

# Math 2413 Calculus I

---

## I. PROFESSOR CONTACT INFORMATION:

<b>Professor:</b>	Dr. Vinh Dang	<b>Office Phone:</b>	281-618-5684
<b>Office:</b>	WINSHIP 115 T	<b>Office Hours</b>	T/Th: 12-2pm M/W: 2:30-3pm Other times by appointment
<b>E-mail:</b>	<a href="mailto:vinh.x.dang@lonestar.edu">vinh.x.dang@lonestar.edu</a> (best way to reach me)		

## II. WELCOME TO:

<b>Term and Year:</b>	Spring 2019
<b>Course Title:</b>	MATH 2413
<b>Course Subject:</b>	Calculus I
<b>Course Sections:</b>	1105
<b>Class Days &amp; Times:</b>	M/W 8-10:15 am
<b>Class Room Locations:</b>	Winship 176
<b>Credit Hours:</b>	4

### COURSE OVERVIEW:

Math 2413 is designed to present the basic techniques of differential and integral calculus and some of their applications. Calculus I emphasizes limits, continuity, derivatives of algebraic, trigonometric, natural exponential, and natural logarithmic functions. Applications such as curve sketching, optimization, and related rates are discussed. Following this is an introduction to integral calculus including Riemann Sums, The Fundamental Theorem of Calculus and the area between two curves.

The main goals of this class are: 1) Students will gain proficiency in the essentials of the subject and develop strong problem solving skills. 2) Students will explore the applications of calculus in science and engineering, and learn to communicate mathematical ideas (both verbal and written) clearly and effectively.

The class will be primarily lecture-oriented.

### III. GETTING READY:

**Prerequisites:** Precalculus (Math 2412).  
Engl 0305 or 0365 or higher level course or placement by testing

**Corequisite:** Engl 0307 (if not college-level in English)

**Required Materials:** **Textbook: Calculus Volume 1, OpenStax:**  
The book is available for free at:  
<https://openstax.org/details/calculus-volume-1>  
(Please also download the pdf version of the book into your computer, ipad or phone)

**WebAssign Online Homework:**

You are required to register at <http://webassign.net/> by the end of Wednesday, January 23<sup>rd</sup>. The class key is:  
**lonestar.northharris 2516 0909**

A Graphing Calculator such as the TI-83 or TI-84 is recommended. A Scientific calculator TI-30XIIS or Casio FX-115 is also allowed on tests as well but will not be as useful.

**Positive learning attitudes:** take responsibility for your study, work hard, be patient, be perseverant, demonstrate professionalism and treat people with respect.

**Course Websites:**

<http://apps.lonestar.edu/blogs/vindang/spring-2019/math-2413-1105-calculus-1-mw-8-to-1015pm/>

In addition to WebAssign, this is the most important website for this course. You can find plenty of resources on the course website that can help you succeed.

(Syllabus, calendar, class notes, exam reviews, videos, etc.)

<https://d2l.lonestar.edu/>

(this is for the purpose of recording your grades only)

### IV. INSTRUCTOR GUIDELINES AND POLICIES:

**FINAL GRADE CALCULATION:**

WebAssign Homework	15%
Quizzes	5%
3 Regular Exams	60% (3 exams @ 20% each)
Final Exam	20%

**GRADING POLICY:**

90 – 100: A; 80–89.9: B; 70 –79.9: C; 60 – 69.9: D; 59.9 or Below: F.

If any of your exam scores is below 50%, you cannot receive a grade of “A” for the course, no matter what your percentage works out to be. **THIS APPLIES EVEN IF AN EXAM SCORE IS REPLACED BY THE FINAL EXAM SCORE.**

**ATTENDANCE POLICY:**

- Your attendance is critical. I cannot help you if you are not present.

- **Attendance is taken daily. I reserve the right to drop you after 3 or more absences.**
- You are expected to attend all classes and be on time. If you are more than 10 minutes late or if you leave in the middle of my lecture, it is counted as an absence. Arriving late to class or leaving the classroom in the middle of lecture is disrespectful and disruptive to your classmates and professor. Unless prior arrangement is made with me, I might drop students who arrive late or leave early three or more times.

