COURSE SYLLABUS
Intermediate Algebra DMAT 0093 Internet
Summer II 2013

Math/Science Learning Center
Location: P330
Telephone: 972-273-3500
Office Hours:
Mayterm: Monday - Friday 8:00 am - 4:30 pm
Summer I and II: Monday – Thursday 8:00 am – 7:00 pm
Friday: 8:00 am - 4:30 pm
Check Posted Hours to Verify in Case of Changes

This course syllabus is intended as a set of guidelines for DMAT 0093. Both North Lake College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

Instructor Information:
Instructor’s Name: Nahid Pope
Email Address: npope@dcccd.edu
Office Phone Number: 214-860-3946
Office Location: Central Campus – K303B
Office Hours: Only by Appointment

Course Information (Department Syllabus)
Course title: Intermediate Algebra
Course number: DMAT 0093
Section number: 76440 / 96002
Credit hours: 3
Class meeting time: Anytime day or night online

Course description: This course includes further development of the terminology of sets, operations on sets, properties of real numbers, polynomials, rational expressions, linear equations and inequalities, the straight line, systems of linear equations, exponents, roots, and radicals. Also covered are products and factoring, quadratic equations, absolute value equations and inequalities, relations, functions, and graphs. Exponential and logarithmic functions, sequences, series and matrices will also be introduced.
**Course prerequisites:** DMAT 0091 or an appropriate score on a mathematics placement test.

**DCCCD Distance Education Courses:**
This course is presented through a web-based interactive, multimedia format using MyLabsPlus and can be completed on either a PC or MAC computer. Students use Internet access to participate in classroom studies and to ask questions. There is not a particular time of the day when the class meets. One of the advantages of taking a course in this medium is the flexibility of when students choose to complete the work. For those students who live close to North Lake College, the Math Lab is available six days a week for extra one-on-one help with homework.

**Required Textbook and Materials**
*Beginning & Intermediate Algebra MLP Package for North Lake College*
Includes Access to MyLabsPlus, Student Organizer, and Beginning & Intermediate Algebra Text, 4th ed, by Elayn Martin-Gay
ISBN: 1256121800

Note: Only a MyLabsPlus code will work for this course.

**Technical Support**
MyLabsPlus support website: [http://www.mylabsplus.com/support](http://www.mylabsplus.com/support)
eCampus support website: [http://ecampus.dcccd.edu/](http://ecampus.dcccd.edu/)

A link to these sites is available on eCampus.

Technical support number for eCampus: 1-866-374-7169
Technical support number for MyLabsPlus: 1-888-883-1299

**Course Objectives**
To develop a further understanding of the process of learning mathematics, the factors which can interfere with that process, and to continue to build the fundamentals of algebra necessary for a foundation for future courses or utilization in a career or other endeavor.

This course is a continuation of DMAT 0091 and covers chapters 6 through 10 as well as parts of chapters 3, 4, 11, 12, 14 and Appendix E & F of the textbook. Please see the Appendix of this document for a detailed list of the course objectives.

**Specific Student Learning Outcomes**
1. Students will use operations and properties to simplify rational expressions and solve rational equations involving real world applications.
   **General Education Outcomes: 1.1, 2.2**
2. Students will graph and write linear functions to include real world applications.
   **General Education Outcomes: 1.1, 2.2**
3. Students will determine whether a relation is a function and if so find the domain and range of that function.
   **General Education Outcomes: 1.1, 2.2**
4. Students will solve conjunctions and disjunctions.
   **General Education Outcomes: 1.1, 2.2**
5. Students will solve equations and inequalities containing absolute value.
   General Education Outcomes: 1.1, 2.2

6. Students will apply the properties of exponents to simplify expressions containing rational exponents.
   General Education Outcomes: 1.1, 2.2

7. Students will use operations and properties to manipulate radical expressions and solve radical equations in the complex number system.
   General Education Outcomes: 1.1, 2.2

8. Students will use various methods to solve quadratic equations.
   General Education Outcomes: 1.1, 2.2

9. Students will use various methods to solve real world applications involving systems of linear equations.
   General Education Outcomes: 1.1, 2.2

**Means of Assessment of Course Learning Outcomes**
Course Learning Outcomes will be assessed using a variety of means.

1. A written exam or online exam will be given to assess each Learning Outcome.
2. Homework will be assigned and assessed either using the software component or by the instructor.
3. Students will complete learning activities that will address specific course learning outcomes.

**Course Outline**
See Appendix ~ Course Calendar

**Evaluation Procedures**

A. **HOMEWORK:**
Each student is required to purchase the online component (called MyLabsPlus) that comes with a new book.

