College Algebra Lecture Syllabus

NORTH LAKE COLLEGE
5001 N. MacArthur Blvd.
Irving, Texas 75038-3899
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Instructor Information
Instructor’s Name: Huy (Tim) Ngo
Email Address: hngo@dccc.edu
Office Phone Number: 927-273-3068
Office Location: C303E
Office Hours: M-W: 09:25AM-10:55AM
T-Th: 04:40PM-05:40PM
Notes: Other times available by appointment.

Division Office and Phone: Location: P330
Telephone: 972-273-3500

Course Information
Course title: College Algebra
Course number: MATH 1314
Section number: 78218
Semester/Year: 2nd 8 Weeks, Fall 2019.
Certification Date: 10/28/2019
Last Day to Withdraw: 11/27/2019
Credit hours: three (3)
Class meeting time: T-Th 12:30PM-03:20PM in C210;
Attendance at this scheduled time is highly recommended.

Course Prerequisites
DMAT-0093 or DMAT-0310 (Intermediate Algebra) or equivalent with an A, B, or C, or an appropriate score on a mathematics placement test.

Course Description
This course is an in-depth study and applications of polynomial, rational, radical, exponential, logarithmic, absolute-values and piecewise-defined functions, and systems of equations using matrices. Also covered are the graphing calculator, non-linear inequalities, sequences and series, circles, the Binomial Theorem and a review of the classification of the real number systems.
Student Learning Outcomes

Course Learning Outcomes will be assessed by a variety of means.
1. A written exam or Mastery test in MyLabsPlus will be given to assess each Learning Outcome.
2. Homework will be assigned and assessed using the software component.
3. Observation of students as they interact in groups and discussions will be used to assess all outcomes.
4. Students will complete projects and learning activities that will address specific course learning outcomes.

ACGM Learning Outcomes

Upon successful completion of this course, students will:
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomials and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

Texas Core Objectives

The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the activities you engage in will give you the opportunity to practice two or more of the following core competencies:

1. Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
2. Communication Skills - to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
3. Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
4. Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
5. Personal Responsibility - to include the ability to connect choices, actions, and consequences to ethical decision-making
6. Social Responsibility - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
Required Course Materials

1. NORTH LAKE MML Plus for College Algebra w/ Coreq Support.
   Edition: 5th
   ISBN: 9780136171935
   Author Beecher
   Publisher: Pearson Learning Solutions
   Copyright Year: 2019
   The MyLabsPlus is accessed with the MyMathLab – Plus access code.
   Student ID number and email address listed in eConnect will be uploaded into the MyLabsPlus software to provide the student access to the course materials. You can modify your email address and password once you have logged into the software the first time. If you have questions or concerns contact the math division office at 7mascioff@dccc.edu

2. Calculators
   You will be allowed to use calculators on all tests. Graphing calculators (such as the TI-83 or TI-84 Plus) are recommended. 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 which are taken in class at North Lake College.

Note: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Graded Work

The tables below provide a summary of the graded work in this course and an explanation of how your final course grade will be calculated.

Summary of Graded Work

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of grade</th>
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</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>5%</td>
</tr>
<tr>
<td>Homework in MLP</td>
<td>10%</td>
</tr>
<tr>
<td>Other Daily Work: 5 SLO POP Quizzes.</td>
<td>10%</td>
</tr>
<tr>
<td>4 Written Chapter exams (tests)</td>
<td>60%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
</tr>
</tbody>
</table>
Final Grade
Your course grade will be determined by the final grade average based on the following:
A = 90 – 100   B = 80 – 89   C = 70 – 79   D = 67 – 69   F = 0 – 66

Description of Graded Work:

Attendance
Attendance is necessary to pass this class. Roll will be taken every class period.
This portion of the final course grade will be determined by the number of unexcused absences, using the following table:

