GEORGETOWN UNIVERSITY
College of Arts & Sciences

HOYA SUMMER, 2025 – MATH 1360-20 – Calculus II

Main Second Summer Session July 7 – August 8, 2025

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Classroom: *ICC 213; MTWR 1:00 – 3:30 PM*

Office: St. Mary's Hall, 317

Office Hours: Monday through Thursday, 11:30 AM - 12:30 PM, EDT. I'm available to help you learn. Whenever you have a question that doesn't get answered in a lecture (or by the textbook), please contact me during office hours in person or through CANVAS using "Zoom Conferencing.". Additional ZOOM office hours are available by request.

Course description: This course is the continuation of MATH-1350 (Calculus I). Topics include applications of the definite integral, techniques of integration, infinite sequences and series including power series and Taylor series, and parametric and polar curves. We will explore these topics from both a computational and conceptual perspective. Calculus is essential for mathematics, sciences and many other fields. This course together with other courses in the calculus sequence will help you master the powerful tools for problem solving that calculus affords.

Registration Concerns: MATH 1350 or equivalent.

Required text: Briggs, Cochran and Gillett, Calculus: Early Transcendentals, Single Variable, 3rd edition, Pearson. ISBN-978-0-13-596034-9. This is the eBook with MyLab Math access (MyLab will be used for homework assignments). As an option, available through the GU Bookstore, is the *"À La Carte Edition"* ISBN-978-0-13-499610-3. This is the loose-leaf, 3-hole punch version. It comes bundled with e-text and the MyLab Access Kit that's good for 24-months. It is recommended for those who will be taking Calculus 2 and 3. (This course will cover chap/sec 1.1 through 5.5.)

Computer Requirements: You will need a laptop or desktop computer (Windows or Mac) and adequate Internet service to complete this course. Although you can use other devices – smartphones and tablets – some features do not function on these devices. You will also need a mic and camera to complete the course. While you can use any browser to access CANVAS (the Georgetown Learning Management System) please note that Google Chrome and Mozilla Firefox tend to work best.

Technical Support: All students have 24/7 access to CANVAS technical support 24 hours a day, 7 days a week, including live chat and a support hotline at 855-338-2770. Use the 'Help' icon in the lower left of your CANVAS window to view all available support and feedback options.

Additional required technology: A Graphing Calculator. (I'll be using and demonstrating the TI-84+ in class.)

Student Learning Outcomes:

For the **General Curriculum**, at the successful completion of this course the student will demonstrate the following Student Learning Outcomes: critical thinking and problem-solving skills; competence in technology, and written communication; quantitative reasoning through an understanding of mathematical concepts and their application to the natural world and society; and knowledge of human culture as manifested in the liberal arts (partially satisfied).

At the successful completion of this course, a student will also demonstrate the following Student Learning Outcomes:

- ✓ Interpret areas between curves, surface areas and volumes of solids of revolution, and lengths of curves as definite integrals and compute the values.
- ✓ Recognize and implement appropriate techniques (substitution, integration by parts, trigonometric integrals, trigonometric substitution, and integration by partial fractions) to evaluate indefinite and definite integrals.
- ✓ Identify and evaluate improper integrals.
- ✓ Understand definitions and properties of infinite sequences and series.
- ✓ Choose and apply various tests (divergence, integral, comparison, alternating series, ratio and root tests) to determine the convergence or divergence of infinite series. Determine the radius and interval of convergence for a given power series.
- ✓ Find Taylor polynomials and Taylor series for a variety of functions, and use them to approximate function values.
- ✓ Describe curves and regions in the plane using parametric and polar representations.
- ✓ Write basic mathematical arguments that apply some of the major definitions and theorems of calculus.

Method of Instruction: "Interactive Lecture" … presentation of theory, application, and sample problems by instructor with student participation.

Attendance: Policies regarding class attendance follow those published in the 2024-2025 Undergraduate Bulletin.

Make-up quizzes and tests are at the discretion of the instructor: Make-ups will be given only under extraordinary circumstances. https://bulletin.georgetown.edu/regulation/standards

Students with Disabilities: The University encourages any student who believes s/he may have a qualifying disability to make an appointment with an Academic Resource Center (ARC) staff person to discuss available services and the process for documenting a disability and receiving accommodation. http://academicsupport.georgetown.edu/ Disability support web site: http://academicsupport.georgetown.edu/disability Phone: (202) 687-8354 Email: arc@georgetown.edu

Support Services: Georgetown offers a variety of support services for students that can connect you with professionals on and off campus during this time. Below are some of the resources available to you:

- ✓ Academic Resource Center: 202-687-8354 | arc@georgetown.edu
- ✓ Counseling and Psychiatric Services: 202-687-6985
- ✓ Institutional Diversity, Equity & Affirmative Action (IDEAA) (202) 687-4798

Class Recording: By registering for or attending Georgetown University courses, individuals consent to the recording of classes. Access to class recordings is restricted to the students in the recorded class who have been given permission by the instructor or for whom recording has been approved as a reasonable accommodation by the Academic Resource Center. The content of any class, including materials created by the instructor, is the intellectual property of the instructor.