Homework is the most important learning tool in a course.

- It reinforces instruction.
- It provides an immediate and personal measure of your competence in the course.
- Always express the answers to stated problems (word problems) in a sentence which identifies what you have determined to be the answer.
  - An important part of mathematical literacy is good communication skills.
  - First, write the problem or the essential facts.
  - Second, present mathematical sentences showing the progression of your ideas.
  - Third, present a conclusion using a complete sentence.
- More details about what is expected on homework assignments and tests can be found in the eCampus classroom.

Time Requirements:
• You can expect to spend a **minimum of 15 hours per week** on this class.
• *If you cannot donate this amount of time to math homework, your success will be diminished.*

B. **TESTS:**
There are four types of tests: pretests, mastery tests, online tests and written tests.

**Pretests, Mastery Tests and Online Tests:**
- All pretests, mastery tests and online tests will be taken at home using MyLabsPlus
  - The pretest (optional) will generate personalized homework specifically for you.
  - The mastery test will help determine your readiness to take the written test.
  - The online test is sometimes used in place of a written test.
    - All online tests must be treated like a written test (no notes, no book, no help of any kind).
    - You will have limited attempts and a deadline to take each online test.
    - The highest grade on each online test will be used to determine your average. *The online test average will be a portion of your final course grade. See Grading Scale below for details*

- Mastery Test criteria:
  - If your score is at least 75%, you will be able to take the written chapter test.
  - If your score is below 75%, you will be required to work specific problems from the Study Plan AND re-take the mastery test at least once. See “Retaking a Mastery Test” document on eCampus.

**Written Tests:**
- All written tests have been uploaded into the eCampus classroom.
  - There are four written tests (chapter 6 is an online test on MyLabsPlus and chapter 14 & 4 is an online test on MyLabsPlus)
  - The pretest, study plan and mastery test are designed to prepare you to succeed on the written test.
  - You are ready for the written test after you have completed the following for all sections in that chapter:
    a. Watched Section Video and/or read text
    b. Filled in the Student Organizer or took notes on notebook paper
    c. Completed homework (minimum score of 75% on each assignment)
    d. Took the Mastery Test and earned the required minimum score on first attempt or followed procedures listed on “Retaking a Mastery Test” document on eCampus.
    e. Completed any chapter activities/projects

  Contact your instructor via email and request the test password once these have been completed.

- Once you have the password,
  1. Go into the eCampus classroom and click on the appropriate unit/chapter.
  2. Print the exam and complete the test according to the “Guidelines for Homework Assignments and All Tests”. To earn full credit you MUST use proper notation.
  3. Mail the exam back to your instructor with a self-addressed stamped envelope enclosed so that your exam may be returned after it has been graded.
4. Due to the number of pages, the required postage is usually at least two stamps. It is your responsibility to make sure you use the correct amount of postage.

- Chapter 6 Online Test and Chapter 14 & 4 Online Test will NOT be mailed. Instead, it will be completed and submitted online via MyLabsPlus.
- You have 48 hours to mail in the exam after the password has been given. An exam cover sheet must also be included with the test (the cover sheet is available on eCampus).
- Any tests that have been mailed after the deadline and 3 day grace period will be considered late and will count as a retake.
- **Students will be allowed to take ONLY one test each week unless a student is trying to finish the course early. No exceptions will be made without written permission from your instructor. If you take a second test in a week and the written permission is not attached, it will not be graded. The only test that may be taken during finals week is the final, and it will be taken in the testing center of your choice or with a proctor if you live outside of the area.**
- Retakes are available on all exams except the final. You are allowed only one retake per exam.
- The maximum grade for retakes will be 75%.
- All written tests will be graded according to the Guidelines for Homework Assignments and All Tests (see Appendix).

**Special note on written chapter tests:**

- All written tests will be based on concepts presented in the videos, text, Student Organizer pages and homework problems that are covered throughout the semester.
- **All written tests will test your understanding of the course concepts that are covered throughout the semester and through various forms of questioning and application problems. This means the exams are NOT identical to problems you have worked but designed to test your understanding of the concepts presented.**
- If you do not earn at least 70% on these tests, the instructor will discuss strategies to improve your success. Then you may choose to retake the test. The maximum grade for the retake is 75%.