<table>
<thead>
<tr>
<th>Absences</th>
<th>No. of Absences</th>
<th>Grade</th>
<th>Grade Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absences</td>
<td>0 - 2</td>
<td>Grade</td>
<td>100</td>
</tr>
<tr>
<td>Absences</td>
<td>3</td>
<td>Grade</td>
<td>90</td>
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<tr>
<td>Absences</td>
<td>4</td>
<td>Grade</td>
<td>80</td>
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<tr>
<td>Absences</td>
<td>5</td>
<td>Grade</td>
<td>70</td>
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<tr>
<td>Absences</td>
<td>6</td>
<td>Grade</td>
<td>60</td>
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<tr>
<td>Absences</td>
<td>7</td>
<td>Grade</td>
<td>50</td>
</tr>
<tr>
<td>Absences</td>
<td>8</td>
<td>Grade</td>
<td>40</td>
</tr>
<tr>
<td>Absences</td>
<td>9</td>
<td>Grade</td>
<td>30</td>
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<tr>
<td>Absences</td>
<td>10</td>
<td>Grade</td>
<td>20</td>
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<tr>
<td>Absences</td>
<td>11</td>
<td>Grade</td>
<td>10</td>
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<tr>
<td>Absences</td>
<td>12</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>13</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>14</td>
<td>Grade</td>
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<td>Absences</td>
<td>15</td>
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<td>Absences</td>
<td>16</td>
<td>Grade</td>
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<td>Absences</td>
<td>17</td>
<td>Grade</td>
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<tr>
<td>Absences</td>
<td>18</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>19</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>20</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>21</td>
<td>Grade</td>
<td>0</td>
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<tr>
<td>Absences</td>
<td>22 or more</td>
<td>Grade</td>
<td>0</td>
</tr>
</tbody>
</table>

Tardies
- Don't be late to class.
- It is rude to the instructor and other students.
- It causes you to miss part of the classwork.
- Everyone will be late on occasions—even the instructor. Do not make a habit of it.
• If you anticipate an ongoing problem, please discuss it with the instructor.
• Quizzes will be given periodically often during the first 5 minutes of class. The quizzes are a part of your daily work grade. Arriving after the quiz has been distributed will result in a zero for that daily quiz.

Homework
• What happens in the classroom is only a part of the course.
• You have to put time in outside of class—homework.
• Your degree of success in the course will depend on how much effort you are able to give to work outside of class. That will depend on the time you are willing to give and the other activities that require your time—work, other courses, family, etc.
• Read the section to be covered BEFORE you come to class.
• MyLabsPlus for homework assignments is required.

Research has found that to be successful in a course (A, B, or C) students have to spend 2 hours out of class for every hour in class. Do the math! Do you have that much time?

Homework must be completed before the chapter test is taken.
Students should maintain a HW notebook.
• Label each section and each problem
• Show your work needed to solve the problem
• Circle the answer
• Enter your answer in MyLabsPlus
• You will be asked to present your written HW at various times throughout the semester.
• For detailed examples of required work, see “Guidelines for All Tests and Assignments” document posted in your eCampus classroom.

Quizzes: (PAPER Pop Quizzes)
Quizzes will be given periodically often during the first 5 minutes of class. The quizzes are a part of your daily work grade. Arriving after the quiz has been distributed will result in a zero for that daily quiz.
Only extenuating circumstances where reasons for missing these quizzes are well documented, unpreventable, and were of urgent concern are considered. These conditions are subject to your instructor’s judgment.

Testing
Written Tests (See "Important Limits on testing" below):
• All written tests will be taken in the testing center (See Testing Center later in this document.)
• Students should ask for a paper copy of the lecture test.
• You must show all your work to receive full-credit.
• A correct answer with no work shown may result in no credit.
• The instructor reserves the right to make test schedule changes. All tests will be announced at least one week in advance.
• If you are unable to take a test on schedule, make prior arrangements with the instructor, if possible.

Important limits on testing--read now before you have a problem:
No one will be allowed under any circumstances to take more than 2 tests of any kind during the week before final exams.

