



Mathematics

Katy Campus

Math 2414: Calculus II

CRN 89016 – Spring 2016 (Regular Term)

Rm. 215 | 2 – 4 pm | Tue and Thu

4 hour lecture course / 64 hours per semester/ # of weeks

Textbook: *Calculus*, 10th Edition, by Ron Larson & Bruce H. Edwards

ISBN-13: 978-1285057095

WebAssign Class Key: hccs 6261 2563

Instructor: Kimber Kaushik

Contact Information: kimber.kaushik@hccs.edu, 713/718-5733

Office Location: Rm. 359 H at Northwest College's Katy Campus

Office Hours: Monday & Wednesday 11 am – 12:30 pm; Tuesday 12:30 – 1 pm & 4 – 5 pm; Thursday 12:30 – 1 pm

Course Description: Math 2414: Calculus II. Integral calculus including discussions of transcendental functions, applications of integration, integration techniques and improper integrals, infinite series, Taylor series, plane curves, and polar coordinates.

Prerequisite: MATH 2413.

Course Goal: This course provides a detailed study of the logarithmic, exponential, and other transcendental functions, integration techniques with applications, L'Hopital's rule, an introduction to infinite series and power series, as well as Taylor polynomials and approximations, plane curves, parametric equations, and polar coordinates.

Course Student Learning Outcomes (SLO):

1. Compute derivatives and antiderivatives of transcendental functions.
2. Identify and apply the appropriate integration technique, and apply them to set up and solve various applications.
3. Demonstrate the correct use of L'Hopital's rule and various techniques for solving improper integrals.
4. Recognize and use infinite series with attention to the application of the Taylor series.
5. Demonstrate knowledge of plane curves and polar coordinates.

Learning outcomes: Students will:

- 1.1 Define and use transcendental functions including logarithmic and exponential functions.
- 1.2 Compute derivatives and antiderivatives involving transcendental functions.
- 2.1 Apply integration to various applications.
- 2.2 Show various integration techniques
- 3.1 Show correct usage of L'Hopital's rule.
- 3.2 Describe and solve improper integrals.
- 4.1 Recognize and use infinite series.
- 4.2 Recognize and apply Taylor series to various problems
- 5.1 Demonstrate knowledge of plane curves and polar coordinates.

Core Objectives

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

Students enrolled in this core curriculum course will complete a research project or case study designed to cultivate the following core objectives:

Critical Thinking Skills: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication.

Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

WebAssign: The online program WebAssign contains the course's online homework assignments and course gradebook. If you purchase Enhanced WebAssign, the program also includes the electronic version of the textbook, and helpful tutorial features. To access the program, go to www.WebAssign.net. The class key is hccs 6261 2563 and the course name is MATH 2414, section 89016. If you are new to WebAssign, please read the document, "WebAssign Quick Start Guide," posted on my Learning Web page.

When you set up your WebAssign account, be sure to record your username and password. You'll need this information, as well as the institution name, hccs, to log into WebAssign.

Calculator Use: You will need a scientific or graphing calculator (TI 83 or 84 only) in this course.

Online Homework: Homework assignments for each textbook section covered in class will be available in WebAssign.

Chapter Tests: There are four chapter tests, each taking place in class. I'll replace your lowest chapter test grade with your final exam grade, if that is to your advantage.

Mastering the Material: Prepare for each class by reading the sections to be covered that day. If you miss class, it is your responsibility to learn the material by reading the textbook carefully, watching the video lectures in WebAssign, and conferring with classmates. As you work on homework assignments in WebAssign, record your work in a math notebook. Be neat and highlight tricky problems. Writing your work in an organized manner helps you think clearly and gives you a record of your thought. You can then review the material as you study for chapter tests and the final exam. I encourage you to ask questions in class if you don't understand a topic discussed in class or a homework problem.

Free in-person tutoring is available at many HCC campuses. Another option is to use HCC's free Online Tutoring Services, available at www.hccs.askonline.net. Use your student ID or HCC e-mail address to create an account. Instructions, including a 5-minute video, are provided to make you familiar with the capabilities of this service. Of course, you are also welcome to visit or call me during my office hours.

Final Exam: The final exam is comprehensive and takes place in the normal class room on Thursday, May 12, 2016, from 2 – 4 pm.

