

MATH 2414 – CALCULUS II

COURSE SYLLABUS, SPRING 2022

Course Instructor: Dr. Blerina Xhabli

Email: bxhabli@central.uh.edu

Course/Section Number: Math.2414/18585

Course Format: Face to Face

Lecture Time/Place: MWF 9:00am – 10:00am / SR 117

Lab Time/Place: MWF 10:00am or 11:00am or 12:00pm / Check your schedule

Office Hours: Online TBA and/or by appointment

Course Homepage: www.casa.uh.edu and MATH2414-18585-SP22 TEAM

Course Calendar: <https://www.math.uh.edu/~blerina/Math2414SP22.html>

LEARNING OBJECTIVE

Upon successful completion of this course, students will master the following:

- Integration Techniques
- Applications of Integration
- Sequences and Series
- Polar Coordinates
- Parametric Equations

COURSE HOMEPAGE/CASA

The course homepage for this class is <http://www.casa.uh.edu>. **Every student is expected to create a CASA account by the first day of classes.** It is highly recommended that you check the CASA class page calendar at least once a day. This will allow you to stay up to date with assignments, homework and announcements. This page will provide you with access to the textbook, homework assignments, the syllabus, the course calendar, online lectures and useful links.

COURSE LEARNING MATERIALS

The textbook, online quizzes, EMCF assignments, and additional help materials will be made available by logging into CourseWare/CASA at <http://www.casa.uh.edu>. The first portion of these materials are freely available for the first two weeks of class. All students must purchase a Course Access Code and enter it on CASA by the first day of the third week of class to continue accessing the course learning materials. A Course Access Code can be purchased online for about \$55 from the University Bookstore.

TECHNOLOGY REQUIREMENTS

Computer and internet access is required for this course. In summary, students will need:

- a functioning and updated Computer (with microphone, speaker or earphones, and webcam)
- Reliable Internet Connection
- PDF viewer/Ability to watch mp4 files.
- Ability to log in to CASA for online assignments.
- Ability to access Microsoft TEAMS platform.

Note that all UH students have access to MS teams with their cougar net ID.

RESOURCES FOR ONLINE LEARNING

University of Houston is committed to student success, and provides information to optimize the online learning experience through our Power-On webpage. Please visit this webpage for a comprehensive set of resources, tools and tips including: obtaining access to the internet, AccessUH; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For assistance, contact UHOnline@uh.edu.

COURSE DELIVERING FORMAT AND STRUCTURE

This course is being offered in the **face to face** format. Every lecture session will be held **every Mon/Wed/Fri 09:00am - 10:00am** according to the class schedule at **SR 117**. Being a face to face delivered course, all students agree that they are available during the meeting times.

Even though the course format/structure is face to face, due to the changing nature of the pandemic, the team for this lecture will be created and available on MS TEAMS. In case of a need to move to the online setting, all students will be enrolled in the class team. Every student is automatically put on the MS Team of this course.

This course is not self-paced; students are expected to follow assignment due dates as specified on CASA calendar. After every lecture session, we recommend working on the corresponding quiz and homework assignments.

For the first two weeks of classes, we will implement a soft opening. As a result, all the lecture sessions will be recorded and the links of the recordings will be displayed in your interactive CASA calendar and in TEAMS. If you can't attend the lecture session in person, make sure you watch the recorded video of the session. The best approach is to watch the missed lecture video before the next upcoming lecture session. **Attendance is not mandatory but is recommended.**

Besides the lecture sessions in person, you will be having **Lab Sessions/Recitations** in person conducted by the class teaching assistants. During these sessions, you will be working with more practice problems in order to master the newly learned concepts. The teaching assistants will provide help in homework/quiz problems and provide more practice as time permits. All teaching assistants of our course will have their own channel in our team. The students are encouraged to post their questions ahead of time under their corresponding lab channel they will be attending. **The student should attend the lab session he is enrolled into.**

1. Students are expected to behave professionally during lecture and lab sessions. Any students who do not follow the university's code of conduct might be removed from the session.
2. Students will have only two places to concentrate on: CASA for course material, lecture notes and assignments/exams and TEAMS for online setting when necessary. All the course materials will be found in both places.
3. For online sessions, you are advised to turn off your webcam and microphone before joining the sessions. By joining an online session, students give consent to be recorded on the live session video. This rule will apply if we need to switch to online teaching.