No testing is allowed in the testing center during finals week.
(Reserved for on-line courses and placement testing.)
If you unable to take the exam by the given deadline, you will be given a zero. If you are absent for an exam, you should contact your instructor as soon as possible to discuss your situation. Only extenuating circumstances where reasons for missing these exams are well documented, unpreventable, and were of urgent concern are considered. These conditions are subject to your instructor’s judgment.

Final Paper:
The final exam is comprehensive. The exam will be taken **in the classroom at the time specified** in the Official Final Exam Schedule.

Institutional Policies
Institutional Policies relating to this course can be accessed using the link below. These policies include information about tutoring, Disabilities Services, class drop and repeat options, Title IX, and more.

[North Lake Institutional Policies](http://www.northlakecollege.edu/syllabipolicies)

Course Schedule

**MATH 1314 Lecture Course – Fall 2019 Second 8 Week Course Calendar**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 22</td>
<td>Classes Begin</td>
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<tr>
<td>October 28</td>
<td>Certification Date (Last day to drop WITHOUT record on Your transcript).</td>
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<tr>
<td>November 27</td>
<td>Last Day to Withdraw with grade of W</td>
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<tr>
<td>November 28-30</td>
<td>Holidays: NO classes.</td>
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<tr>
<td>December 10:</td>
<td>Final Exams Only, Held in the classroom-</td>
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<tr>
<td></td>
<td><strong>No Other Tests Allowed</strong></td>
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<td></td>
<td>No Final Exam will be issued after 01:31PM.</td>
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<tr>
<td>Week</td>
<td>Sections/Activities to be covered each week</td>
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<td>--------------------------------------------</td>
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<tr>
<td>Week 1</td>
<td><strong>In class activities:</strong></td>
</tr>
<tr>
<td>10/22 – 10/27</td>
<td>eCampus – Show syllabus and calendar – discuss syllabus</td>
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<tr>
<td></td>
<td>How to Log into MyLabsPlus ppt (MLP)</td>
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<tr>
<td></td>
<td>MyLabsPlus - Logging in – temporary access info</td>
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<td></td>
<td>Group activity in class: Circle Activity (covers sec. 1.1)</td>
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<tr>
<td></td>
<td>Section 1.1 (Ex. 4 - 11)</td>
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<td></td>
<td>Section 1.2 (Ex. 1, 3 - 10)</td>
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<td></td>
<td><strong>SLO 1 Activity</strong> - “Finding the Domain and Range of a Square Root Function”</td>
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<tr>
<td><strong>Week 1 Homework Assignment: eCampus &amp; MLP Orientation</strong></td>
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<tr>
<td></td>
<td>Log into eCampus</td>
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<td></td>
<td>Go to Start Here</td>
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<td></td>
<td>Read MyLabsplus login information &amp;</td>
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<td></td>
<td>Update student email address, if needed</td>
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<td></td>
<td><strong>Log into MyLabsPlus</strong> and RUN the Browser Check!</td>
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<tr>
<td></td>
<td>If new to MLP, preview “How to Enter Answers” located on Announcements</td>
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<tr>
<td></td>
<td><strong>Section 1.1 HW</strong></td>
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<tr>
<td></td>
<td><strong>Section 1.2 HW</strong></td>
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<td></td>
<td><strong>Students should review the following documents in eCampus:</strong></td>
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<tr>
<td></td>
<td><strong>Supplement:</strong> Domains</td>
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<td></td>
<td><strong>Handout in eCampus:</strong> Calculator Tips (eCampus ~ Lesson Unit Ch 1&amp; 2)</td>
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<tr>
<td>Week 2</td>
<td><strong>In Class Activities:</strong></td>