#### **HOMEWORK:**

- The homework is assigned using WebAssign to provide you with valuable online resources and immediate feedback. Work on the homework for a section immediately after we cover that section in class. The due date for each homework assignment is posted on WebAssign. You are responsible for knowing which assignment is due when and complete the assignment before the due date. You must complete each homework assignment by the due date. Otherwise, you will receive a zero. **There will be no extensions or make-up to any of the homework assignments under any circumstances. If you wait until the due day to work on the assignments and the WebAssign system is closed for maintenance on that day, you will NOT get an extension.**
- I do understand that unforeseeable events can occur; hence, your lowest 3 homework scores will be dropped when grade is calculated. Moreover, see the section on Extra Credit.
- The only way to learn mathematics is to DO mathematics. The homework is designed to help you understand the essential material and develop your problem solving skills. With limited class time, there will be many important extensions of concepts and techniques and many types of problems that are covered in the homework assignments instead of in class. Therefore, the key to keep up with the fast pace of the course and do well in exams is to constantly practice solving homework problems and understand all the steps, concepts, definitions and results involved in their solutions.
- Visit my office during office hours or visit the MAC center for help with homework problems when you get stuck. I also strongly encourage you to work in groups and collaborate on the homework assignments. However, do not simply copy the answers from your classmates, make sure you understand every step of the solutions and all the concepts involved in a problem.
- **I reserve the right to drop you if you have 4 zeros on your homework assignments.**

#### **QUIZZES:**

- Starting from the third week of class, there will be weekly quizzes posted on WebAssign. The quizzes are due before class starts every Wednesday. **There will be no extensions or make-up to any of the quizzes under any circumstances.** Your lowest 2 scores on the quizzes will be dropped when grade is calculated.

#### **REGULAR EXAMS/FINAL EXAM MAKE-UP POLICY:**

- You will have 3 regular exams and a final. All exams are paper-and-pencil. You must show all work on the written part of the exam. All cellphones must be turned off and put on the table, clearly visible to the instructor, before the exam is handed to you. All books, notes, etc. must be put in your backpacks and the backpacks must be put in the front of the classroom.

- No make-up exams will be given. I do understand that schedules get hectic. Thus, if you know in advance that you will need to miss an exam, let me know and I will try to make an arrangement. The following guidelines will apply:
  - You must notify me both in person and via email.
  - You must notify me at least one week prior to the exam date.
  - If you wish to take the exam, you must take it before the regular scheduled time.
  - Notice that a panicked cellphone call from the freeway on the morning of the exam does not fall into this category. Such an event is covered below.
  - Notice that asking me several days (or weeks or months) after the exam does not fall into this category. Such an event is covered below
- I also understand that unforeseeable events can occur. Hence, I will replace the lowest of your exam#1-3 scores with the score you make on the final exam, provided the score on the final exam is higher than your lowest regular exam scores. If you miss an exam, you will simply have your score from the final substituted for the missing score. The following guidelines will apply:
  - The final exam will not be replaced. You must take the final.
  - If you miss 2 exams, only one will be replaced.

#### **EXTRA CREDIT:**

Although the homework assignments are online, I strongly encourage you to carefully and neatly write down all the steps of your solution to every problem on paper. Be neat, accurate and organized and always show quality work on all the exercises in the assignments. You can earn extra credit for doing so in the following way: On the date of each test, I will collect your notebook or paper and grade your written solutions to the homework assignments corresponding to that test for completion. **If your work is satisfactory, you will earn an extra 1% for your overall percentage of the class.** So in total, you can earn up to 4% for your overall percentage of the class.

For your work to be marked as satisfactory, you must

- Either do your homework assignments in a notebook (just-for-homework-notebook) or do them in standard size paper and staple all the pages together.
- Solve all the exercises on each assignment and show all your work. If you miss just one exercise from an assignment, you will not get the extra credit.
- Clearly label the title of the assignment and label the exercises in the assignment. All your solutions must be clearly labeled and in order. Write all your work neatly for each exercise.
- Demonstrate that you have made serious attempts to work on ALL the exercises assigned. The answers need not be correct but you need to show substantial work on each exercise.
- Turn in each extra credit at the beginning of class on the date of each exam.

