Math 2414 Calculus II

I. PROFESSOR CONTACT INFORMATION:

Professor: Dr. Vinh Dang

Office Phone: 281-618-5684

Office: WINSHIP 115 T

Office Hours: M/W:9:55-10:55am, 2-3pm
T/Th: 8:55-9:25am

E-mail: vinh.x.dang@lonestar.edu

II. WELCOME TO:

Term and Year: Fall 2019

Course Title: MATH 2414

Course Subject: Calculus II

Course Sections: 1201

Class Days & Times: TTh: **1-3:20pm**

Class Room Locations: Winship 154

Credit Hours: Four (4) semester hours

PURPOSE:

Math 2414 is a continuation of the study of calculus begun in Math 2413. Calculus II emphasizes the calculus techniques of integration, applications of integration, L'Hopital's Rule and indeterminate forms, polar coordinates, parametric equations, infinite sequences and series, and power series.

MAJOR COURSE OBJECTIVES:

1. Use the concepts of definite integrals to solve problems involving area, volume, work, and other physical applications.
2. Use substitution, integration by parts, trigonometric substitution, partial fractions, and tables of anti-derivatives to evaluate definite and indefinite integrals.
3. Define an improper integral.

4. Apply the concepts of limits, convergence, and divergence to evaluate some classes of improper integrals.

5. Determine convergence or divergence of sequences and series.

6. Use Taylor and MacLaurin series to represent functions.

7. Use Taylor or MacLaurin series to integrate functions not integrable by conventional methods.

8. Use the concept of parametric equations and polar coordinates to find areas, lengths of curves, and representations of conic sections.

9. Apply L'Hôpital's Rule to evaluate limits of indeterminate forms.

III. GETTING READY:

Prerequisites: Calculus I (Math 2413).
Engl 0305 or 0365 or higher level course or placement by testing
Corequisite: Engl 0307 (if not college-level in English)

Textbook (Recommended): Calculus, 11th ed., Larson/Edwards, 2018 Cengage Learning. ISBN: 978-1-337-27534-7

Course Websites:
http://apps.lonestar.edu/blogs/vindang/
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, lecture notes, worksheets exam reviews, etc.)
https://d2l.lonestar.edu/
(this is for the purpose of recording your grades only)

IV. INSTRUCTOR GUIDELINES AND POLICIES:

FINAL GRADE CALCULATION:

Homework	15%
3 Regular Exams	60% (3 exams @ 20% each)
Final Exam	25%

GRADING POLICY:
90 – 100: A; 80–89.$\bar{9}$: B; 70 –79.$\bar{9}$: C; 60 – 69.$\bar{9}$: D; 59.$\bar{9}$ 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 15 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:

- **There will be no extensions or make-up to any of the homework assignments under any circumstances**.
- There are hour homework sets. The first homework set consists of all the worksheets that correspond to the sections that Test 1 covers, the second homework set consists of all worksheets that correspond to the sections that Test 2 covers, etc.
- Each assignment in a homework set is graded out of 5 points. **1 point**: serious attempt on at least half of the problems. **2 points**: serious attempt on most problems (80%) but some solutions may not contain sufficient work or explanation or incorrect. **3 points**: serious attempt on **all** problems but some solutions may not contain sufficient work or explanation or incorrect. **4 points**: do **all** problems, solutions contain sufficient work and explanations for most problems (80%), but have some minor errors in a few problems. **5 points**: do all problems with detailed and correct solutions and explanations to all problems.
- 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. 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.
- Please visit my office during office hours or visit the MAC center for help with homework problems if you have additional questions. 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.

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 exam. All cellphones must be turned off and put on the table, clearly visible to the instructor, and all other material must be put in your packbacks and the packbacks must be put in the front of the class. Having a cellphone on you during any of the exams immediately results in a zero for that exam.
- No make-up exams will be given. I 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:

Print out and completely fill out all the details of all the lecture notes that correspond to an exam and turn them in at the beginning of class on the day of the exam. Each satisfactorily filled out note will earn you one bonus point to any exam that you do not have a perfect score. This CANNOT be carried over to the next exam.

For your work to be marked as satisfactory, you must

- Print out the lecture notes.
- Solve all the example problems in the lecture notes. Fill out all details, graphs and explanation.
- Write all your work neatly for each example problem.

USE OF PERSONAL ELECTRONIC EQUIPMENT IN CLASS:

- Unless otherwise given permission by your instructor, all cell phones and laptop computers must be turned off and placed out of sight. Personal electronic devices of any kind are not allowed during lecture.
- You can use your laptop during the time we work on worksheet problems.
- 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 your cell phones, laptops, PDA's, ipads, etc. **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.**

EXPECTED BEHAVIOR:

Each student is expected to participate in the class, and to respect the instructor and fellow classmates (where applicable) at all times and during office hours and email communications. Classroom disruptions and confrontational behavior and/or an unwillingness to participate may warrant dismissal from the class. Professional language and etiquette is expected at all time. Respectful behavior is expected.

I have zero tolerance for inappropriate and/or disrespectful behaviors, language and/or profanity in class, during my office hours or in email-communications. Students who engage in such behaviors will be asked to leave the class and will not be allowed to be back until they obtain permission from the Dean or the Department Chair. 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.

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 unsual 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.

Link to LSC Syllabus Polices for information on
FERPA
Title IX
Academic Integrity
Academic Appeals
ADA 504/508
Emergency Procedures (and LoneStarCollegeAlert)
Concealed Carry / Campus Carry

SCAN ME

Link to NH Math Syllabus Information and Resources on

Mathematics Department
Math Achievement Center and Tutoring
Division Counselor
OTS HelpDesk
Student Course Documents
Online Videos
Student Support Material
Math Faculty Websites
Sexual Assault Prevention

SCAN ME