Math 2414 Calculus II

PROFESSOR CONTACT INFORMATION:

Professor:	Vinh Dang, Ph.D.	**Office Phone:**	281-618-5684
Office:	WINSHIP 115 T	**Office Hours**	M/W: 11am-1pm T/Th: 1-2pm Also email me with questions or set up a time to meet via WebEx
E-mail:	vinh.x.dang@lonestar.edu		

WELCOME TO:

Term and Year:	Spring 2017
Course Title:	MATH 2414
Course Subject:	Calculus II
Course Sections:	1501
Credit Hours:	4

LECTURE/TUTORIAL SESSION:

This is an online class. However, I will hold a lecture/tutorial session every Friday from 10am to 1pm in room Winship 177 at LSC – North Harris. These sessions are optional but everyone is encouraged to attend. You can also join the session remotely and pose your questions during the session by logging into lonestar.webex.com/meet/vindang.

The notes for these sessions will be posted on the class website.

COURSE OVERVIEW:

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, polar coordinates, parametric equations, infinite sequences and series, and power series.

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)
Required Materials:	Textbook: Calculus Volume 2, OpenStax The book is available for free at: https://openstax.org/details/books/calculus-volume-2 (Please 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 Sunday, January 22, 2017. The class key is: **lonestar.northharris 0930 9061**

The cost is $33.95. **Your first two online HW assignments are due on Saturday, January 28, 2017.**

Course Websites: http://apps.lonestar.edu/blogs/vindang/spring-2017/math-2414-calculus-ii-online/ (Syllabus, calendar, class notes, review sheets, practice exams, etc.)

(An easier way to access the course website is to go to my website apps.lonestar.edu/blogs/vindang/ hover over Spring 2017 and click on your class Math 2414 - 1501.)

https://d2l.lonestar.edu/ (this is for the purpose of recording your grades only)

INSTRUCTOR GUIDELINES AND POLICIES:

FINAL GRADE CALCULATION:

WebAssign Homework	15%
4 Regular Exams	60% (4 exams @ 15% each)
Final Exam	25%

GRADING POLICY:

90 – 100: A; 80 – 89: B; 70 – 79: C, 60 – 69: D, Below 60: 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.

TEST DATES:

Test 1 is open from Monday, February 6 until Saturday, February 11. It covers section 2.1 through 2.5.

Test 2 is open from Monday, February 27 until Saturday, March 4. It covers section 2.6 through 3.4.

Test 3 is open from Monday, April 3 until Saturday, April 8. It covers section 3.6 through 5.5.

Test 4 is open from Monday, April 24 until Saturday, April 29. It covers section 5.6 through 6.4.

The final exam is open from Monday, May 8 until Thursday, May 11. It is comprehensive.

All tests are given at testing centers of Lone Star College System. It is your responsibility to contact a Lone Star College Testing Center of your choice to check their hours of operations and accommodations before the test date. Note that the testing centers stop handing out test 1 hour before they close. You have a 4 hour-time-limit for all the tests. It is your responsibility to make the arrangement to give yourself enough time to complete the test.

The contact information of LSC testing center can be found at http://www.lonestar.edu/testing-centers.htm

If you are not able to take the tests at any LSC testing center, you must take the tests at a testing center approved by me. Typically, it needs to be a testing center at a public community college or university. It is your responsibility to provide me with the phone number, email address and physical address of the testing center that you would like to take the test at. I will work with them to see whether we can accommodate your request.

HOMEWORK:

- The homework is assigned using WebAssign to provide you with valuable online resources and immediate feedback. There are homework assignments every week. Make sure to give yourself enough time to complete them. Do the homework for a section immediately after we cover that section in lecture. The due date for each homework assignment is posted on WebAssign and in

the class calendar. 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. I generally do not extend the deadline but if you have a good excuse, talk to me as soon as possible.

