

Villanova University Spring 2022  
MATH 2500 – Calculus III – Sections 1,2, & 3  
**SYLLABUS**

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**Sect. 1 Meet Times: MW:** 1:55-3:10 PM, Mendel Hall 260, **Th:** 9:00-9:50 AM, White Hall 218

**Sect. 2 Meet Times: MW:** 3:20-4:35 PM, Mendel Hall 260, **Th:** 10:00-10:50 AM, White Hall 218

**Sect. 3 Meet Times: MW:** 4:45-6:00 PM, Mendel Hall 260, **Th:** 11:30 AM-12:30 PM, White Hall 218

**Instructor:** Dr. Melissa M Fuentes

**Office:** St. Augustine Center 369

**Email:** melissa.fuentes@villanova.edu (will respond to emails 8 AM-1:30 PM, Monday to Friday)

**Office hours:** W 6:00-7:15 PM, Th 12:30-1:45 PM. By appointment via Zoom Friday mornings.

**Course Website:** <https://www.MelissaMFuentes.com/mat2500>

**Course Description:** Our attention in this course will be directed toward extending the core ideas from Calculus I and II to problems that involve two or more variables. We will see the connections between Calculus and geometry in full bloom. Our emphasis will be less on memorizing the “rules” of Calculus and more on gaining an understanding of the underlying principles and how these principles lead to worthwhile applications.

**Course Objectives:** This course is designed to introduce science and engineering students to the fundamentals of multivariable calculus. Topics covered include:

• vectors & geometry of space • vector valued functions • partial derivatives • multiple integrals • vector calculus.

**Course Textbook:** *Calculus: Early Transcendentals, 9<sup>th</sup> ed.* by J. Stewart, D. Clegg, and S. Watson. An e-textbook is included with WebAssign access, which is required for the course (see below).

### **Required Materials**

**Blackboard (BB):** <https://elearning.villanova.edu/> All class materials will be posted to Blackboard under the COURSE CONTENT tab on the left. **Students are expected to check BlackBoard for weekly reminders, due dates, course notes, and worksheets, all of which will be posted under the current week’s module.**

**WebAssign:** Weekly online homework assignments are to be completed via WebAssign, an online supplement to our textbook. Purchase options (single or multi-semester) and WebAssign registration instructions can be found on the WEEK 1 Module in BlackBoard under COURSE CONTENT.

**The WebAssign Course Key can be found on the syllabus posted for your section on BlackBoard.**

**Maple (2022 version):** This course will include Maple assignments and each exam will have a Maple portion. Installation instructions can be found on the WEEK 1 Module in BB under COURSE CONTENT.

### **Suggested Materials**

**Scientific Calculator:** You may use a scientific calculator during class, exams, and quizzes. **Graphing calculators are prohibited during quizzes and exams. The most advanced calculator that can be used during exams should align with the TI-30X family ([VU Bookstore scientific calculator](#)).**

### **Homework & Homework Policy:**

There will be weekly WebAssign assignments (2-3 sets in total), **due each Wednesday, 11:59 PM.** You are encouraged to study and discuss problems with classmates, but please write your own solutions and make sure you understand how to do the problems.

There will be 4 Maple Assignments in total. They may be completed individually or submitted with your classwork groups (subgroups of classwork groups are also fine). These assignments are to be submitted in PDF format via BlackBoard.

**Extensions will always be granted. However, if you require an extension for an assignment (WebAssign or Maple), 8 points will be deducted for each additional day it is late.**

**Classwork:** A worksheet will be posted every week on Blackboard and the course website. Most Thursdays will be dedicated to working on worksheet problems in your classwork groups. Each of you will be a member of a group of 5-6 students and will be expected to post a solution to a worksheet problem on the board. Classwork will be graded based on attendance and participation.

