Testing Center, please make sure to include a phone number in case the Testing Center staff needs to contact you regarding your fax. It is helpful if you will also include the total number of pages (including cover sheet) that you are faxing.**

**If the College should be closed due to inclement weather on a date that tests or assignments are due, then the tests/assignments will be due on the next FULL day the College is open. Check the first page of this course plan for Testing Center hours at both the main campus and Christiansburg site.**



**G. 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:

- 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.

Students take an independent course because of their inability to attend regular classes or a scheduling conflict. However, in an effort to help you maintain progress during the semester, due dates for assignment completion will be imposed; these are listed on **II. Course Schedule**.

**Listed below are deadlines with the penalty of withdrawal if they are not met:**

The Introductory Letter must be submitted in Blackboard or to the Testing Center by **February 8**.

The project 9.6 Assignment must be received by **February 15**.

Quiz 1 must be taken in MathXL by **February 22**.

Unit #1 Test must be received by **March 8**.

If any of these deadlines are not met, I will withdraw you from this course and you will receive a "W" grade for MTH 151.

Student inactivity that lasts for more than 14 consecutive days (2 weeks) will result in withdrawal also. "Student inactivity" is defined as no submission of assignments in MathXL, no submission of assignments or participation in forums in Blackboard, no receipt of assignments or tests in the DE testing center, and no communication from the student to the instructor.

Please contact me immediately if temporary circumstances will prevent you from satisfying these conditions.

If I have withdrawn you and you wish to be reinstated, please contact me.

## 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. Due dates for assignments and tests are listed in the table below. Assignments or tests must be delivered to one of the DE campus sites or must arrive on campus by the dates specified.

<b>Deadlines with Penalties</b>		
<b><u>Assignment</u></b>	<b><u>Deadline</u></b>	<b><u>Penalty</u></b>
Introductory Letter	February 8	Withdrawal from the course
9.6 Assignment	February 15	Withdrawal from the course
Quiz 1	February 22	Withdrawal from the course
Unit #1 Test	March 8	Withdrawal from the course
<b>Assignments and tests which are more than 3 days late will receive a 10% penalty.</b>		

**NOTE:** For students testing through a Proctor, please remember to have your completed tests returned to the campus **BY THE DUE DATE**. This is especially necessary for the Final Exam.

**\*\*\* The complete assignment schedule begins on the next page. \*\*\***

WEEK	ASSIGNMENT
<b>You must begin and remain active in the course to stay enrolled.</b>	
<b>Weeks 1 &amp; 2</b> Jan 22 – Feb 8	Review this course packet and <i>The Student's Guide to Distance Education</i> .  <b>Due by <u>FEBRUARY 1:</u></b>  <b>Introductory Letter.</b> (See <b>III. Course Assignments</b> for details.)  <b>Due by <u>FEBRUARY 8:</u></b>  <b>UNIT 1</b> 1.1 – p. 7, #1 – 11 (odd), 43, 45; MathXL 1.2 – MathXL  <b>PROJECT</b> 9.6 Assignment  <b>“Introductions All Around” Discussion Forum.</b> This is an optional assignment - see Blackboard for details.
<b>Week 3</b> Feb 9 - 15	<b>Due by <u>FEBRUARY 15:</u></b>  <b>UNIT 1</b> (continued) 1.3 – p. 26, #15, 30, 37, 61; MathXL 1.4 – p. 35, #1 – 17 (odd), MathXL <i>Handout: Calculator Practice</i>  Quiz 1 on 1.1 & 1.2 – MathXL.
<b>Week 4</b> Feb 16 - 22	<b><u>Due by FEBRUARY 22:</u></b>  <b>UNIT 1</b> (continued) 5.1 – p. 203, # 1 – 12 (all); MathXL 5.2 – p. 210, # 1 – 10 (all), 15, 25; MathXL 5.5 – p. 237, # 1 – 6 (all), 7 – 13 (odd)  Quiz 2 on 1.3 & 1.4 – MathXL Quiz 3 on 5.1 & 5.2 – MathXL  <b>PROJECT</b> 9.7 Assignment
<b>DAILY HOMEWORK FROM THE TEXTBOOK AND HANDOUTS IS NOT TURNED IN.</b>	