**Proctored Tests – Midterm and Final Exam**

- You must contact the instructor via email at least **two weeks before** you are ready to take either the midterm or final exam so that it can be sent to the appropriate test center. Exams are usually only sent out on Tuesdays.
- The midterm exam is comprehensive and will be given after chapters 6-9 have been completed.
- The midterm and final exam will be accessed via eCampus and the NLC-DMAT-0093 Testing Community if taken at North Lake College ~ See eCampus for more details.
- The final exam is comprehensive and is given after Appendix E & F have been completed. It covers the entire course.
- For the final exam, students must adhere to the test schedule given in the course calendar. A student may take the final exam early ~ contact your instructor.

**You may not take the final exam until all the written chapter tests have been taken AND received by the instructor.**
• The midterm and the final must be taken at a DCCCD college or in a supervised testing situation at a testing site mutually agreed upon. Students must notify the instructor as to which college is best for testing by filling out the student profile form and emailing the instructor within the first week of class with the desired campus indicated.

• Students who live out of the Dallas area may arrange for a proctor using the proctor nomination form in the Dallas TeleCollege. No proctored tests will be sent to a location in Dallas County other than a DCCCD campus test center unless accommodation is being made through Disability Services. There is a link to the proctor nomination form in the “External Links” area of the eCampus classroom.

Taking Tests in the Testing Center (A 425)

• You may not bring personal items into the Test Center. This includes bags, cell phones and pagers. To do so constitutes Academic Dishonesty. Coin-reimbursable (quarter) lockers are available for student use.

• Please show courteous and cooperative behavior while using the services provided by the Testing Center.

• Do not bring children to the testing center. You must make arrangements for the care of your children prior to your exam date. The police department will be notified of any unattended children.

• Do not take any testing materials with you when you leave the Testing Center. This includes the test, answers, charts, scratch paper, etc. To do so constitutes Academic Dishonesty. These items will be attached to your test.

• Division Policy on Bathroom Breaks During Testing: Students taking tests in math and science will NOT be allowed to leave the testing center during a test and return to complete the test. If you leave you are through testing. If you need special accommodations, talk to your instructor or the Disability Services Office. Accommodations can be made. You can contact the Disability Services Office in person (A430) or by phone at 972-273-3165. For more information, visit http://www.northlakecollege.edu/services-and-resources/advice-and-assistance/Pages/disability-services.aspx

Academic Dishonesty
The Dallas County Community District has established procedures and guidelines to protect the security and integrity of all exams. All incidents of academic dishonesty are documented and reported to the instructor, the Director of Testing and the Dean of Student Enrollment.

Questions? Please visit the Testing Center (A425) or call 972-273-3160.

Monday – Thursday: 8:30 a.m. – 8:00 p.m.
No tests will be issued after 7:00 p.m. Other cut-off times may be in effect for specific exams by the instructor's direction. All exams collected at 8:00 p.m.
Friday - Saturday: 8:30 a.m. – 3:30 p.m.
Other cut-off times may be in effect for specific exams by the instructor's direction.
No tests will be issued after 2:30 p.m. All exams collected at 3:30 p.m.

Sunday: CLOSED

If your instructor requires you to complete an exam in the Testing Center you must have a Government- or school-issued photo identification. This requirement is strictly enforced. NLC Student IDs can be acquired from the Student Resource Center in L240.

In addition you must have the following information when you request your test.

- Instructor’s name
- Subject and course number (DMAT 0093)
- Exam number (midterm or final exam)

You should also bring the following supplies.

- Pencil & Eraser
- A Test Request Form must be completed before entering the Testing center.
- Only battery operated 4 function, non programmable scientific or TI83/TI84 calculators are allowed (if permitted by instructor).
- Money for coin-return lockers (quarter). Please do not share lockers.

Important: Government- or school-issued photo identification is required & enforced.

**Grading Scale**
The course grade will be determined as follows:

- Written Tests: 35%
- Homework, Mastery Tests, Quizzes: 10%
- Midterm: 30%
- Final Exam: 25%

**Note:** The Chapter 6 Online Test and the Chapter 14 & 4 Online Test together will be equivalent to one Written Test.

**FORMULA:**
Written Test average * 0.35 + Homework & Quiz average * 0.05 + Mastery Tests Average * 0.05 + Midterm * 0.3 + Final Exam * 0.25 = Course Grade

See eCampus for a sample calculation.

The Gradebook listed under “Tools” on eCampus will show you your exam grades.

Your course grade will be determined by the following:
A = 90 – 100%
B = 80 – 89%                         *The letter grade of D is no longer
given in DMAT classes*
C = 70 – 79%
F = 0 – 69%;  Grade of F or E (if earned) will be reported.
(See below for details to earn the E.)

The instructor reserves the right to make changes in the course requirements as need throughout
the semester.  Students will be notified via email of any changes that are to be made.  If an
adjustment occurs in the number of points that can be generated, the course grade grid will be
altered accordingly.