Evaluation: You can find your course average and individual assignment grades in the WebAssign Gradebook. Your course average will be calculated as follows:

- 15%: Online Homework average
- 60%: Chapter Test average
- 25%: Final Exam

Your course grade is based on your course average as follows:

A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, D: 60 – 69%, F: less than 60%

Academic Honesty: A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. I am responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, I have teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test not yet administered;
- Bribing another person to obtain a test that is to be administered.

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

Dropping/Withdrawing from the Course: If you wish to drop the course without a grade, you must do so by Monday, February 1, 2016. If you do not log in to this course's Eagle Online shell or register for MyMathLab by February 1, you will be automatically dropped from the course.

If you feel that you cannot complete this course, you will need to withdraw from the course by Tuesday, April 5, at 4:30 pm. Before you withdraw from the course, please contact me to discuss why you feel it is necessary to do so. I may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which I *may* "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with me or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

Note that I may administratively withdraw you if you are inactive in the course between February 1 and April 5, but I will first attempt to contact you.

Please read the section "Policies and Procedures" in the [DE Student Handbook](#) for more details about the withdrawal process.

Repeat Course Fee: The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with me or your counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Student Course Reinstatement Policy: Students have a responsibility to arrange payment for their classes when they register, either through cash, credit card, financial aid, or the installment plan. Faculty members have a responsibility to check their class rolls regularly, especially during the early weeks of a term, and reconcile the official class roll to ensure that no one is attending class whose name does not appear on it. Students who are dropped from their courses for nonpayment of tuition and fees who request reinstatement after the official date of record (OE Date) can be reinstated by making payment in full and paying an additional \$75 per course reinstatement fee. A student requesting reinstatement should present the registrar with a completed **Enrollment Authorization Form** with the signature of the instructor, department chair, or dean who should verify that the student has been attending class regularly. Students who are reinstated are responsible for all course policies and procedures, including attendance requirements.

HCC Policy Statement – ADA

Services to Students with Disabilities: Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Ability Services Office at his or her respective college at the beginning of each semester. Faculty members are authorized to provide only the accommodations requested by the Ability Support Services Office. Persons needing accommodations due to a documented disability should contact the ADA counselor for their college as soon as possible. For questions, please contact Donna Price at 713.718.5165. To visit the ADA Web site, please visit www.hccs.edu then click Future students, scroll down the page and click on the words Ability Information.

Northwest College Ability Support Service Office

Katy Campus

1550 Fox Lake Drive, Rm. 111
 Houston, TX 77084
 Phone: 713/718-5408
 Fax: 713/718-7990

Spring Branch Office

1010 W. Sam Houston Pkwy North
 Phone: 713/718-5422
 Fax: 713/718-5430

HCC Policy Statement: Title IX

HCC is committed to provide a learning and working environment that is free from discrimination on the basis of sex which includes all forms of sexual misconduct. Title IX of the Education Amendments of 1972 requires that when a complaint is filed, a prompt and thorough investigation is initiated. Complaints may be filed with the HCC Title IX Coordinator available at 713 718-8271 or email at oie@hccs.edu.

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students’ rights with regard to sex/gender discrimination.

Information regarding these rights are on the HCC website under Students-Anti-discrimination. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC.

Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations. Log in to www.edurisksolutions.org. Sign in using your HCC student email account, then go to the button at the top right that says Login and enter your student number.

EGLS 3 -- Evaluation for Greater Learning Student Survey System: At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the semester, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. To evaluate your instructor, go to <http://www.hccs.edu/district/students/egls3/>.

Administration Contact Information:

College - Level Math Courses

Chair of Math	Jaime Hernandez	SW Campus	713-718-2477	Stafford, Scarcella, N108
- Secretary	Tiffany Pham	SW Campus	713-718-7770	Stafford, Scarcella, N108
Math Assoc. Chair	Roderick McBane	CE Campus	713-718-6644	San Jacinto Building, Rm 369
Math Assoc. Chair	Ernest Lowery	NW Campus	713-718-5512	Katy Campus Building, Rm 112
Math Assoc. Chair	Mahmoud Basharat	NE Campus	713-718-2438	Codwell Hall Rm 105

Developmental Math Courses

Chair of Dev. Math	Susan Fife	SE Campus	713-718-7241	Felix Morales Building, Rm 124
- Secretary	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Marisol Montemayor	SE Campus	713-718-7153	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	NE Campus	713-718-2434	Northline Building, Room 321

For issues related to your class, please first contact me. If you need to contact departmental administration, then contact the appropriate Associate Chair. If further administrative contact is necessary, then contact the appropriate Department Chair.