WEEK	ASSIGNMENT
<b>Week 5</b> Feb 23 – Mar 1	<b>Due by <u>MARCH 1:</u></b>  <b>UNIT 1</b> (continued) <b>TAKE UNIT 1 TEST (1.1 – 1.4, 5.1, 5.2, and 5.5).</b>  <b>UNIT 2</b> 2.1 – MathXL first; then p. 54, # 87 - 90 (all) 2.2 – MathXL first; then p. 61, # 61 - 68 (all)
<b>Week 6</b> March 2 - 8	<b>Due by <u>MARCH 8:</u></b>  <b>UNIT 2</b> (continued) 2.3 – MathXL first, then p. 73, # 83 – 115 (odd) <i>Handout: Venn Diagram Introduction</i> <i>Handout: Venn Diagrams, Set Properties, and Set Statements</i> 2.4 – MathXL <i>Handout: Cardinal Numbers</i>  Quiz 4 on 2.1 & 2.2 – MathXL Quiz 5 on 2.3 & 2.4 – MathXL  <b>PROJECT</b> 9.8 Assignment Project Proposal. See Blackboard for submission or submit to one of the Testing Centers.
<b>Week 7</b> March 9 - 15	<b><u>Due by MARCH 15</u></b>  <b>UNIT 2</b> (continued) <b>TAKE UNIT 2 TEST (2.1 – 2.4)</b>  <b>UNIT 3</b> 3.1 – p. 99, # 25 - 31, 41 – 47, 57 – 73 (odd), MathXL <i>Handout: Quantifiers</i> 3.5 – <i>Handout: Euler Diagrams and Arguments with Quantifiers</i>  <b><i>Extra Credit Assignment #1: Due <u>MARCH 15</u></i></b>
<b>DAILY HOMEWORK FROM THE TEXTBOOK AND HANDOUTS IS NOT TURNED IN.</b>	

WEEK	ASSIGNMENT
<b>Week 8</b> March 16 - 22	<p><b>Due by <u>MARCH 22:</u></b></p> <p><b>UNIT 3</b> (continued)            3.2 – p. MathXL first, then p. 111, # 45, 49, and 55  <i>Handout: Writing the Negation of Compound Statements Using DeMorgan's Laws</i>            3.3 – MathXL first, then p. 120 # 55, 59, and 63            3.4 – <i>Handout: Writing Conditional Statements in Symbolic Form</i></p> <p>Quiz 6 on 3.1a &amp; 3.5 – Turn in at DE Testing Center            Quiz 7 on 3.1b &amp; 3.2 – MathXL</p> <p><b>PROJECT</b>            Progress Report: see Blackboard for details or submit to one of the Testing Centers.</p> <p><b>Reminder:</b>  <b>MARCH 19 - 23</b>  <b>Spring Break – No Day/Evening Classes</b>  <b>Testing Centers open only 8 a.m. – 5 p.m.</b>  <b>Both locations closed Saturday and Sunday, March 24-25.</b></p>
<b>Week 9</b> March 23 - 29	<p><b>Due by <u>MARCH 29:</u></b></p> <p><b>UNIT 3</b> (continued)            3.3 – <i>Handout: Writing the Negation of a Conditional Statement</i>,            p. 120, # 73 – 77 (odd),  <i>Handout: Using Truth Tables to Determine Equivalent Statements</i>            3.4 – MathXL first,            then <i>Handout: Writing the Converse, Inverse, and Contrapositive of a Conditional Statement</i></p> <p>Quiz 8 on 3.3 &amp; 3.4 – MathXL</p> <p><b>Reminder:</b>  <b>MARCH 19 - 23</b>  <b>Spring Break – No Day/Evening Classes</b>  <b>Testing Centers open only 8 a.m. – 5 p.m.</b>  <b>Both locations closed Saturday and Sunday, March 24-25.</b></p>
<b>DAILY HOMEWORK FROM THE TEXTBOOK AND HANDOUTS IS NOT TURNED IN.</b>	