**End of Course Options**

1. **Receive a grade of an A, B or C**
   Receiving an A, B or C grade is considered successful completion of the Intermediate
   Algebra course.

2. **Student receives a W.**
   Students who decide that they will be unable to complete the course and withdraw on or
   before the drop date will receive a W.  Students repeating the course in a subsequent
   semester will have to pay tuition again and may have to purchase a new set of materials
to obtain the required software license (MyLabsPlus code is good for at least one year if
used with the same text.)

3. **Student receives an Incomplete (I)**
   - A student who has completed all work but the last unit test and final exam
     successfully in accordance with the Course Calendar AND/OR HAS MEDICAL
     ISSUES OR OTHER EXTREME CIRCUMSTANCES may be eligible for an
     Incomplete grade.
   - Only students who have worked consistently and regularly throughout the
     semester may qualify for an Incomplete.
   - The student needs to make individual arrangements with the instructor for plans to
     finish the course.
   - A contract for the Incomplete must be included with the instructor’s final grades.
   - Incomplete contracts must be approved by the last week of the term and may be
     accepted via email.
   - The contract includes a deadline for completion, agreed upon work to be finished
     and a grade alternative if the contract is not fulfilled.
   - The student does not have to re-enroll in the course nor buy new materials.

4. **Student receives a WX grade**
   - It is mandatory that the student have consistent attendance (as determined
     by activity in the software) and work on a regular basis every week (tests are
     taken regularly, not all bunched up together).
   - All online tests, written tests and activities for chapters 6 through 9 as well as the
     midterm must be completed with a 70% or higher on each.
   - Students who receive a WX grade must sign a contract that states what
     assignments are to be finished and must agree to sign up for the same online
     course the next semester to complete the course work.  Students will begin where
     they left off the previous semester.
• The contract must be approved by the last week of the term and submitted with the final grades. Student’s acceptance of the contract may be completed by email.
• The student will have to pay for the course tuition again but will not have to purchase a new code.
• The WX grade will only be considered and discussed on an individual basis.

5. **Student receives an E or an F.**

   **E Details**
   • Any student that does not meet the standards below will receive a grade of F.
   • Student re-enrolls in same course and begins with pre-testing at the very beginning of the course.
   • The student will create a new study plan for each chapter. With the pre-testing and exemptions for concepts mastered, a repeating student will have the opportunity to focus on only the concepts for which he/she needs additional practice.
   • The E grade is non-punitive with regard to one’s GPA but counts as hours not completed by Financial Aid.
   • To earn the E option the following requirements must be met:
     1. Student had regular attendance as determined by time spent working in the course software.
     2. Student made a valid effort to complete the required material.
     3. Student must restart the class from beginning.
     4. Student will be required to pay for the new attempt at the course.

**Availability of Course Materials:**
Access to coursework on MyLabsPlus is dependent upon the beginning and ending of the semester. Students may not be able to access their coursework except under instructor supervision and during their enrolled semester.

**Discipline/ Course/ Department/Policies**

**SENDING EMAILS**
Be sure to put "DMAT 0093-section, Last Name" in the subject line for all emails you send. Your instructor may have several internet classes going on at the same time. By doing this you will be saving yourself and the instructor a lot of time. Also, please include your first and last name in the message of the email as well as your student id number.

**ATTENDANCE**
Attendance is an important part of your success. Attendance will be marked each week by recording the time spent in the instructional classroom. Additional time off line, doing assigned homework and taking exams is also expected.

**CALCULATORS:**
Calculators will be permitted on all tests. You are also encouraged to use them on the homework for the entire course. Calculators such as the TI 89 & TI 92, which perform algebraic operations, are not allowed. You may check out a TI 84 calculator for the midterm and final at North Lake College. Please verify the calculator policy for other campuses by calling the appropriate testing center.
**CELL PHONE USE:**
The use of cell phones or other similar devices is **prohibited** during testing. You are expected to turn OFF and put away all such devices BEFORE entering the testing center. **Students caught with a cell phone in their possession while taking a test will be given a zero (0) for that test and may face disciplinary action.**

**SCHEDULE FOR MATH LEARNING CENTER:**
Located in C211 on the main campus
- 8:00 am – 9:00 pm, Monday – Thursday
- 9:00 am – 2:00 pm, Friday, Saturday
- CLOSED on Sunday

**INSTITUTIONAL POLICIES**

**ACADEMIC DISHONESTY**
The Student Code of Conduct prohibits academic dishonesty and prescribes penalties for violations. According to this code, which is printed in the college catalog, "academic dishonesty", includes (but is not limited to) cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion."

