Calculus I ONLINE-INET Syllabus

NORTH LAKE COLLEGE
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DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

Instructor Information
Instructor’s Name: Huy (Tim) Ngo
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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: Calculus I
Course number: MATH 2413
Section number: 70431
Semester/Year: 2nd 8 Week, SPRING 2020.
Certification Date: 04/03/2020
Last Day to Withdraw: 05/04/2020
Credit hours: four (3)
Class meeting time: Students can work online anytime day or night.

Course Prerequisites
MATH 2412 or approval of instructor.

Course Description
Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.
Student Learning Outcomes

Learning Outcomes
Upon successful completion of this course, students will:
1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.
2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.
3. Determine whether a function is continuous and/or differentiable at a point using limits.
4. Use differentiation rules to differentiate algebraic and transcendental functions.
5. Identify appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
6. Evaluate definite integrals using the Fundamental Theorem of Calculus.
7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

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.

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**

I) **Required Textbook:**

*MyLabsPlus Access Code w/eBook for Calculus*

**Author:** Pearson  **ISBN:** 9781323656617  
**Publisher:** Pearson Learning Solutions

II) **Calculators**

You will be allowed to use graphing calculator TI-83 or TI-84 Family on all tests. The graphing calculator TI-83 or TI-84 Family is required.

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.

The learning outcomes will be assessed through Individual work, Homework, and Exams. The final grade will be based on the following:

- **northlake.mylabsplus.com** includes 3 parts:
  1) Homework 10%
  2) Mastery Tests: 20%
  3) Quizzes: 6%

- Midterm Exam 34%
- Final Exam 30%

*Midterm and Final Exam will be taken using Northlake.mylabsplus.com*

The Midterm and Final exam will be 13 (thirteen for each exam) questions that come from your practice Midterm and Practice Final Exam. The concepts are the same with the Practice Exam but the numbers must be different.
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 = 60 – 69  F = 0 – 60

Description of Graded Work:

Homework: [northlake.mylabsplus.com](http://northlake.mylabsplus.com) includes 3 parts:

1) Homework 10%
2) Mastery Tests: 20%
3) Quizzes: 6%

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 eCampus.

Tests
There are 2 types of tests: Mastery tests and Midterm and Final exams.

**All tests (Mastery Tests and Exams) are to be completed without receiving help of any kind. This includes, but is not limited to, working with other people, using notes and/or textbook, looking for answers online, etc. Failure to follow this rule will result in one or more of the consequences listed under Academic Dishonesty.**

Mastery Tests:

- All mastery tests will be taken at home using MyLabsPlus. The mastery test will help determine your readiness to take the Midterm and Final Exam.
  - All mastery tests must be treated like a written test (no notes, no book, no
help of any kind).

✓ You will have limited attempts to take each mastery test.

✓ The highest grade on each mastery test will be used to determine your average. *The mastery test average will be a portion of your final course grade. See Grading Scale below for details*

**TAKING THE MIDTERM & FINAL EXAM:**

*Midterm and Final Exam will be taken using Northlake.mylabsplus.com*

The Midterm and Final exam will be 13 (thirteen for each Exam) questions that come from your practice Midterm and Practice Final Exam.

The concepts are the same with the Practice Test but the numbers must be different.

**All work must be written neatly on paper and the answer submitted online.**

Please sign the attached cover sheet, then email it to me.

**Exams cannot be graded without a cover sheet - be sure to sign it and email it to me.**

**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 2413 ONLINE-INET Course – SPRING 2020 Second 8 Week Course Calendar**

| Week 1 03-30-20 | • Log into eCampus  
|                 | • Carefully work through the START HERE section in eCampus  
|                 | • Complete the Day 1 & 2 assignment.  
|                 | **Midterm and Final Exam will be taken using Northlake.mylabsplus.com**  
|                 | • Section 2.1, 2.2, 2.3, 2.4 and 2.5 ([northlake.mylabsplus.com](http://northlake.mylabsplus.com))  

| Week 2 04-06-20 | • SLO #1: Quiz #1 ([northlake.mylabsplus.com](http://northlake.mylabsplus.com))  
|                 | • Section 2.6 ([northlake.mylabsplus.com](http://northlake.mylabsplus.com))

| March 30 | Classes Begin  
| April 03 | Certification Date (Last day to drop WITHOUT record on Your transcript).  
| May 04 | Last Day to Withdraw with grade of W  
<p>| May 11, 2020 | <strong>6 PM, May 11, 2020:</strong> Last day to take Final |</p>
<table>
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<tr>
<th>Week 3 04-13-20</th>
<th>Section 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 and 3.10 (northlake.mylabsplus.com)</th>
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| Week 4 04-20-20 | SLO #2: Quiz #2 (northlake.mylabsplus.com)  
|                 | Section 3.11  
|                 | Mastery Test: Chapter 3  
|                 | **Midterm Exam will be taken using Northlake.mylabsplus.com**  
|                 | **Available 12:01PM-END 11:59PM, April, 2020.** |
| Week 5 04-27-20 | Section 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 and 4.8 (northlake.mylabsplus.com) |
| Week 6 05-04-20 | Mastery Test: Chapter 4  
|                 | Section 5.1, 5.2, 5.3, 5.4, 5.5 and 5.6 (northlake.mylabsplus.com)  
|                 | **Last Day to Withdraw: Monday, May 04, 2020.**  
|                 | SLO #3: Quiz #3, Section 5.6.  
|                 | Mastery Test: Chapter 5 |
| Week 7 05-11-20 | Final Exam Review  
|                 | **Final Exam will be taken using mymathlab.com**  
|                 | **Available 12:01PM-END 11:59 PM, May 11, 2020.**  
|                 | Final Exam Covers Chapter 4 & 5 |

**Math STEM Center**

We will be offering math tutoring online in the following format **March 30th until we are back to normal working conditions**. To make it easier for students to access online tutoring the STEM Lab Manager have included two (2) links to the online tutoring site. Each link corresponds to a day and time frame. Please click on the link below.

**Monday-Thursday 9am-8pm:**  
[https://us.bbcollab.com/guest/d52039516bbf48c88507ecdc8b2bdaea](https://us.bbcollab.com/guest/d52039516bbf48c88507ecdc8b2bdaea)

**Friday-Saturday 9am-2pm:**  
[https://us.bbcollab.com/guest/e3cabb98bc004185b98502aff377b79b](https://us.bbcollab.com/guest/e3cabb98bc004185b98502aff377b79b)

For example if a student is trying to get tutoring Monday-Thursday between 9am and 8pm, there is a specific link for that tutoring session. If they are trying to get tutoring Friday-Saturday between 9am and 2pm, there is a specific link for that tutoring session.
If there are any questions or if students are having any issues the STEM Lab Manager can be reached at camrunn.beck@dcccd.edu

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.

**NOTE: THE INSTRUCTOR RESERVES THE RIGHT TO MAKE CHANGES TO THE SYLLABUS AS NECESSARY**