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<tr>
<td>10/28 – 11/03</td>
<td>Section 2.1 (Ex. 1, 2, 4 – 7)</td>
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<td>Section 2.2 (Ex. 1, 2, 3, 4, 5)</td>
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<tr>
<td></td>
<td>Section 2.3 (Ex. 1 – 5)</td>
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<td></td>
<td><strong>FAQ:</strong> Difference Quotient and the Slope of the Secant Line</td>
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<tr>
<td><strong>Homework Due next week:</strong></td>
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<td></td>
<td><strong>Section 2.1 HW</strong></td>
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<tr>
<td></td>
<td>SLO Quiz #1</td>
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<tr>
<td></td>
<td><strong>Section 2.2 HW</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Section 2.3 HW</strong></td>
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<tr>
<td></td>
<td><strong>Students should review the following document in eCampus:</strong></td>
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<tr>
<td></td>
<td><strong>Supplement in eCampus:</strong> Graphing Piecewise Functions</td>
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<tr>
<td>Week 3</td>
<td><strong>In class activities:</strong></td>
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<tr>
<td>11/04 – 11/10</td>
<td>Section 2.4 (Ex. 1 – 3)</td>
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<td></td>
<td>Section 2.5 (Ex. 1, 3 a &amp; b, 4)</td>
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<tr>
<td></td>
<td>Section 3.1 (1 – 3, 5, 6)</td>
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<tr>
<td></td>
<td>Section 3.2 (1, 2, 5 – 7)</td>
</tr>
<tr>
<td></td>
<td>Section 3.3 (Ex. 2 using vertex formula, 4 – 6)</td>
</tr>
<tr>
<td>Week</td>
<td>Sections/Activities to be covered each week</td>
</tr>
<tr>
<td>------------</td>
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</tr>
</tbody>
</table>
| **Week 1** | **Homework due** next Monday:  
- Section 2.4 HW  
- Section 2.5 HW  
- Mastery Test: Chapter 1 & 2 (MLP)  
- Section 3.1 HW  
- Section 3.2 HW  
- Section 3.3 HW  
**Written Test Ch 1 & 2 – Testing Center** (Due by Tuesday, November 12, 2019). |
| **Week 4** | **In class activities:**  
- Section 3.4 (Ex. 1, 3, 4, 5)  
- Section 3.5 (Ex. 1 - 4)  
- Section 4.1 (Ex. 1 - 3, 5, 6)  
- Section 4.2 (Ex. 1 - 3)  
**Homework due** next week:  
- Section 3.4 HW  
- Section 3.5 HW  
- Mastery Test: Chapter 3 (MLP)  
- Section 4.1  
- Section 4.2  
- SLO Activity 3: “Analyzing Graphs”, p.246  
Students should review the following documents in eCampus:  
- **Supplement**: Completing the Square or \( h = -b/(2a) \)  
- **Supplement**: Calculator Tips Part II  
**Written Test Chapter 3. Testing Center** (Due by Tuesday, November 19, 2019). |
| **Week 5** | **In class activities:**  
- Section 4.3 (Ex. 1, 2, 4, 6)  
- Section 4.4 (Ex. 1 - 3, 5)  
- Section 4.5 (Ex. 1 - 6, 8, 11)  
- Section 4.6 (Ex. 1 - 3, 5)  
**Homework due next week:**  
- Section 4.3  
- Section 4.4  
- Section 4.5  
- Section 4.6  
- Mastery Test: Chapter 4 (MLP)  
- SLO Quiz 2 & 3 (in MLP)  
**Supplements available in eCampus:**  
- **FAQ**: Section 4.4 & 4.5 Example problem including calculator steps (pdf) |
<table>
<thead>
<tr>
<th>Week</th>
<th>Sections/Activities to be covered each week</th>
</tr>
</thead>
</table>
| Week 6 11/25–12/01 | **FAQ:** Graphing Rational Functions – power point (eCampus Ch 4)  
**Written Test: Chapter 4, Testing Center** (Due by Tuesday, November 26, 2019). |
|            | In class activities:  
|            | • Section 5.1 (Ex. 1, 2, 5, 6, 8, 9)  
|            | • Section 5.2 (Ex. 1 – 4, 6, 7)  
|            | • Section 5.3 (Ex. 1 – 4, 7, 9, 10)  
|            | • Section 5.4 (Ex. 1 – 4, 6 – 8, 10)  
|            | • Section 5.5 (Ex. 1 – 9)  
|            | **Homework due** next week:  
|            | • Section 5.1  
|            | • Section 5.2  
|            | • Section 5.3  
|            | • Section 5.4  
|            | • Section 5.5 |
| Week 7 12/02 – 12/08 | In class activities:  
|            | • Section 5.6 (Ex. 1, 2, 4, 5)  
|            | **Homework due** next week:  
|            | • Section 5.6  
|            | • Mastery Test: Chapter 5 (MLP)  
|            | • SLO Quiz #4 (MLP)  
|            | • SLO Quiz #5 (MLP)  
|            | **Written Test: Testing Center** (Due by Wednesday, December 04, 2019). |
| Week 8 December 10, 2019 | **Final Exam taken in classroom: start 12:30PM, end 02:30PM.**  
No Final Exam will be issued after 01:31PM.  
Final Exam Covers Chapter 1, 2, 3, 4 & 5 |