1) The Vice-President of Academic & Student Affairs may initiate disciplinary proceedings against a student accused of academic dishonesty.

2) Academic dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.

3) Cheating on a test includes:
   a) Copying from another student’s test paper;
   b) Using, during a test, materials not authorized by the person giving the test;
   c) Collaborating with another student during a test without permission to do so;
   d) Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test.
   e) Substituting for another student, or permitting another student to substitute for you to take a test; and
   f) Bribing another person to obtain an unadministered test or information about an unadministered test.

4) “Plagiarism” means the appropriation of another’s work (ideas and/or words) and the unacknowledged incorporation of that work in one’s written work offered for credit. Quotes not identified as quotes constitute a form of plagiarism even if the borrowed ideas are documented.

5) “Collusion” means an unauthorized collaboration with another person in preparing written work offered for credit.

Academic dishonesty may result in the following sanctions, including, but not limited to:
1. A grade of zero or a lowered grade on the assignment or course.
2. A reprimand.
3. Suspension from the college.

**NOTIFICATION OF ABSENCE DUE TO RELIGIOUS HOLY DAY(S)**
Students who will be absent from class for the observance of a religious holiday must notify the instructor in advance. Please refer to the Student Obligations section of the college catalog for more explanation. You are required to complete any assignments or take any examinations missed as a result of the absence within the time frame specified by your instructor.

**REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (A430)**
North Lake College provides academic accommodations to students with disabilities, as defined under ADA law. It is the student's choice and responsibility to initiate any request for accommodations. If you are a student with a disability who requires such ADA accommodations, please contact North Lake College's Disability Services Office in person (A430) or by phone at 972-273-3165.
http://www.northlakecollege.edu/resources/disability.html

**ADMINISTRATIVE WITHDRAWAL**
Students with valid extenuating circumstances may be eligible for an administrative withdrawal by the Dean of the Division in which the course or courses are taught. An administrative withdrawal will not be awarded to students who simply fail to withdraw prior to the last day to receive a “W.” The request for an administrative withdrawal must be made in writing to the Dean of the Division with any supporting documentation attached. This must occur before the last official day of the semester.

**DROP POLICY**
If you are unable to complete this course, you must officially withdraw by **Tuesday, July 23, 2013**. Withdrawing is a formal procedure which you must initiate; your instructor cannot do it for you. All Dallas County Community Colleges charge a higher tuition rate to students registering the third time for a course. This rule applies to the majority of credit and Continuing Education / Workforce Training courses. Developmental Studies and some other courses are not charged a higher tuition rate. Third attempts include courses taken at any DCCCD college since the fall 2002 semester. For further information, go online to:
http://www.DCCCD.edu/thirdcourseattempt

**STOP BEFORE YOU DROP**
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W.” Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access:
https://www1.dcccd.edu/coursedrops
FINANCIAL AID STATEMENT
Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate are also subject to this policy.

To apply for financial aid in the DCCCD, students must complete FAFSA (Free Application for Federal Student Aid) on the web at: http://www.fafsa.ed.gov

COUNSELING SERVICES (A430)
Counseling services for personal issues are provided to all students currently enrolled at North Lake College. These services are provided by licensed professionals who are bound by confidentiality (within ethical parameters) at no charge. With the assistance of a counselor, students are able to identify, understand, resolve issues and develop appropriate skills. To make an appointment call 972-273-3333 or visit A 430.

TSI INFORMATION
TSI (Texas Success Initiative) is the state required assessment program that has replaced TASP. The purpose of TSI is to insure students have the skills to be ready for college level coursework. Dallas County Community College District is allowing students to decide when they will take their developmental coursework. Demonstrated proficiency in skills through completion of DMAT 0093 or a passing score on an assessment instrument is required to move to college level math classes. Students must earn an “A”, “B”, or “C” in their developmental class in order to move to the next developmental level or to a college level class.

Effective for Fall Semester 2005, the Dallas County Community Colleges will charge a higher tuition rate to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in higher tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 semester.

Enrollment in developmental courses is subject to other limitations. Students may enroll in a maximum of 27 hours of developmental courses.

For more information go to the DCCCD web site and click on “Paying for College” and then “Third Course Attempt.”

TSI completion of all areas (reading, math, and writing) is required before being awarded a degree. Based on the first testing score, some students may need to re-test in order to complete TSI requirements.