WEEK	ASSIGNMENT
<b>Week 10</b> Mar 30 – April 5	<p><b>Due by <u>APRIL 5</u></b></p> <p><b>UNIT 3</b> (continued)            3.6 – <i>Handout: Using Truth Tables to Determine Valid Arguments</i>  <i>Handout: Chapter 3 Outline</i></p> <p>Quiz 9 on 3.6 – Turn in at DE Testing Center</p> <p><b>PROJECT</b>            Turn in your project.            Begin participation in “Project Sharing” forum. This is an optional assignment, see Blackboard for details.</p>
<b>Week 11</b> April 6 - 12	<p><b>Due by <u>APRIL 12:</u></b></p> <p><b>UNIT 3</b> (continued)</p> <p><b>TAKE UNIT 3 TEST (3.1 – 3.6)</b></p> <p><b>UNIT 4</b>            4.1 – p. 158, # 1 – 7, 15 – 21 (odd), 35 and 37</p> <p><b>Reminder:</b>  <b>APRIL 8</b>  <b>Library and DE Testing Center (Martin Hall) closed.</b>  <b>**The Christiansburg site will be open Saturday, April 7 from 8:30 a.m. – 1:00 p.m. for DE students who need to complete tests. The assignment drop box for the main campus Testing Center will be located next to the Security Office in Godbey Hall for assignment submission on April 7 and 8.</b></p>
<b>DAILY HOMEWORK FROM THE TEXTBOOK AND HANDOUTS IS NOT TURNED IN.</b>	

WEEK	ASSIGNMENT
<b>Week 12</b> April 13 - 19	<b>Due by <u>APRIL 19:</u></b>  <b>UNIT 4</b> (continued) 4.2 – MathXL first, then p. 167, # 21, 25, 29, 33, 37, 43, 47 and 51 4.3 – <i>Handout: converting Between Bases</i> MathXL; p. 176, # 21, 25, 31, 35, 43 – 53 (odd)  Quiz 10 on 4.1 & 4.2 – Turn in at the DE Testing Center. Quiz 11 on 4.2 & 4.3 – in MathXL  <b>PROJECT</b> Finish participation in “Project Sharing” forum. This is an optional assignment, see Blackboard for details.
<b>Weeks 13 and 14</b> April 20 – May 3	<b>Due by <u>APRIL 26:</u></b>  <b>UNIT 4</b> (continued)  <b>TAKE UNIT 4 TEST (4.1 - 4.3)</b>  <b>Due by <u>MAY 3:</u></b>  <i>Extra Credit Assignment #2</i>  <b>Cumulative Quiz in MathXL</b>
<b>Week 15</b> May 4 - 7	<b>Due by <u>MAY 7:</u></b>  <b>TAKE FINAL EXAM (Units 1 – 4 &amp; 9.6, 9.7, 9.8)</b> <i>Deadline for Final Exam: <u>May 7.</u></i>  <b>NO WORK WILL BE ACCEPTED AFTER MAY 7.</b>
<b>DAILY HOMEWORK FROM THE TEXTBOOK AND HANDOUTS IS NOT TURNED IN.</b>	



### 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 heading with the following information:
  - Name
  - Student ID Number (EMPLID#)
  - Attn: MTH 151-30
  - 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.

Submit this letter as an attached file in Blackboard or to the Testing Centers:

1. Write your letter in a word-processing application, such as Word.

When you save it, name the file "MTH15130\_firstname\_lastname\_introletter", using your first name and last name for "firstname" and "lastname", respectively.

2. Access Blackboard and this course.

3. Access Assignments.

4. Click "View/Complete" link for the Intro Letter to browse and attach your Intro Letter.

#### B. TEXTBOOK AND HANDOUT ASSIGNMENTS

These assignments are not turned in. Nevertheless, you are tested on the material covered by these assignments.

