MATH 249
Spring 2020 Course Policy Sheet

Instructor:	Dr. Colin Starr	**Office Hours:**	MF 9-10, W 9:15-10:15
Office:	Ford 213		MWH 1-2
Office Phone:	(503) 370-6419		T 2-3
Home Phone:	(503) 585-4088		Others by appointment or chance
e-mail:	cstarr@willamette.edu	**My URL:**	http://www.willamette.edu/∼cstarr

Required Text: *Early Transcendentals Multivariable Calculus, Fifth Edition or later (I am using the 6th)*, 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. [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 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, among other things. 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!

Assessment: Your grade will be computed as follows:

WeBWorK:	300 points
Homework:	50 points
Worksheets and Projects:	150 points
Midterm Exams:	3@ 100 points each
Final Exam:	200 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	B	C	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, so 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.

Homework: I will select one or two WeBWorK problems each day for you to write up and hand in. WeBWorK only cares about whether the answer is correct. I, however, also care about how you get to the answer and how you communicate your work. At exam time, it will be important that you communicate your process to me clearly, and the homework is a low-stakes chance to practice that. Ideally, you will carefully write out your work for all of your WeBWorK problems whether you hand them in or not, so this should not be much additional burden.

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!**

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 be left in the dust. **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.

Worksheets: We will be using Python regularly on group 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 most Python work will be outside of class. 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**. We will also have one or two projects that are more substantial than the routine exercises described above. These will be group projects and require a written report.

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

Exam I	Wednesday, February 12
Exam II	Wednesday, March 11
Exam III	Monday, April 13

The final exam is Thursday, May 7, 8-11am in our classroom. 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.

Diversity 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 Matthews 103 at 503-370-6737 or Accessible-info@willamette.edu to discuss a range of options to removing barriers in the course, including accommodations.

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`

DACA/Undocumented Student Advocate: Willamette is committed to supporting our DACA/ Undocumented students in a variety of ways. This year, Professor Michael Niño is the contact person for all DACA/undocumented students. He can provide those students with a number of external and internal resources. His email address is mdnino@willamette.edu, his office is Smullin 213, and his phone number is 503-370-6643.

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 me 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.

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! My door is usually open. The office hours above are the times I will definitely be in my office (or nearby), but you are welcome to come by at other times as well. Make sure you come see me whenever you have a question. Plus, that's where I keep the Red Vines.