**Testing in the Testing Center**

- Take a chapter test in the Testing Center, Room L240, on or before the regularly scheduled test dates.
- To test you will need to have the following information:
  1. Instructor’s name
  2. Subject, course number, and section number (ex: Math 1314-77203)
  3. Exam number (1st, 2nd, 3rd, etc.)
  4. Exam deadline (Get this information from your instructor. The testing staff cannot look up this information on computers).
- You should also bring the following supplies:
  1. Pencil
  3. Government or school issued photo identification is required & enforced.
  4. Only battery operated 4 function, non-programmable scientific or TI83/TI84
calculators are allowed (if permitted by instructor). The memory on your calculator will be cleared.

**Testing Center Hours (L240)**

- The Testing Center normal hours are Mon – Thurs: 8:30 a.m. to 8 p.m. and Fri and Sat: 8:30 a.m. to 3:30 p.m. Important: hours and days may vary due to holidays or other events, **please verify the Testing Center will be open before you arrive.**
- Questions? Please visit the Testing Center (L240) or call 972-273-3160.

Testing Center Policies (additional)

- No personal items in the Testing Center. This includes bags, cell phones, and pagers.
- Please show courteous and cooperative behavior while using the services provided by the Testing Center.
- **NO children in the Testing Center.** No exceptions. 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. These items will be attached to your test. (To do so constitutes Academic Dishonesty.)

**Math Center (The STEM Center)**

The STEM Center, located in L137 and L139 provides assistance and resources free to students enrolled in mathematics and developmental mathematics classes at North Lake College. This is a great place to bring a study group, study quietly, get help with math classes, and use the center’s various resources.

Services offered:

- Tutorial services in all math courses taught at North Lake College
- Computers for use by students enrolled in courses that have an Internet component such as homework systems (i.e., MyLabsPlus, ConnectMath)
- Graphing calculators for use in the center
- Textbooks for use in the center
- A quiet area to study (Just ask one of the tutors)
- Opportunity for students to make up class absences
- Whiteboards space for study groups
- Content workshops covering how to use graphing calculators, course topics, review sessions, and study skills

Contact the STEM Center Manager (Math)

Hours of Operation
Monday – Thursday: 9 a.m. – 6 p.m.
Friday & Saturday: 9 a.m. – 2 p.m.
Manager: Camrunn Beck, Room L135, camrunn.beck@dcccd.edu

**Classroom Behavior**
Distractive talking or any disorderly conduct is prohibited. Please be courteous of others. A warning will be given for behavior an instructor considers disruptive and if the warning is not heeded, the student will be asked to leave. See Student Code of Conduct for more details.

**Cell Phone Use**
The use of cell phones or other similar devices is prohibited during class time. You are expected to turn OFF all such devices BEFORE entering the classroom. You may be asked to leave class if your cell phone causes you or others to be distracted in class; i.e. contact calls or texting.