### USE OF PERSONAL ELECTRONIC EQUIPMENT IN CLASS:

- Unless otherwise given permission by your instructor, all cell phones must be turned off or turned to silent mode and placed out of sight.
- Text messaging is not allowed in the classroom, you will be asked to leave the classroom if you engage in text messaging.
- During regular exams and the final, you must turn off all laptops, PDA's, ipads, etc. and put them in your backpacks and put your backpacks in the front of the class. You must also turn off your cell phone and put it on the table. **If you have an electronic communication device with you during the exam, you will receive a zero on the exam regardless of whether you use it or not. This is absolutely non-negotiable.**

### BEHAVIOR:

**I have zero tolerance for inappropriate and/or disrespectful behaviors, language and/or profanity in class, during my office hours or in email-communication.** Students who engage in such behaviors will be removed from the class room or dropped from the class, depending on the circumstances. I will also remove any individual from the lectures/ discussions and/or the course who is deemed by me and/or others to be disrupting the educational process. In serious circumstances, students might be referred to the appropriate LSC offices which could result in disciplinary actions or dismissal from the college. This is a fast-paced course and there are a lot of material to cover. Hence, the class is primarily lecture-oriented and I will spend most of class time to lecture on the important concepts, important problem solving techniques and examples. If you have homework questions, policy questions, questions on previous material, or questions on the prerequisite material for this class, come to my office during my office hours and I will be happy to answer them. On the other hand, I welcome and encourage you to answer the questions and exercises that I pose during my lecture.

### HOW TO EMAIL YOUR PROFESSOR:

View an Email to a Professor as a Professional Interaction:

- Begin your email by addressing your professor by title and last name, and end your email with a closing and your signature. (For example, begin by "Dear/Hi Dr. Dang" or Professor Dang. End by "Sincerely, Your Name" or "Thanks, Your Name.")
- Be clear and concise. Use correct spelling and proper grammar.
- Always use an informative subject line. Write a few words indicating the purpose of your message. Do not leave the subject line blank.
- Specify who you are and specify which class you are taking before diving into the specifics.
- Before composing an email to your professor, check the syllabus. Class policies, such as office hours, assignment details, policies on missed classes and exams, etc. are addressed in the syllabus. If something is still not clear, then by all means ask your question --- but first attempt to answer the question yourself and only write if you need further clarification.
- Do not make demands. Explain your circumstances and your needs, and ask politely for accommodation.

- Do not use your email to vent, rant, or whine. If you have a complaint, or are not happy about something, explain yourself calmly and ask if anything can be done. You may very well be frustrated about a situation, but sending an angry email will not help things. In situations like this, it is also often more helpful to talk to the professor in person rather than send an email -- particularly since tone and intent can often be misinterpreted in emails.
- Be respectful, and consider whether anything you have written might sound rude or offensive to your professor.
- Allow time for a response. Allow 24-48 hours for a professor to reply -- possibly more if it is a weekend or holiday.

#### **READING THE BOOK:**

Except for the first day, I expect you to read the eBook sections that we are going to cover in class before coming to class. That way, class time will be more like a review and you can follow my lecture and internalize the important concepts, techniques and examples we cover much more effectively.

#### **RESPONSIBILITIES:**

1. Successful students follow instructions. The syllabus and class calendar are the primary sources of instructions in any college course; so successful students read them carefully and refer to them regularly.
2. Successful students, those that get A's, B's, and C's, use their time wisely. The standard formula for college coursework is that every hour of class time will result in two to three hours of homework, so a three unit class will do an average of six or more hours of homework (doing homework, reading textbook, studying notes) per week. As a result, successful students plan their time wisely so that they keep up with assignments.'
3. Successful students take time to do the homework and do it on time. Mathematics can be a lot of fun when you understand what is being explained. When you are not keeping up with the class, it becomes more difficult to follow the instructor's explanation and to read the book.
4. Successful students seek assistance when needed. Go to your professor's office hours and virtual office hours, go to the MAC, form study groups and work on problems and learn the material together.
5. Successful students are neat, accurate and well organized. They always attempt to do quality work on all exercises.
6. Successful students are perseverant. An interesting characteristic of learning mathematics is that at one moment you may feel totally confused, and then suddenly the light bulb goes on and you understand the material! Some mathematical concepts take time to digest and you might find that after a few days of working some of the exercises, they finally start to make sense.