FACE COVERING POLICY

To reduce the spread of COVID-19, the University strongly encourages everyone (vaccinated or not) to wear face coverings indoors on campus including classrooms for both faculty and students.

PRESENCE IN CLASS

Your presence in class each session means that you:

- Are NOT exhibiting any Coronavirus Symptoms that makes you think you have COVID-19
- Have NOT tested positive or been diagnosed for COVID-19
- Have NOT knowingly been exposed to someone with COVID-19 or suspected COVID-19

If you are experiencing any COVID-19 symptoms that are not clearly related to a pre-existing medical condition, do not come to class. Please see Student Protocols for what to do if you experience symptoms and Potential Exposure to Coronavirus for what to do if you have potentially been exposed to COVID-19. Consult the Undergraduate Excused Absence Policy for information regarding excused absences due to medical reasons.

COVID-19 INFORMATION

Students are encouraged to visit the University's COVID-19 website for important information including on-campus testing, vaccines, diagnosis and symptom protocols, campus cleaning and safety practices, report forms, and positive cases on campus. Please check the website throughout the semester for updates.

VACCINATIONS

Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent vaccine information, consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

REASONABLE ACADEMIC ADJUSTMENTS/AUXILIARY AIDS

The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact the Justin Dart Jr. Student Accessibility Center (formerly the Justin Dart, Jr. Center for Students with DisABILITIES).

EXCUSED ABSENCE POLICY

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Undergraduate Excused Absence Policy for reasons including: : medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.

RECORDING OF CLASS

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Center for Students with DisABILITIES. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

SYLLABUS CHANGES

Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible on CASA or in class.

GRADES

Final course grades are assigned according to student performance, using the guidelines below:

POPPERS/PARTICIPATION: 4%

Beginning third week of classes, you will be given quick multiple choice questions called poppers during the lecture. These questions are aimed to keep the students' attention alive and to engage them in the lecture. The answers will be submitted online through EMCF tab of your CASA accounts. Attending the lab sessions and posting questions in the lab channels may/will be counted as a plus towards your participation grade. (located on the TEAMS).

HOMEWORK: 8%

Homework assignments consist of multiple choice portion (EMCF) and written portion. Written homework is to be submitted by scanning in your work and uploading it under Assignments on CASA. EMCF assignments are posted and answered on CASA using the EMCF tab.

ONLINE QUIZZES: 15%

There will be one to two online quizzes given each week. You can attempt these quizzes up to 10 times, and the highest grade will be used for your score. You can access the quizzes by logging into CASA at <http://www.casa.uh.edu> and selecting Online Assignments. Quizzes will not reopen once they have closed. Two lowest online quiz grades will be dropped at the end of the semester.

Exams: 73%

There will be 4 midterm exams and one comprehensive final exam. Test 1 will be delivered online through Online Assignments tab in your CASA accounts and all the other exams will be taken at CASA Testing Center(s) with reservation. You must make a reservation to take a test prior to the first testing day. You should print out the web page showing your reservation time for your records and proof of your reservation.