**Quizzes:** There will be a group quiz nearly every week. Quizzes will be completed with your classwork group members. Each quiz will cover the previous week's material and the WebAssign homework assignment due the previous day. Quiz problems will be selected from WebAssign assignments, worksheets, or practice problems (similar to homework and examples done in class). **The two lowest quiz grades are dropped.**

**Exams:** There will be one in-class midterm and a final exam. The tentative dates are listed below.

**Midterm: PART 1 - Wednesday, October 5<sup>th</sup>, PART 2 - Thursday, October 6<sup>th</sup>**

**Final (cumulative): Friday, December 16<sup>th</sup>, 11:30 AM - 2:00 PM**

**Extra Credit:** There will be no extra credit assignments given in this course.

**Grading Policy:** Grades will be computed according to the following point system:

Homework: 150 points  
Quizzes: 200 points  
Maple Assignments: 140 points  
Classwork: 60 points  
Midterm: 200 points  
Final Exam: 250 points

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1000 points in total possible

**Letter grades:**

<b>Points</b>	920-1000	880-919	840-879	800-839	770-799	740-769	700-739	670-699	640-669	600-639	570-599	0-569
<b>Grade</b>	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

## Course Policies

**Cell phones should be turned off/muted during class. No texting.**

**Unless time has been allocated for in-class computer use, use of a PC or MAC is discouraged.**

**Tablet/Ipad usage is allowed.**

**Recording class lecture, either audio or video, is strictly prohibited without the express written consent of the professor. Violation of this policy will result in a failing grade for the course.**

**Attendance:** It is expected that students will attend every class. The university attendance policy on attendance also addresses what may constitute an excused absence:

<https://www1.villanova.edu/villanova/provost/resources/student/policies/attendance.html>

**Make-ups:** There are **no make-ups** for exams or quizzes without **written documentation (e.g. doctor's note)**. All requests for make-ups and extensions must be officially requested by email BEFORE a quiz/exam. If a make-up exam or quiz is warranted, then it must be made up **within two class dates** after you return to campus. For example, if you were to miss a quiz on a Thursday, the make-up quiz must be completed by Wednesday of that next week.

**Travel plans do not constitute an acceptable reason to reschedule an exam or quiz. Please plan accordingly during finals and semester breaks.**

**Athletes:** Students who participate in athletics are excused from class **ONLY FOR GAMES**. **Athletes should provide me with a list of game dates along with a letter from their coaches by the end of the second week of the semester.** It is the responsibility of the athlete to make sure that all outstanding work due is turned in BEFORE the class is missed.

**Changes to the syllabus:** Any changes to the syllabus will be provided in writing and posted to Blackboard.

**Office of Disabilities (ODS) and Learning Support Services (LSS):** It is the policy of Villanova to make reasonable academic accommodations for qualified individuals with disabilities. All students who need accommodations should go to Clockwork for Students via myNOVA to complete the Online Intake or to send accommodation letters to professors. Go to the LSS website <http://learningsupportservices.villanova.edu> or the ODS website <https://www1.villanova.edu/university/student-life/ods.html> for registration guidelines and instructions. If you have any questions please contact LSS at 610-519-5176 or [learning.support.services@villanova.edu](mailto:learning.support.services@villanova.edu), or ODS at 610-519-3209 or [ods@villanova.edu](mailto:ods@villanova.edu).

**Academic Integrity:** All students are expected to uphold Villanova's Academic Integrity Policy and Code. Any incident of academic dishonesty will be reported to the Dean of the College of Liberal Arts and Sciences for disciplinary action. For the College's statement on Academic Integrity, you should consult the *Student Guide to Policies and Procedures*. You may view the University's Academic Integrity Policy and Code, as well as other useful information related to writing papers, at the Academic Integrity Gateway web site: <https://library.villanova.edu/research/subject-guides/academicintegrity>

**Absences for Religious Holidays:** Villanova University makes every reasonable effort to allow members of the community to observe their religious holidays, consistent with the University's obligations, responsibilities, and policies. Students who expect to miss a class or assignment due to the observance of a religious holiday should discuss the matter with their professors as soon as possible, normally at least two weeks in advance. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the absence. [https://www1.villanova.edu/villanova/provost/resources/student/policies/religious\\_holidays.html](https://www1.villanova.edu/villanova/provost/resources/student/policies/religious_holidays.html)

## **Important Dates**

Tuesday, August 30 – Last day to add/drop courses or for requesting Satisfactory/Unsatisfactory.

Monday, September 5 – Labor Day (no classes).

Monday, October 10 to Sunday, October 16 – Semester Recess (no classes).

Wednesday, October 19 – Mid-semester grades due.

Wednesday, November 9 – Last day for authorized course withdrawal without academic penalty (WX).

Thursday, Nov. 22 (after last class) to Sunday, Nov. 27 – Thanksgiving Recess after class (no classes).

Monday, December 12 – Fall classes end.

Tuesday, December 13 – Reading day.

Wednesday, December 14 – Tuesday, December 20 (excluding Sunday, Dec. 18) – Final exams.