7. Successful students prepare carefully for the exams. In math courses, you show proficiency by taking exams. Study for the exams by reviewing class notes, slides, videos, examples in the book, questions and problems from your homework assignments, and review sheets.
8. Tell yourself what you have learned. As you learn new concepts, point out to yourself what you have learned so that your confidence in your mathematical ability will increase. Each mathematical concept you understand becomes another tool that you can use.

**THINGS I HATE:**

1. WILL THIS BE ON THE TEST?
2. WHEN IS THE FINAL?
3. NOT FOLLOWING BLATANT DIRECTIONS.
4. NOT STOPPING AN EXAM WHEN TIME IS CALLED.
5. HOW MANY QUESTIONS WILL THERE BE ON THE TEST?
6. DO YOU HAVE A CALCULATOR I CAN USE?
7. DO YOU HAVE A PENCIL I CAN USE?
8. IS THERE ANY EXTRA CREDIT?
9. **COMPLAINING ABOUT HAVING TO BE HERE.**

**DROPPING THE CLASS:**

It is my desire that no students drop the course. However, circumstances may arise which might cause you to consider that as a possibility. If so, I encourage you to talk with me. It may be that there are options available that are unknown to you. In any case, however, except for inordinately unusual circumstances or non-attendance or having multiple zero homework assignments, I will not initiate dropping a student from the course. You, the student, are responsible for ensuring that:

- (a) You are properly enrolled in the course and, should you decide to,
- (b) You are properly withdrawn from the course.

**RESOURCES:**

Math Lab Tutoring: Students can get free help from tutors in MAC center (Winship 110). No appointment is necessary and the Lab is staffed with a tutor or tutors during all the hours it is open. Rhonda Cannon, Counselor for Math and Natural Sciences, is available in Winship 115G to assist you in meeting your academic, career, and personal goals.

**CAMPUS CARRY:**

The Texas Legislature enacted campus carry by passing Senate Bill 11, effective at LSC on August 1, 2017. Senate Bill 11, known as the "Campus Carry" law, amends Texas law to allow license holders to

carry concealed handguns on college campuses. To carry a concealed handgun on LSC campuses, an individual must have a valid License to Carry issued by the Texas Department of Public Safety.

LSC has established rules and regulations regarding enforcement of Campus Carry. Lone Star College prohibits concealed carry in some areas of LSC campuses. For more information about Campus Carry, visit the LSC Campus Carry website at <http://www.lonestar.edu/campuscarry>.

### **ADA STATEMENT (2017)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides civil rights protection for persons with disabilities. If you have a disability that requires accommodation(s) to participate in this course, please contact the LSC-North Harris Disability Services Office as soon as possible (Winship 120, 281-765-7940). Disability Services will provide you with the documentation I need in order to provide your accommodation(s). Failure to handle this in a timely manner may delay your accommodations.

### **6 – DROP STATEMENT**

Students who enrolled in Texas public institutions of higher education as first-time college students during the Fall 2007 term or later are subject to section 51.907 of the Texas Education Code, which states that an institution of higher education may not permit a student to drop (withdraw with a grade of “W”) from more than six courses. This six-course limit includes courses that a transfer student has previously dropped at other Texas public institutions of higher education if they fall under the law.

### **EMERGENCY NOTIFICATION INFORMATION**

Lone Star College System (LSCS) is committed to maintaining the safety of the students, faculty, staff, and guests while visiting any of our campuses. See <http://www.lonestar.edu/oem> for details. Register at <http://www.lonestar.edu/12803.htm> to receive emergency notifications. In the event of an emergency contact LSCS Police at (281) 290-5911 or X5911.

We will try to follow the course calendar very closely. However, at times the course structure may need to be adjusted to provide for a better learning environment. Thus I reserve the right to make changes to the syllabus and the schedule. All changes will be announced in class.