- 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. The key to keep up with the material and do well in the 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, visit the MAC center, or make appointments to meet me via WebEx 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 after 5 or more zero homework assignments.**

REGULAR EXAMS/FINAL EXAM MAKE-UP POLICY:

You will have 4 regular exams and a final. You must show all work on the written part of the exam. Calculators will be allowed on exams. However, you MUST use calculators that the testing centers supply (Scientific Calculators, usually TI30XIIS). You are NOT allowed use your own calculator on exams. You are allowed a 3'' by 5'' index card as a cheat sheet on all the regular exams and the final exam. However, you must follow the official rules of the cheat sheet posted on my website. I will ask the test proctor to examine the cheat sheets before the exam and they have the right to deny the use of any cheat sheet that does not comply with the rules. Otherwise, no books, notes or any other material will be allowed during any of the exams.
Since the testing window for every test given is over multiple dates, no make-up exams will be given. To accommodate for unforeseeable circumstances, your final exam score is used to replace the lowest of your Exam #1 – 4 score.

EXTRA CREDIT:
You can earn an extra of 10 points on each regular exam by completing the practice exams posted on my website (usually a week before the exam date). Guidelines will be posted there and you must follow these guidelines exactly to earn the points.
No extra credit points are available for the final exam.

BEHAVIOR:
I have zero tolerance for disrespectful behaviors and language in class, during my office hours, during web/online meetings/discussions or in emails. Students who engage in such behaviors will be removed from the classroom 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.

ACADEMIC HONESTY, CELL PHONES AND OTHER IMPORTANT ITEMS:
1. During the regular exams and the final, you must turn off all your cell phones, laptops, electronic communication devices and put them in your backpacks or purses and put your backpacks or purses with the test proctor. This is the policy of all LSC testing centers.
2. Collaboration with others on any graded work is prohibited unless the assignment is a group assignment. Violations of this policy will result in a 0 for that work. You can work with your

classmates on the online homework and the practice exams, but anything you turn in must be written by you and in your own words and demonstrate your understanding of the material.

3. At all times during the semester, you, the student are responsible for ensuring that you are properly enrolled in the course and should you decide to, you are properly withdrawn from the course.

4. Under no circumstance you can leave the testing center with the test or your scratch paper. Intentional or unintentional compromise of the confidentiality of any exam before the testing period is over may result in you being dropped from the course and possibly further disciplinary actions.

READING THE BOOK:

The textbook has thorough explanations and numerous interesting and important examples, clearly worked out. Therefore, I strongly recommend you read the sections that we are going to cover in a lecture before joining the lecture. That way, the meeting 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 and ask for clarifications on the parts which confuse you.

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 keep up with the material by doing the homework, reading the textbook and taking notes.

3. Successful students are careful to make sure that they have taken accurate notes and ask questions before due dates.

4. Successful students look up information first so that they ask informed questions, not questions they already have the answers to. If they can't find the answers, they contact the professor during office hours or email (whichever is most appropriate for the question).

5. Successful students pay close attention to how they can best and most easily learn the material in a particular subject area. You may find it helpful to take a learning styles inventory to guide your study habits. You can access one online at http://www.metamath.com//lsweb/dvclearn.htm. If you have difficulty figuring out how best to learn the material in this class, please make an appointment to see me.

6. 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.

RESOURCES:

Math Lab Tutoring: Students can get free help from tutors in MAC center (across the hall from Winship 115 - the math office). 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.

WITHDRAWAL POLICY:

Withdrawal from the course after the official day of record and prior to "W" Day, will result in a final grade of "W" on your transcript. No credit will be awarded for a course earning a "W." If you stop

attending class, you must withdraw at the registration office prior to "W" day. If you stop attending class and do not officially withdraw, you will receive an "F" for the course. At all times during the semester, you, the student are responsible for ensuring that you are properly enrolled in the course and should you decide to, you are properly withdrawn from the course.

SIX DROP RULE:
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, including courses that a transfer student has previously dropped at other Texas public institutions of higher education that have already been counted against their six drop limit.   Each student should fully understand this drop limit before you drop any course. Please see a Counselor or Advisor in our Student Services area for additional information and assistance.