Food and Drink in the Classroom
The college policy restricts food and drink in the classroom.
THE ACADEMIC SKILLS CENTER (A332)
The Academic Skills Center (ASC) is designed to provide assistance to students in the following areas:

- Labs for students enrolled in foreign language, Developmental Reading, and ESOL courses. One-on-one tutoring is available.
- The Writing Center can help students clarify writing tasks, understand instructors’ requirements, develop and organize papers, explore revision options, detect grammar and punctuation errors, and properly use and document sources. Rather than merely editing or "fixing" papers, tutors focus on helping students develop and improve their writing skills.
- The Online Writing Lab (OWL) allows students to submit papers to our writing tutors electronically and get feedback within 24-72 hours. The OWL can be accessed through eCampus. After logging on to eCampus, click on the Community Tab at the top. Type “Owl” in the search field and click “Go.” Next, click on the double drop-down arrows next to “NLC-OWL2,” and then click on “Enroll.” Once enrolled, students can receive services from the OWL.

For more information or to schedule a tutoring appointment, come by A-332 or call 972-273-3089.

General Education Outcomes

North Lake College has comprehensive general education outcomes and assures its graduates are able to meet those outcomes. Our graduates will acquire or improve skills that enable them to be productive citizens, lifelong learners, and effective employees. These skills include oral and written communication, critical/logical thinking, information literacy and technological competence, ethical and civic values, cultural diversity and global awareness, and workforce and interpersonal skills.

Outcome 1: Communication Skills

Outcome 2: Critical Thinking Skills

Outcome 3: Information Literacy and Technological Competency

Outcome 4: Ethical and Civic Values

Outcome 5: Cultural Diversity and Global Awareness

Outcome 6: Workforce and Interpersonal Skills
Learning Activities, Outcomes, and Assessment
Optional During Summer and Fall Semester

1. Learning Activity: Using a Linear Function to Make Predictions
   a. Learning Outcomes: At least 75% of the students will use a linear function to model data then use the function to make calculations on a quiz.
   b. Assessment: Quiz on MyMathLab ~ The student will be assessed based on accuracy and precision.
   c. General Education Outcome: Outcome 2 ~ Critical thinking

2. Learning Activity: Solving and Graphing a Conjunction
   a. Learning Outcomes: At least 75% of the students will solve and graph a conjunction on a quiz.
   b. Assessment: Quiz on MyMathLab ~ The student will be assessed based on accuracy and precision.
   c. General Education Outcome: Outcome 2 ~ Critical thinking

3. Learning Activity: Domain of a Rational Function
   a. Learning Outcomes: At least 75% of the students will correctly identify the domain of a rational function on a quiz.
   b. Assessment: Quiz on MyLabsPlus ~ The student will be assessed based on accuracy and precision.
   c. General Education Outcome: 1.1, 2.2, Critical thinking

Required Learning Activities to Prepare for SLO Assessment
Online Courses

Required Activities will be posted in the eCampus classroom.
APPENDIX

DMAT 0093 Weekly Course Calendar ~ Internet Course
Summer II 2013

July 9, 2013    Classes Begin
July 16       Certification Date
August 28    Drop date ~ Last day to drop with grade of W
September 2  Only one take-home test and one proctored exam allowed after this date
September 9  All take-home tests must be received by instructor before or on this date
September 10   day to take final exam at a campus other than North Lake
September 14  Last day to take final exam at North Lake campus