These assignments are listed in the course schedule. They are in the textbook and handouts. They cover material which MathXL doesn't. They are intended to give you practice so that you will do well on the Unit Tests. In most cases, odd-numbered problems were assigned so that you can check your answers in the back of the book. Answers to the handouts are provided with the course materials. You may receive help from any source for these assignments.

#### C. MATHXL

MathXL is online software operated and maintained by Pearson/Addison-Wesley, the textbook publisher. It contains the graded homework assignments and most of the quizzes.

To register, you must have an access code. The Student Access Kit which contains your code is included with the textbook, new or used, if you bought it at the NRCC Bookstore Fall 2005 or later. Follow the directions in the kit and at [www.mathxl.com](http://www.mathxl.com). When asked for an email address,

please use your VCCS email address. Be sure to enroll in the correct course: **Abbott: MTH 151-DE, Spring 2007.**

Follow the directions for the Installation Wizard unless you are at a computer in the NRCC Library in Martin Hall, or the Math Lab in Godbey 150. You will need the plug-ins for the software to work properly. This process is only required once for any computer you use.

The homework assignments are always available and may be worked multiple times, even after the due date. They are worth 5 points each. I convert your percent score received by the due date to a 5 - point scale.

There are several help features: "Help Me Solve This" shows you how to solve the particular problem - you must then solve a similar problem to get credit. "View an Example" goes through a similar problem. "Textbook Pages" takes you to the appropriate section of the textbook. "Ask My Instructor" will allow you to email me with a link to the problem you are working on.

#### **D. QUIZZES**

Most of the quizzes are in MathXL in "Homework and Tests". They contain problems like the Math XL homework problems except they do not have the help features. I strongly recommend that you become comfortable and secure with the related Math XL homework first. You are allowed **three** (3) attempts. You may use any source for help, but I would like your score to reflect your understanding of the material. I will convert your highest percent score to a 10 - point scale.

A few of the quizzes are paper/pencil. These are included in your packet. You may use any source for help, but I would like your score to reflect your understanding. See **Section I Course Information F.** about Assignment Submission.

The 25 - point cumulative quiz covers the entire semester. Its format is different. Watch for information in Blackboard towards the end of the semester.

#### **E. PROJECT**

The project has two components: a general exploration of the topics presented in sections 9.6, 9.7, and 9.8 of the textbook with worksheets for each section and a more-specific exploration in greater depth of one of the topics. Each component is worth 75 points for a total of 150 points. See the detailed explanation in the project section of the supplements.

#### **F. UNIT TESTS AND FINAL EXAM**

The Unit Tests and Final Exam are taken in one of NRCC's testing centers or with a proctor. You are tested on all material in each unit for which you were given an assignment.

#### IV. TESTING AND PROCTOR REQUEST INFORMATION

**IMPORTANT:** Proctor Request forms must be received in the DE Office NO LATER than MONDAY, JANUARY 29. Proctor requests will be processed in the order they arrive. Any request received after the deadline requires instructor approval, and may result in delayed mailing of tests.

##### 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

A proctor is an individual who administers and monitors testing in an educational or professional setting. Proctored testing is a service provided by the NRCC Distance Education program for eligible students. This service is provided for students who live outside the service region, or are physically unable to come to one of our Testing Centers due to a documented disability.