Keep records of all work (including test scores) at least until you have received your grade from the admissions office following completion of the course. If you believe an error exists, communicate no later than ten days after the start of the next session / semester.

ACADEMIC INTEGRITY:
The Lone Star College System upholds the core values of learning: honesty, respect, fairness, and accountability. The system promotes the importance of personal and academic honesty. The system embraces the belief that all learners – students, faculty, staff and administrators – will act with integrity and honesty and must produce their own work and give appropriate credit to the work of others. Fabrication of sources, cheating, or unauthorized collaboration is not permitted on any work submitted within the system.

The consequences for academic dishonesty are determined by the professor, or the professor and academic dean, or the professor and chief student services officer and can include but are not limited to:
1. Having additional class requirements imposed,
2. Receiving a grade of zero or "F" for an exam or assignment,
3. Receiving a grade of "F" for the course,
4. Being withdrawn from the course or program,
5. Being expelled from the college system.

STUDENT BEHAVIOR EXPECTATIONS:
Students are expected to conduct themselves appropriately while on College property or in an online environment. Students may receive disciplinary action up to and including suspension, if they violate System or College rules, disrupt classes, or interfere with the opportunity of others to obtain an education. Students who pose a threat to the safety of others will be subject to immediate withdrawal from the classroom, campus environment, and/or online environment, as well as face subsequent criminal charges, as appropriate. Please refer to the Student Code of Conduct located online at http://www.lonestar.edu/student-responsibilities.htm for additional information.

AMERICANS WITH DISABILITIES ACT STATEMENT:
Lone Star College is dedicated to providing the least restrictive environment for all students. We promote equity in academic access through the implementation of reasonable accommodations as required by the Vocational Rehabilitation Act of 1973, Title V, Section 504 and the Americans with Disabilities Act of 1990 (ADA) which will enable students with disabilities to participate in and benefit from all post-secondary educational activities.

CAMPUS SAFETY AND SECURITY:
Lone Star College System is committed to maintaining the safety of the students, faculty, staff, and guests while visiting one of our campuses. See http://www.lonestar.edu/safety-nh.htm for details.

Register at http://www.lonestar.edu/12803.htm to receive emergency notifications. In the event of an emergency, contact the police at 5911.

COMPUTER VIRUS PROTECTION:
Computer viruses are, unfortunately, a fact of life. Using flash drives on more than one computer creates the possibility of infecting additional computers and flash drives with computer viruses. This exposes college computers, personal computers, and any other computers to potentially damaging viruses. The college has aggressive anti-virus procedures in place to protect its computers, but cannot guarantee that a virus might not temporarily infect one of its machines. It is your responsibility to protect all computers under your control and use and ensure that each flash drive you use, wherever you use it, has been scanned with anti-virus software.

EQUAL OPPORTUNITY STATEMENT:
It is the policy of the Lone Star College System to provide equal employment, admission and educational opportunities without regard to race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability.
Lone Star Colleges strive to provide an excellent learning environment free from harassment or intimidation directed at any person's race, color, creed, national origin, gender, age, veteran's status, sexual orientation, or disability. Any form of harassment will not be tolerated.

FERPA:
The academic, financial, and non-directory information on your student account is confidential and protected by the Family Educational Rights & Privacy Act (FERPA). LSCS cannot release certain information to another person without your written authorization. The Authorization to Release Student Information Form can be found at http://www.lonestar.edu/departments/admissions/ARC-011_FERPA_Privacy_Request.pdf.

INTERNET AND EMAIL:
LSCS provides computing and network resources. You are encouraged to use the computers, software packages, and electronic mail (e-mail) for educational or System-related activities and to facilitate the efficient exchange of useful information. The equipment, software, and network capacities provided through the district computer services are the property of the System. Use of the equipment and networks is to comport with the policies and procedures of the System and access may be denied to any student who fails to comply with the System's policies and procedures regarding its use.