Exam Schedule:

<i>Exam</i>	<i>Where</i>	<i>When</i>	<i>Percent of Average</i>	<i>Covers</i>
Test 1	Online	01/21 – 01/28	3%	Pre-requisite material
Test 2	CASA Testing Center	02/12 – 02/15	15%	Chapter 7
Test 3	CASA Testing Center	03/10 – 03/12	15%	Chapter 8
Test 4	CASA Testing Center	04/21 – 04/23	15%	Chapter 9
Final Exam	CASA Testing Center	05/09 – 05/12	25%	Ch 7-10

Letter grades will be assigned as follows:

A	$x > 93$	B-	$80 \leq x < 83$	D+	$67 \leq x < 70$
A-	$90 \leq x < 93$	C+	$77 \leq x < 80$	D	$63 \leq x < 67$
B+	$87 \leq x < 90$	C	$73 \leq x < 77$	D-	$60 \leq x < 63$
B	$83 \leq x < 87$	C-	$70 \leq x < 73$	F	below 60

POPPER INSTRUCTIONS

Beginning third week of classes, for every lecture session, you will have poppers which are short questions on the course material from the lectures prior and/or up to that day. All the poppers' answers will be submitted online through the corresponding post in the EMCF tab of your CASA account.

For example, for the 3rd week of classes on Wednesday, the instructor will post "Popper W3" post under the EMCF tab, and the popper questions' answers given during the Wednesday lecture will be posted there. Popper W3 will be open during the lecture session and will not be available afterwards. The instructor has the right to extend the deadline as needed and when needed. The popper deadlines can be seen under EMCF tab at CASA, and will be displayed on the CASA calendar. Some poppers(15% - 20%) will be dropped to cover for emergencies or unexpected events.

Students are responsible for the content/announcements given in the lecture sessions. The lecture content will be posted in your CASA calendar, and the announcements will also be delivered through email.

ONLINE QUIZZES

Online quizzes will be given regularly in this course. The quizzes are located in your CASA accounts under the "Online Assignments" tab. The quizzes will close on the due dates given on CASA at 11:59 pm and will not re-open. If the quiz is still open when the time expires, your work will not be saved; you must submit any online assignment before 11:59pm. **Two lowest quizzes will be dropped.** The primary reason for this policy is to offset the impact of zero/low quiz scores due to emergencies on a student's final course grade. You have 10 times to take each quiz and your highest score is retained as final score. There is a 60 minute time limit for most quizzes. Online quizzes will be given twice weekly in this course.

Neither the instructor, nor Math Department, is responsible for any difficulty that you have in accessing the quizzes. Please don't delay taking quizzes – there are times during the week when CASA is slow or overloaded. There is no amnesty period for the quizzes; the quizzes will NOT be reopened at the end of the semester. Please contact CASA tech support directly if you are having technical problems for your account.

TEST INFORMATION

There will be 4 tests along with a mandatory final exam.

- **Test 1 is over the pre-requisite material (Calculus 1).** It is recommended to take Practice Test 1 first to see what to expect on Test 1. You can review basic calculus topics to prepare for this test. You can find help videos for these topics on the course website.

Test 1 is considered a diagnostic test: It is important to know that if you score low on Test 1 (below 60 without extra credit); you may consider enrolling in SEP workshop to get the help you need to thrive in this course.

- **Tests 2, 3, 4 and Final Exam will be taken with reservation;** you must make a reservation to take a test prior to the first testing day. Follow the instructions on CASA under the Schedule

Exams tab to reserve a time for your tests; print out the webpage showing your reservation time for your records and proof of your reservation. Reserve a time as soon as scheduler opens up.

- Read the information and policies about CASA Testing Center(s) under the Schedule Exam tab on CASA, and know what to expect on the test day.
- You have only ONE attempt on all tests and you can NOT use calculators during any of the exams; study accordingly.

FINAL EXAM

Final is comprehensive and mandatory for ALL students. There is no “exemption” or “opt-out” from the final. Check course website for final exam schedule. Reserve a seat for it when reservation begins. Reservations are made online at CASA on a first come first serve basis. Make your travel plans so that you are available during the testing period.

If you miss a test without a valid excuse as described below, you receive a zero for it. When you take the final, the grade on the final will replace that zero. If you miss more than one test, only the first one will be replaced. If the final exam grade is better than any of the previous test grades, then the final exam grade will automatically replace the lowest test grade even if you do not miss any test. The primary reason for this policy is to offset the impact of zero scores due to emergencies (medical, personal, or otherwise) on a student's final course grade.