Proctors CAN include:	Proctors CANNOT include:
<u>College or university personnel:</u> administrators, faculty members, counselors, librarians, and official testing center personnel  <u>Public or private school personnel:</u> superintendents, principals, guidance counselors, librarians, and teachers  <u>Organization or institution education personnel:</u> training coordinators, human resource personnel, and supervisors  <u>Other:</u> ministers or members of the clergy	<u>Relatives, friends, coworkers or students</u> – regardless of their position  Proctors with yahoo, hotmail, or similar email addresses will not be approved
<b>Tests must be taken within an educational or professional setting. <u>Residential settings are inappropriate.</u> All proctors must be verifiable with their organization or institution and have a work related email address.</b>	

**C. PROCTOR REQUEST GUIDELINES**

If you think you may be eligible for this service, please fill out and submit a Proctor Request form. Proctor Request forms are available online at <http://de.nr.edu/de/proctoring.pdf> , or in your course material. **Proctors must be requested by the end of the first week of each semester.** This ensures that your tests will not be delayed, and that you receive your grades in a timely fashion. If your request is not approved, you will be notified immediately. If you have any questions about the proctoring process, contact the Distance Education program at 540-674-3614.

Previous approval of a proctor does not guarantee ongoing services. NRCC reserves the right to reject a proctor request for any reason. We provide testing services at our Christiansburg site and our main campus to accommodate students who need to test in the evening or on weekends. Our testing centers are open between 50 and 60 hours a week depending on the location you choose. Proctor requests based on work schedule conflicts are unlikely to be approved since our Testing Centers are open day/evenings and partial weekends.

**D. PROCTOR REQUIREMENTS**

Proctors will discuss any fees associated with their services (if applicable) with the student. Proctors are responsible for providing a quiet environment with no interruption, administering and monitoring the tests, and for returning the completed tests to the NRCC Testing Center with the proper documentation. Test receipts and return mailing labels are provided in each test packet. Proctors are also responsible for protecting the integrity of the tests by safely housing the tests before they are administered, and making sure the tests are delivered to the Testing Center in an appropriate manner. **Tests will be processed only if they arrive by mail, are faxed, or are delivered by the proctor. STUDENTS MUST NEVER DELIVER, FAX OR MAIL THEIR OWN TESTS.** A proctor will certify in writing that a student has completed the tests according to instructions. Proctors are not allowed to make copies of tests. The honor code at NRCC is a top priority.

**E. STUDENT REQUIREMENTS**

**Proctored students are responsible for abiding by test deadlines and contacting their proctor to set up appointments for testing.** Tests are mailed to approved proctors within a week of the request, or as soon as they are made available by the instructor. The purchase of Scantron forms, 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.

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.

**PROCTOR REQUEST FORM**

**IMPORTANT:** This form should reach the DE Office **NO LATER THAN MONDAY, JANUARY 29.** Do not submit this form if you plan to test through New River Community College's Christiansburg site or the main campus.

**Please mail or fax request to:**

New River Community College  
Distance Education Program  
Attention: Carrie Hopkins  
PO Box 1127  
Dublin, VA 24084  
**FAX:** 540-674-3626

**PART I: STUDENT INFORMATION – PLEASE FILL OUT COMPLETELY AND PRINT LEGIBLY.**

<b>Student Name:</b>		<b>Student ID#:</b>
<b>Address:</b>		<b>Course/Section#:</b> (ex. BUS 200-3F)
<b>Day Phone:</b> (    )	<b>Night Phone:</b> (    )	<b>Semester:</b>
<b>E-mail:</b>		
<b>Justification for Request:</b>		
*THE STUDENT <u>MUST</u> NOTIFY THE DE OFFICE IF CLASS IS DROPPED AND PROCTOR SERVICES ARE NO LONGER REQUIRED!		

**PART II: PROCTOR INFORMATION - PLEASE FILL OUT COMPLETELY AND PRINT LEGIBLY**

<b>Proctor Name:</b>			
<b>Title &amp; Place of Employment:</b>			
<b>Complete Mailing Address:</b>			
<b>Office Phone:</b> (    )	<b>Fax Number:</b> (    )		
<b>E-mail Address:</b>			

I agree to serve as the proctor for the student identified above. As test proctor, I will receive, administer and return all tests according to the directions provided me. I will certify that the student completed the test according to the directions provided. I have spoken with the student about any fees associated with testing (if applicable). **I certify that I am not related to the student.**

Signature \_\_\_\_\_ Date \_\_\_\_\_

