MATH 249

Fall 2022 Course Policy Sheet

Instructor: Dr. Colin Starr Office Hours*: MWF 10:20-11:30, 1-2*

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* These "office" hours will be held via Zoom.

Required Text: Early Transcendentals Multivariable Calculus, Sixth Edition (5th or later is fine), by James Stewart.

Goals: This course is a generalization to higher dimensions of the calculus you have already learned. Students will

- 1. understand and apply concepts of calculus in higher dimensions. [Instruments: lectures (L), WeBWorK (W), classwork (C), projects (P), exams(E)]
- 2. learn definitions, theorems, techniques, and applications in multivariable calculus. $[\mathrm{LWCPE}]$
- 3. understand and be able to apply generalizations of the Fundamental Theorem of Calculus. [LWCPE]
- 4. be able to use technology (Python) to perform routine calculus tasks and some more sophisticated calculus tasks. [WCP]
- 5. be able to communicate technical and mathematical ideas to others. [CPE]
- 6. demonstrate the ability to make judgments and draw appropriate conclusions based on quantitative information. (General Education objective from CLA Catalog) [LWCPE]

Course structure: Our classroom will be "flipped." That means that "lecture" occurs outside of class: there are recorded lectures available for you to watch on our Google groups site or from the link on our course page. You are responsible for watching the assigned videos before class. I will assume that you have watched them and have some reasonable idea of what the content is. The lectures include definitions, theorems, examples, etc. – everything you would expect from a normal lecture except for the opportunity to ask me questions. (That comes in class.) As you watch, you should pause frequently to take notes, make sure you understand the material, work through examples before I do, and write down any questions you have. In class, we will work through additional examples and deal with questions, as well as explore applications. We will also spend a little time on homework each day, so be sure to bring a laptop or other device with which you can access our online homework system (see below). One major advantage of this system is that you can listen to the lecture as many times as you want throughout the semester. Make use of that opportunity! In class, we will recap the lecture, go over questions, and work on mini-"projects" (see below).

Assessment: Your grade will be computed as follows:

WeBWorK: 300 points
Written work: 250 points
Midterm Exams: 3@ 100 points each
Final Exam: 150 points
Total: 1000 points

Grades must fall into the categories below to guarantee the corresponding letter grade. Plus and minus grades are at my discretion but generally correspond to trends in your performance.

Letter Grade	A	В	С	D	F
Minimum Percentage	90	80	70	60	
Minimum Points	900	800	700	600	

As a general rule, you should not expect any "curving." The grades correspond to a level of achievement, not a relative ranking in the class. However, if you focus on learning what we study, the grades will take care of themselves. They should be among the least of your worries.

WeBWorK: This is an on-line homework system. The problems will be very much like those in the text, and the text problems can give you additional practice. Note that WeBWorK is worth 30% of your grade. In WeBWorK, you may keep trying problems you miss until you get them right. This means that everyone should get 100% on homework, so take advantage of the system by not giving up. At the same time, you should not just guess at answers until one works; this is a counterproductive waste of time. If you are struggling, come see me! The address for our WeBWorK site is https://secure.willamette.edu/webwork2/Math249-Starr/ and there is a link on our course homepage. Please be sure to do more than just the WeBWorK. WeBWorK is the graded portion, but it is not sufficient by itself. WeBWorK assignments will become available before class time on the morning they are assigned. They are due at 11:59 PM on the due date, and answers will then be available. Between the WeBWorK and the recommended text problems, there is a lot of homework. You should do as much as possible; the WeBWorK portion is slightly less than a bare minimum. You are very welcome to come by my office with questions or take advantage of office hours.

Please note: Our class time is very limited; we are only together for three hours each week. That means that you **must** watch the lectures and read the text before class; I will assume that you have done so and pace the class accordingly. If you have not, you will struggle. You should expect to spend at least three hours outside of class for every hour we have in class. That includes time spent watching the lectures.

Note that the first two weeks of classes will be on Zoom and will be recorded. I will put recordings of those classes in our WISE site. These are not for distribution of any kind, but only for our use.

Written work: We will have frequent group activities, including mini-"projects" and Python worksheets. You will need to work with a group; this is one way we work toward Goal 5 above. We will have some in-class activities to help you get acquainted, and class will usually include some instruction, but some of this work will be done outside of class and become homework to turn in. See the course website for information on Python commands and syntax. I recommend that you also keep a page of Python notes in the back of your notebook for quick reference to the commands we use frequently. Python will be

available to you on all exams except the first **once you pass the gateway exam**. Uploads to WISE of your written work should be a single file.

I will assign reading each night in addition to the lecture; you will read the section for the next day. To help you focus on the material, I will post a few relevant questions on my website for the first few weeks. You should try to answer these for yourself as you read; you'll get a chance to answer them and others for me in class the next day. (I will not collect these.) Work all of the examples for yourself, and try to answer my questions and your own questions, as well. When you can't do so, **come see me!**

Exams: There are three midterm exams; the dates below **are subject to change** if necessary.

Exam I Wednesday, February 2 Exam II Friday, March 4

Exam III Wednesday, April 6

The final exam will be on Thursday, May 5, 8-11am. You may not make up any missed exam. If an emergency arises, **contact me prior to the exam.**

Please note: Written responses to all questions must be in complete sentences. I expect correct use of grammar, spelling, and punctuation; your grade will reflect this! I also expect your work to be neat.