The following timeline is for DMAT 0093 – 76440 &

- The dates listed below are the due dates for this course.
- The post mark on the test will be the date used to determine if a test was taken on time, not the date of receipt by the instructor.
- Students are strongly encouraged to finish early and may take tests as quickly as they are able.
- All exams may be taken on or before the due date without any penalty.
- **Every test has a 3 day grace period.** That means you may request the password up to 3 days late and have the exam count full credit.
- **Any exam taken more than 3 days late will count as a retest.**
- **After September 2, students can only do one take-home test and one proctored exam.**
- **Multiple exams, including retests, will not be accepted after the September 9 cut off.**
- Contact your instructor for the password when you are ready for a test.
- Once the password has been given students have 48 hours to mail in the completed test along with a self-addressed stamped envelope.
- It takes at least 2 first class stamps to return most tests.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>7/9-7/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation (Go to eCampus Classroom)</td>
<td></td>
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<tr>
<td>Sections 6.1 – 6.5 Review (MLP)</td>
<td></td>
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<tr>
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<td><strong>Chapter 6 Online Test</strong> (MLP) ~ No Mastery Test for Chapter 6 ~ due by 7/14</td>
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<th>Week 3</th>
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<td>Review Chapter 3, 8 &amp; 9 – Chapter 8 &amp; 9 Mastery Test (MLP)</td>
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<td><strong>Chapter 8 &amp; 9 Written Test</strong> ~ due by 7/29</td>
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<td>Week 4</td>
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<tr>
<td>Review Chapter 7 – Chapter 7 Mastery Test (MLP)</td>
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<tr>
<td><strong>Chapter 7 Written Test</strong> ~ due by 8/12</td>
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<td>Review for Midterm – Midterm Exam Covers Chapter 6, 7, 8 &amp; 9</td>
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<tr>
<td>Review Chapter 10 - Chapter 10 Mastery Test (MLP)</td>
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<td>Review Chapter 11 &amp; 12 - Chapter 11 &amp; 12 Mastery Test (MLP)</td>
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<tr>
<th>Week 10</th>
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<tr>
<td>Appendix E (eText)</td>
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<td>Appendix F (eText)</td>
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<tr>
<td>Review for Final Exam – See Appendix A of text</td>
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<tr>
<td><strong>Last Day to Take Final Exam at Other Campus</strong> ~ Tuesday, September 10</td>
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<tr>
<td><strong>Last Day to Take Final Exam at North Lake</strong> ~ Saturday, September 14</td>
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<tr>
<td>Final Exam Covers Chapter 4, 6, 7, 8, 9, 10, 11, 12, and 14</td>
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## List of Course Objectives

### Chapter 6: Factoring Polynomials

**Sections 6.1 – 6.5: Factoring All Types of Polynomials**
- Skip ~ Prerequisite: Covered in Elementary Algebra
- A homework assignment will be given on MyLabsPlus as a review.
- Students can also see pages 402 – 405 for an integrated review if needed.

### Section 6.6: Solving Quadratic Equations by Factoring
- Solve quadratic equations by factoring
- Solve equations with degree greater than 2 by factoring
- Find the x-intercepts of the graph of a quadratic equation in two variables

### Section 6.7: Quadratic Equations and Problem Solving
- Solve problems that can be modeled by quadratic equations ~ SKIP for now. Will be included in Chapter 11.

### Chapter 3: Graphs and Introduction to Functions

**Section 3.6: Functions**
- Identify relations, domains, and ranges
- Identify functions
- Use the vertical line test
- Use function notation

### Chapter 8: More on Functions and Graphs

**Section 8.1: Graphing and Writing Linear Functions**
- Graph linear functions
- Write an equation of a line using function notation
- Find equations of parallel and perpendicular lines

**Section 8.2: Reviewing Function Notation and Graphing Nonlinear Functions...SKIP**

**Section 8.3: Graphing Piecewise-Defined Functions and Shifting and Reflecting Graphs of Functions**
- SKIP ~ Covered in College Algebra

**Section 8.4: Variation and Problem Solving**
- SKIP ~ Covered in College Algebra

### Chapter 9: Inequalities and Absolute Value

**Section 9.1: Compound Inequalities**
- Find the intersection of two sets
- Solve compound inequalities containing AND
- Find the union of two sets
- Solve compound inequalities containing OR
  
  A powerpoint has been assigned in MML to help students distinguish the difference between AND and OR.

**Section 9.2: Absolute Value Equations**
- Solve absolute value equations

**Section 9.3: Absolute Value Inequalities**
- Solve absolute value inequalities of the form |x| < a
- Solve absolute value inequalities of the form |x| > a
Section 9.4: Graphing Linear Inequalities in Two Variables and Systems of Linear Inequalities...SKIP. Covered in Math 1324
- Graph a linear inequality in two variables...SKIP
- Solve a system of linear inequalities....SKIP

Chapter 7: Rational Expressions

Section 7.1: Rational Functions and Simplifying Rational Expressions
- Find the domain of a rational expression
  *There is a mistake in the book. This should read, “Find the domain of a rational FUNCTION.”*
- Simplify rational expressions
- Write equivalent forms of rational expressions
- Use rational functions in applications

Section 7.2: Multiplying and Dividing Rational Expressions
- Multiply rational expressions
- Divide rational expressions
- Multiply or divide rational expressions

Section 7.3: Adding and Subtracting Rational Expressions With Common Denominators and LCD
- Add and subtract rational expressions with the same denominator
- Find the least common denominator of a list of rational expressions
- Write a rational expression as an equivalent expression whose denominator is given

Section 7.4: Adding and Subtracting Rational Expressions With Unlike Denominators
- Add and subtract rational expressions with unlike denominator

Section 7.5: Solving Equations Containing Rational Expressions
- Solve equations containing rational expressions
- Solve equations containing rational expressions for a specified variable