Access to the System's e-mail and similar electronic communications systems are a privilege and certain responsibilities accompany that privilege. All users are expected to demonstrate the same level of ethical and professional manner, as is required in face-to-face or written communications. Threatening, anonymous, or forged messages will be treated as a violation of this policy.

SOFTWARE PIRACY:
Law strictly prohibits unauthorized copying of software purchased by Lone Star College for use in laboratories. Lone Star College administration will take appropriate disciplinary action against anyone violating copyright laws.

Week Number	LECTURE MATERIAL	HOMEWORK
1		
JAN 20	**2.1: Areas Between Curves** **2.2: Determining Volumes by Slicing**	**WebAssign HW1 and HW2. Due Jan 28 by 11:59pm**
2		
JAN 27	**2.3: Volumes of Revolution: Cylindrical Shells** **2.4: Arc Length of a Curve and Surface Area**	**WebAssign HW3 and HW4. Due Feb 4 by 11:59pm**
3		
FEB 3	**2.5: Physical Applications** **Test 1 Review**	**WebAssign HW5. Due Feb 11 by 11:59pm**
4		
Test 1: Monday, Feb 6 through Saturday, Feb 11. Covers 2.1 through 2.5		
FEB 10	**2.6: Moments and Centers of Mass** **3.1: Integration by Parts**	**WebAssign HW6 and HW7. Due Feb 18 by 11:59pm**
5		
FEB 17	**3.2: Trigonometric Integrals** **3.3: Trigonometric Substitution**	**WebAssign HW8 and HW9. Due Feb 25 by 11:59pm**
6		
FEB 24	**3.4: Partial Fractions** **Test 2 Review**	**WebAssign HW10. Due Mar 4 by 11:59pm**

Week Number	LECTURE MATERIAL	HOMEWORK
7		
Test 2: Monday, Feb 27 through Saturday March 4. Covers Sections 2.6 through 3.4		
MAR 3	**3.6: Numerical Integration** **3.7: Improper Integrals**	**WebAssign HW11 and HW12. Due Mar 11 by 11:59pm**
8		
MAR 10	**5.1: Sequences** **5.2: Infinite Series**	**WebAssign HW13 and HW14. Due Mar 18 by 11:59pm**
9		
Spring Break: College Closed Mar 13-19, 2016		
10		
MAR 24	**5.3: The Divergence and Integral Tests** **5.4: Comparison Tests**	**WebAssign HW15 and HW16. Due April 1 by 11:59pm**
11		
MAR 31	**5.5: Alternating Series** **Test 3 Review**	**WebAssign HW17. Due April 8 by 11:59pm**
12		
Test 3: Monday, April 3 through Saturday, April 8. Covers Sections 3.6 through 5.5.		
APRIL 7	**5.6: Ratio and Root Tests** **6.1: Power Series and Functions**	**WebAssign HW18 and HW19. Due April 15 by 11:59pm**

Week Number	LECTURE MATERIAL	HOMEWORK
13		
ARPIL 13	**6.2: Properties of Power Series** **6.3: Taylor and Maclaurin Series**	**WebAssign HW20 and HW21.** **Due April 22 by 11:59pm**
14		
APRIL 21	**6.4: Working with Taylor Series** **Test 4 Review**	**WebAssign HW22.** **Due April 29 by 11:59pm**
15		
Test 4: Monday, April 24 through Saturday, April 29. Covers 5.6 through 6.4		
APRIL 28	**7.1: Parametric Equations** **7.2: Calculus of Parametric Curves**	**WebAssign HW23 and HW24.** **Due May 6 by 11:59pm**
16		
MAY 5	**7.3: Polar Coordinates** **7.4: Area and Arc Length in Polar Coordinates** **Final Exam Review**	**WebAssign HW25 and HW26.** **Due May 12 by 11:59pm**
17		
Final Exam is from Monday, May 8 through Thursday, May 11. **The final exam is comprehensive.**		