Cheating: Cheating will not be tolerated. The minimum penalty for cheating is a 0 on the assignment and a formal notification to the dean. I encourage you to work together on your homework, but your final write-up **must** be your own. **NOTE:** It is your responsibility to avoid even the **appearance** of cheating. See the website below for the Willamette policy on cheating and plagiarism.

http://willamette.edu/cla/catalog/policies/plagiarism-cheating.php

Transition plan: The course is set up in such a way that if we need to move to distance learning, we can do so relatively seamlessly. WeBWorK, projects, and lectures are all accessible online. The final exam is already set up as a Zoom exam, and midterms can also become Zoom exams if necessary. Attendance at regular class meetings will continue to be expected, but via Zoom.

Classroom Comportment: We will all make mistakes, and these are an essential part of learning. The classroom environment must be tolerant and welcoming so that everyone feels free to contribute without fear of ridicule or harassment. Treat everyone with respect, and we can all learn from each other.

You are WELCOME! Unfortunately, circumstances dictate that I not hold office hours in person, but you are welcome at any of my Zoom hours. You are also welcome to schedule other times with me, and I will do my best to accommodate your schedule. are welcome to come by at other times as well. Make sure you come see me whenever you have a question.

General Policies

Academic Integrity

Students of Willamette University are members of a community that values excellence and integrity in every aspect of life. As such, we expect all community members to live up to the highest standards of personal, ethical, and moral conduct. Students are expected not to engage in any type of academic or intellectually dishonest practice and encouraged to display honesty, trust, fairness, respect, and responsibility in all they do. Plagiarism and cheating are especially offensive to the integrity of courses in which they occur and against the College community as a whole. These acts involve intellectual dishonesty, deception, and fraud, which inhibit the honest exchange of ideas. Plagiarism and cheating may be grounds for failure in the course and/or dismissal from the College. http://willamette.edu/cla/catalog/policies/plagiarism-cheating.php

Commitment to Positive Sexual Ethics

Willamette is a community committed to fostering safe, productive learning environments, and we value ethical sexual behaviors and standards. Title IX and our school policy prohibit discrimination on the basis of sex, which regards sexual misconduct — including discrimination, harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success, and we encourage affected students to talk to someone about their experiences and get the support they need. Please be aware that as a mandatory reporter I am required to report any instances you disclose to Willamette's Title IX Coordinator. If you would rather share information with a confidential employee who does not have this responsibility, please contact our confidential advocate at confidential-advocate@willamette.edu. Confidential support also can be found with SARAs and at the GRAC (503-851-4245); and at WUTalk - a 24-hour telephone crisis counseling support line (503-375-5353). If you are in immediate danger, please call campus safety at 503-370-6911.

DACA/Undocumented Student Advocate Willamette is committed to supporting our DACA/Undocumented students in a variety of ways. This year, Tori Ruiz is the contact person for all DACA/undocumented students; she can provide those students with a number of external and internal resources that are available. Her contact information is email:truiz@willamette.edu, Office: 3rd Floor UC, Phone: 503-370-6447.

Diversity and Disability Statement

Willamette University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal is to create a learning environment that is usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify me as soon as possible. Students with disabilities are also encouraged to contact the Accessible Education Services office in Smullin 155 at 503-370-6737 or Accessible-info@willamette.edu to discuss a range of options to removing barriers in the course, including accommodations.

Religious Practice

Willamette University recognizes the value of religious practice and strives to accommodate students' commitment to their religious traditions whenever possible. Please let me know within the first two weeks of the semester if a conflict between holy days or other religious practice and full participation in the course is anticipated. I will do my best to work with you to determine a reasonable accommodation.

SOAR Center Offerings: Food, Clothing, and School Materials

The Students Organizing for Access to Resources (SOAR) Center strives to create equitable access to food, professional clothing, commencement regalia, and scholarly resources for WU and Willamette Academy students. The SOAR Center is located on the Putnam University Center's third floor (in the former Women's Resource Center and across from the

Harrison Conference Room). The space houses the Bearcat Pantry, Clothing Share, and First-Generation Book Drive and is maintained by committed students and staff and faculty advisers.

Trans-Inclusive Classroom Space

I will gladly honor your request to address you by your affirmed name or gender pronoun. Please advise me of this at any point in the semester so that I may make appropriate changes to my records. If I accidentally use an incorrect gender pronoun when addressing you, please feel free to let me know, in whatever manner makes you comfortable, what pronouns you use so that I can make every effort to correct that error.

Land Acknowledgement

We are gathered on the land of the Kalapuya, who today are represented by the Confederated Tribes of the Grand Ronde and the Confederated Tribes of the Siletz Indians, whose relationship with this land continues to this day. We offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to study, learn, work, and be in community on this land. We acknowledge that our University's history, like many others, is fundamentally tied to the first colonial developments in the Willamette Valley. Finally, we respectfully acknowledge and honor past, present, and future Indigenous students of Willamette.

LinkedIn Learning

Willamette University tracks all log-in information for LinkedIn Learning. This information will be kept in-house and will be used for the purposes of developing LinkedIn Learning on campus. Faculty may keep track of your log-in for the purposes of evaluating your progress for class. Faculty using LinkedIn Learning in for class assignments will not share your log-in information with others as it is protected under FERPA.

Time Commitment

Willamette's Credit Hour Policy holds that for every hour of class time there is an expectation of 2-3 hours' work outside of class. Thus, for this class you should anticipate spending 6-9 hours outside of class engaged in course-related activities. Examples include reading course materials, preparing for discussion, and preparing and writing papers and exams.

Intellectual Property and Privacy

Class materials and discussions including recorded lectures are for the sole purpose of educating the students enrolled in the course. The release of such information (including but not limited to directly sharing, screen capturing, or recording content) is strictly prohibited, unless the instructor states otherwise. Doing so without the permission of the instructor will be considered an Honor Code violation and may also be a violation of other state and federal laws, such as the Copyright Act.