EXTRA CREDIT

There are practice tests and a practice final on Courseware. You can take the practice tests several times (up to 10 times) and we only take your best score. **5% of the highest score** will be applied to the relevant test as extra credit. Pay attention to the deadlines on these practice tests. In general, practice tests end before the exam period starts (except for Practice Test 1). To receive extra credit, students should take the practice tests before they close.

HOMEWORK

Homework (either EMCF or Written) is going to be assigned weekly covering all the material seen during the prior week of lectures. You need to submit your EMCF homework under the EMCF tab, and the written homework under the Assignments tab. Homework files will be uploaded on the described places. **NO late homework is accepted.** We will drop 2 lowest grades at the end.

LATE ASSIGNMENT AND MAKE-UP POLICY

This course is a cumulative course. You as a student need to keep up with the reading, quizzes, homework assignments and exams. Students are expected to check the calendar on CASA several times a week and plan ahead so that they don't miss assignments. We drop some assignments primarily to offset the impact of zero/low scores due to emergencies on a student's final course grade. Hence, students should not expect to have an option to make up missed assignments unless in the case of an excused absence (See: Excused Absence Policy above).

If you miss a test, it may be possible to reschedule a test appointment during the testing period (depending on space availability) by using the online scheduler. Rescheduling must be made online in your account; your instructor is not responsible for finding seats or making reservations for you. At the end of the semester, your final exam score will replace your lowest midterm exam score if the former is higher. A missed test will result in a score of zero. If you miss two or more exams, only one of those scores will be replaced.) The primary reason for this policy is to offset the impact of zero/low test scores due to emergencies on a student's final course grade.

If requesting make up work (assignment or test) due to an excused absence: the student needs to contact the instructor in writing before the next class meeting (or as soon as possible afterwards with an explanation regarding why the notice could not be sent before the next class meeting). Read the Undergraduate Excused Absence Policy to see a list of documentations to support your request; follow the guidelines provided on this document to make your request. Your instructor will inform you of the decision in writing (via email).

Note: If students lose access to CASA temporarily due to not entering access code by the deadline, or being temporarily dropped from the course for non-payment, then they are responsible for any assignment deadlines that are missed.

COMMUNICATION VIA EMAIL

Email communications related to this course will be sent to your Exchange Email Account which each University of Houston student receives. The Exchange mail server can be accessed via Outlook, which provides a single location for organizing and managing day-to-day information, from email and calendars to contacts and task lists. Exchange email accounts can be accessed by logging into Office 365 with your CougarNet credentials or through Access UH. They can also be configured on IOS and Android mobile devices. Additional assistance can be found at the Get Help page.

Your instructor will be sending class emails using PeopleSoft; you are responsible for checking your UH email. Per UH Policy, notices properly addressed and so sent via PeopleSoft shall be presumed to have been received by the student. Thus, you are responsible for the content in emails sent to your UH account, regardless if your external (non-UH) email provider filters or blocks them. When emailing your instructor, it is recommended that you use a professional email address and include the course name on the subject line so that your instructor can address your questions accordingly. Please read this link for more on communication via email: [EMAIL ETIQUETTE](#)

Any emails sent to the course TA or the instructor should have Math 2414, Section 12281 in the subject line. Also, if the instructor or the TA do not respond to your email within two working days, please resend the email. If you again do not hear from me within one more working day, it is likely that your email is not coming through and you should mention this in one of the online sessions before or after class. It is your responsibility to ensure that I and your TA are aware of issues you may have with the course; failure to effectively initiate timely communication is not a valid basis for a grade grievance and cannot be used as such.

Any emails sent by the instructor or TA will be sent through AccessUH so please make sure your email is up to date in the system. Class announcements will also be posted on the CASA calendar and/or the Announcements channel on MATH2414-12281-F21 TEAM, so check those pages daily.