Section 7.6: Proportion and Problem Solving With Rational Equations
- Solve proportions
- Use proportions to solve problems
- Solve problems about numbers
- Solve problems about work
- Solve problems about distance

Section 7.7: Simplifying Complex Fractions
- Simplify complex fractions by simplifying the numerator and denominator and then dividing
- Simplify complex fractions by multiplying by a common denominator ...OPTIONAL
- Simplify expressions with negative exponents

Chapter 10: Rational Exponents, Radicals, and Complex Numbers

Section 10.1: Radicals and Radical Functions
- Find square roots
- Approximate roots
- Find cube roots
- Find nth roots
- Find $\sqrt[n]{a^n}$ where $a$ is a real number
- Graph square and cube root functions...SKIP. Covered in College Algebra

Section 10.2: Rational Exponents
- Understand the meaning of \( a^{\frac{1}{n}} \)
- Understand the meaning of \( a^{\frac{m}{n}} \)
- Use rules for exponents to simplify expressions that contain rational exponents
- Use rational exponents to simplify radical expressions

**Section 10.3: Simplifying Radical Expressions**
- Use the product rule for radicals
- Use the quotient rule for radicals
- Simplify radicals
- Use the distance formula

**Section 10.4: Adding, Subtracting, and Multiplying Radical Expressions**
- Add or subtract radical expressions
- Multiply radical expressions

**Section 10.5: Rationalizing Denominators and Numerators of Radical Expressions**
- Rationalize denominators
- Rationalize denominators having two terms
- Rationalize numerators...

**Section 10.6: Radical Equations and Problem Solving**
- Solve equations that contain radical expressions
- Use the Pythagorean theorem to model problems

**Section 10.7: Complex Numbers**
- Write square roots of negative numbers in the form \( bi \)
- Add or subtract complex numbers...
- Multiply complex numbers...
- Divide complex numbers...
- Raise \( i \) to powers...

**Chapter 11: Quadratic Equations and Functions**

**Section 11.1: Solving Quadratic Equations by Completing the Square**
- Use the square root property to solve quadratic equations
- Solve quadratic equations by completing the square
- Use quadratic equations to solve problems...Will include problems from Sec 6.7

**Section 11.2: Solving Quadratic Equations by the Quadratic Formula**
- Solve quadratic equations by using the quadratic formula
- Determine the number and type of solutions of a quadratic equation by using the discriminant
- Solve geometric problems modeled by quadratic equations

Sections 11.3 – 11.6: SKIP ~ Covered in College Algebra

**Chapter 12: Exponential and Logarithmic Functions**

**Section 12.1: The Algebra of Functions; Composite Functions**

**Section 12.2: Inverse Functions**

**Section 12.3: Exponential Functions**
- Graph exponential functions
- Solve equations of the form \( b^x = b^y \)...
- Solve problems modeled by exponential equations

**Section 12.4: Logarithmic Functions**
- Write exponential equations with logarithmic notation and write logarithmic equations with exponential notation
- Solve logarithmic equations by using exponential notation
- Identify and graph logarithmic functions

**Section 12.5: Properties of Logarithms**

**Section 12.6: Common Logarithms, Natural Logarithms, and Change of Base**
- Identify common logarithms and approximate them by calculator
- Evaluate common logarithms of powers of 10
- Identify natural logarithms and approximate them by calculator
- Evaluate natural logarithms of powers of e.
- Use the change of base formula

**Section 12.7: Exponential and Logarithmic Equations and Applications**

**Chapter 14: Sequences, Series, and the Binomial Theorem**

**Section 14.1: Sequences**
- Write the terms of a sequence given its general term
- Find the general term of a sequence
- Solve applications that involve sequences

**Section 14.2: Arithmetic and Geometric Sequences**
- Identify arithmetic sequences and their common differences
- Identify geometric sequences and their common ratios

**Section 14.3: Series**
- Identify finite and infinite series and use summation notation
- Find partial sums

**Section 14.4: Partial Sums of Arithmetic and Geometric Sequences**

**Section 14.5: The Binomial Theorem**

**Chapter 4: Solving Systems of Linear Equations**
- Solve a system of linear equations by graphing
- Use the substitution method to solve a system of linear equations
- Use the addition method to solve a system of linear equations
- Solve a system of three linear equations in three variables by hand
- Systems of Linear Equations and Problem Solving

**Appendix E: Solving Systems of Equations by Matrices**

**Appendix F: Solving Systems of Equations by Determinants**

The focus will be on using the calculator to solve a system of equations using matrices.
A handout or powerpoint is available for using a calculator and matrices to solve a system of equations.