Workload: For every hour in class, students should expect to spend up to two hours outside of class on work for this course (reading the textbook, studying notes, doing homework, viewing related videos). Summer courses are fast-paced; if you get too far behind, it will be difficult to catch-up. Set aside enough time in your schedule to keep up.

Homework (Problems assigned on MyLab Math via Canvas): The most important part of any Calculus course is the homework. Many of the problems assigned will not be routine drill, but instead they will push you to think about and work with the underlying concepts and applications. There will be a homework assigned for each section (we'll be covering 35 sections). All homework will be completed on-line using MyLab Math. I *will* drop your two lowest homework scores.

Quizzes: On most days there will be a six (6) question multiple-choice quiz covering material from the previous day. The intention of these quiz questions is to test comprehension, reinforce key concepts, improve knowledge retention, and to encourage attendance and the viewing of video components. Five correct answers will be considered a perfect score 10/10; all six questions correct will result in a score of 11/10 (a bonus point). I *will* drop your lowest quiz score.

Tests: Two (2) 90-minute tests will be given during the session. These tests will last cover the material outlined on the course calendar. Unlike homework and quiz grades, I will *NOT* drop your lowest test grade. There will be no final exam.

Grading Scheme: When I calculate final grades, here's how I'll weight the components: Attendance 5%, Homework 20%, Quizzes 15%, First Test 27%, Second Test 33%. (N.B. Class participation, punctuality and improvement will be considered in borderline situations when the final grade is calculated.)

		A	93-100%	A-	90-92%
B+	87-89%	B	83-86%	B-	80-82%
C+	77-79%	C	73-76%	C-	70-72%
D+	67-69%	D	60-66%		
		F	Below 60%		

Incompletes: By university policy, incomplete grades may be given only for reasons of health or serious personal issues. Academic overload, outside employment, or mismanagement of time are not sufficient reasons for receiving an incomplete.

Last Day to Withdraw // Pass/Fail Deadline: Monday, August 4, 2025

Course Evaluation: Toward the end of the course, each student will have the opportunity to evaluate the course/instructor (i.e., me). Students are strongly encouraged to participate in the evaluation.

Title IX Syllabus Statement (endorsed by Faculty Senate): Georgetown University and its faculty are committed to supporting survivors and those impacted by sexual misconduct, which includes sexual assault, sexual harassment, relationship violence, and stalking. Georgetown requires faculty members, unless otherwise designated as confidential, to report all disclosures of sexual misconduct to the University Title IX Coordinator or a Deputy Title IX Coordinator. If you disclose an incident of sexual misconduct to a professor in or outside of the classroom (with the exception of disclosures in papers), that faculty member must report the incident to the Title IX Coordinator, or Deputy Title IX Coordinator. The coordinator will, in turn, reach out to the student to provide support, resources, and the option to meet. [Please note that the student is not required to meet with the Title IX coordinator.]. More information about reporting options and resources can be found on the Sexual Misconduct Website: https://sexualassault.georgetown.edu/resourcecenter.

If you would prefer to speak to someone confidentially, Georgetown has a number of fully confidential professional resources that can provide support and assistance. These resources include:

> Health Education Services for Sexual Assault Response and Prevention: confidential email sarp@georgetown.edu
>
> Counseling and Psychiatric Services (CAPS): 202.687.6985 or after hours, call (833) 960-3006 to reach Fonemed, a telehealth service; individuals may ask for the on-call CAPS clinician

More information about reporting options and resources can be found on the Sexual Misconduct Website.

Title IX Pregnancy Modifications and Adjustments: Georgetown University is committed to creating an accessible and inclusive environment for pregnant students. At any point throughout their pregnancy students may request adjustments/modifications based on general pregnancy needs or accommodations based on a pregnancy-related complication or medical need. Students may also request accommodations following labor and delivery based on a complication or medical need.

SCS students must complete the Pregnancy Adjustment Request Form (https://titleix.georgetown.edu/title-ix-pregnancy/student-pregnancy/) and submit it to the SCS Deputy Title IX Coordinator at titleixscs@georgetown.edu. Upon receiving the completed form, the Deputy Title IX Coordinator will schedule a meeting with the student to discuss the requested adjustments and implementation process.

More information about pregnancy modifications can be found on the Title IX at Georgetown University Website