ACADEMIC HONOR PRINCIPLE

University of Houston students are expected to adhere to the Academic Honesty Policy as described in the UH Undergraduate Catalog. “Academic dishonesty” means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements. Academic dishonesty includes, but is not limited to, the following: Plagiarism; Cheating and Unauthorized Group Work; Fabrication, Falsification, and Misrepresentation; Stealing and Abuse of Academic Materials; Complicity in Academic Dishonesty; Academic Misconduct.

Refer to UH Academic Honesty website and the UH Student Catalog for the definition of these terms and university’s policy on Academic Dishonesty. Anyone caught cheating will receive sanctions as explained on these documents and will be reported to the department for further disciplinary action. The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. Students may not receive a W for courses in which they have been found in violation of the Academic Honesty Policy. If a W is received prior to a finding of policy violation, the student will become liable for the Academic Honesty penalty, including F grades.

Posting answers for Poppers or Homework questions online (at group chats or other online tools) **is considered an academic honesty violation.** Students are expected to know the difference between “getting/giving HELP on a problem” and “getting/giving answers to a problem”. If a student is caught sharing answers (in person or online), he/she might be reported to the departmental hearing officer for an academic honesty violation. If a student becomes aware of cheating or any other violations; that student is responsible for informing the instructor.

INCOMPLETES

An incomplete (I) may be awarded to you by your teacher if the reason is a compelling NON-ACADEMIC reason, you have completed virtually all the course assignments AND you have a passing grade on this work.

Incompletes are NOT available to students who have done little of the coursework nor for students who have failing grades on what they have done. See your teacher to discuss eligibility and to fill out and sign the Incomplete contract. This is also required and must be signed in advance of an I being posted. Imminent failure is not an acceptable reason to be awarded an incomplete.

DROPPING/WITHDRAWING

If a student wants to drop the class, it is his/her responsibility to do so by logging on access.uh.edu and completing the drop process before the drop deadline. Instructors cannot drop students for any reason.

UH CAPS Statement

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (<http://www.uh.edu/caps>) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

HELPFUL INFORMATION

COVID-19 UPDATES: <https://uh.edu/covid-19/>

COOGS CARE: <https://www.uh.edu/dsaes/coogscare/>

LAPTOP CHECKOUT REQUESTS:

<https://www.uh.edu/infotech/about/planning/offcampus/index.php#do-you-need-a-laptop>

HEALTH FAQS: <https://uh.edu/covid-19/faq/health-wellness-prevention-faqs/>

STUDENT HEALTH CENTER:

<https://uh.edu/class/english/lcc/current-students/student-healthcenter/index.php>

The material covered in the course is listed below:

Ch 7 Applications of Integration

- 7.1 Integration Review
- 7.2 The Mean Value Theorem for Integrals
- 7.3 Area
- 7.4 Volume
- 7.5 Arc Length, Centroids, and Surface Area
- 7.6 Differential Equations and Exponential Growth/Decay

Ch 8 Techniques of Integration

- 8.1 Integration by Parts
- 8.2 Powers of Trigonometric Functions
- 8.3 Trigonometric Substitutions
- 8.4 Integrating Rational Functions
- 8.5 Improper Integrals
- 8.6 Numerical Integration

Ch 9 Sequences and Series

- 9.1 Bounded Sets and Sequences
- 9.2 Convergence of Sequences
- 9.3 Numerical Series and Convergence
- 9.4 The Integral Test, Comparison Tests
- 9.5 The Ratio Test and the Root Test
- 9.6 Alternating Series and Absolute Convergence
- 9.7 The Power Series
- 9.8 The Taylor Series

Ch 10 Polar Coordinates and Parametric Equations

- 10.1 Polar Coordinates
- 10.2 Graphing in Polar Coordinates
- 10.3 Area and Arc Length in Polar Coordinates
- 10.4 Curves Given Parametrically
- 10.5 Tangents to Curves Given Parametrically
- 10.6 Arc Length and Surface Area for Curves Given Parametrically