

Villanova University Spring 2022
MATH 2500 – Calculus III – Section 3
SYLLABUS

MWF: 10:30-11:20 AM, John Barry Hall 201B, **Th:** 12-12:50 PM, John Barry Hall 202B

Instructor: Dr. Melissa M Fuentes

Office: St. Augustine Center 369

Email: melissa.fuentes@villanova.edu (will respond to emails 8 AM-6 PM, Monday to Saturday)

Office hours: M 6:15-7:15 PM (virtual via Zoom ID 437 115 1645), W 4:30-5:30 PM, Th 2:30-3:30 PM. All others by appointment at a mutually convenient time, in person, or virtually via Zoom.

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.

Prerequisites: To be successful in this course, a student should have a strong background in algebra and some familiarity with trigonometry. Ordinarily this means high school trigonometry and advanced algebra.

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

- vectors and the geometry of space
- vector valued functions
- partial derivatives
- multiple integrals
- vector calculus.

Course Textbook: *Calculus: Early Transcendentals, 8th 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:

WebAssign: This course will require students to complete weekly online homework assignments. This will be handled by WebAssign, an online supplement to our textbook. Purchase options (single or multi-semester) and WebAssign registration instructions can be found at

www.cengage.com/coursepages/Villanova_Calc_Blackboard.

WebAssign Course Key: villanova 0930 8471

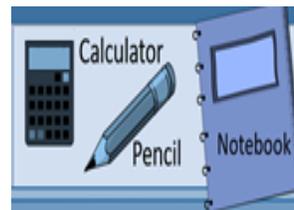
Blackboard: <https://elearning.villanova.edu/>

All class materials will be posted to Blackboard. You are expected to check Blackboard regularly to read announcements, download worksheets, find updates to the schedule, and find due dates. Access to WebAssign, course materials, and due dates can be found under “Course Content.”

Maple: This course will include Maple assignments in and outside of class. Maple (2021 version) is available for all students for download. It will work on a PC or a MAC. You can download it at <https://www1.villanova.edu/villanova/unit/studentservices/SoftwarePortal.html>.

Suggested Materials:

Scientific Calculator: You may use a scientific calculator during class, exams, quizzes, and to complete assignments. *Graphing calculators are prohibited.* **The most advanced calculator that can be used during exams should align with the TI-30X family (VU Bookstore: www.bkstr.com/villanovastore/product/calc-ti30xiis-duel-pwr-blue-144483-1).** *More advanced calculators and use of a cell phone or tablet app is prohibited during quizzes and exams.*



Homework: There will be weekly homework assignments (2-3 sets in total), **due each Wednesday by 11:59 PM.** Check each week’s module section on Blackboard for the homework assignments that are due. There will not be weekly announcements for homework due dates.

You are encouraged to study with and discuss problems with others from the class, but write up your own homework by yourself, and make sure you understand how to do the problems. **If you require an extension for a WebAssign assignment, 8 points will be deducted for each additional day it is late.**

There will be two Maple assignments to be completed outside of class. You may choose to submit it individually or with your classwork group members. The due dates will be announced later in the semester.

Maple Assignment: There will be several Maple Assignments given in-class to be done in groups or outside of class to be completed individually.

Classwork: A worksheet will be posted every week on Blackboard and the course website. Fridays will be dedicated to group work. Each of you will be a member of a group of 6-7 students and will submit one completed worksheet per group every week.

Quizzes: There will be a group quiz every week (except midterm exam weeks). That is, quizzes will be completed with your classwork group members. Each quiz will cover the previous week’s material. 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 two in-class midterms and a final exam. The tentative dates are listed below.

Midterm 1: Monday, February 14th

Midterm 2: Monday, March 28th

Final (cumulative): Saturday, April 30th, 8:00 - 10:30 AM

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: 150 points
- Maple Assignments: 120 points
- Classwork: 100 points
- Midterm 1: 160 points
- Midterm 2: 160 points
- Final Exam: 160 points

1000 points in total possible

Letter grades:

Points	920-1000	880-919	840-879	800-839	770-799	740-769	700-739	670-699	640-669	600-639	570-599	0-569
Grade	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 official **freshman rules** for attendance apply. **Missing more than a third of all classes results in a failing grade.** 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: Late work will **not be accepted.** If you or your group need additional time for an assignment, please speak to me in **advance** of the due date. **Extensions for work will not be granted after an assignment is due. Make-ups will not be given for unexcused missed classwork assignments.**

There are **no make-ups** for exams or quizzes without **written documentation.** All requests for make-ups and extensions must be officially requested by email. 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 an exam on Monday, the makeup exam must be completed by Thursday of that same 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. Go to the Learning Support Services website <http://learningsupportservices.villanova.edu> for registration guidelines and instructions. For physical access or temporarily disabling conditions, please contact the Office of Disability Services at 610-519-3209 or 610-519-4095, or email ods@villanova.edu. Registration is needed in order to receive accommodations.

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

Important Dates

Sunday, January 16 – Last day to add/drop courses.

Monday, January 17 – Martin Luther King Day (no classes).

Monday, February 28 to Sunday, March 6 – Semester Recess (no classes).

Wednesday, March 9 – Mid-semester grades due.

Wednesday, March 30 – Last day for authorized course withdrawal without academic penalty (WX).

Thursday, April 14 to Monday, April 19 – Easter Recess (no classes).

Thursday, April 28 – Spring classes end.

Friday, April 29 – Reading day.

Saturday, April 30 – Friday, May 6 (excluding Sunday, May 2) – Final exams.

Course Agreement – MAT 2500 – Section 3

This signature form will be handed out to each student on the second day of class to sign and return to Dr. Fuentes.

Print Name: _____

Phone: _____

Email: _____

Class: _____ Section: _____

Advisor: _____

Athletic Team (if applicable): _____

I have read and understood the terms, conditions, and policies of the class as stated in the course syllabus. I understand that if any substantive changes to the course are made, I will be notified in writing.

Signature Date

I understand that late work will not be accepted and that extra credit assignments will not be given.

I also understand that I cannot make up unexcused missed classwork assignments.

Finally, I understand that it is my responsibility to contact Dr. Melissa M Fuentes, Ph.D., by email,

PRIOR to missing a class, an exam, or a quiz.

Signature Date