Texts We will be using *Calculus (Early Transcendentals)*, 3rd Edition, by J. Rogawski and C. Adams, as our textbook. We will cover material from Chapters 12–17, as described on the attached calendar.

You may also find useful the openly-licensed *Vector Calculus*, by Michael Corral, or other open textbooks listed on the course web page.

Course Web Page Off of `buzzard.ups.edu/courses.html` you can find the link to the course web page.

Office Hours My office is in Thompson 303. Making appointments or simple, **non-mathematical** questions can be handled via email — my address is `beezer@ups.edu`. Please do not use the "Email your Instructor" feature in WeBWorK. I rarely do not receive your email, and I read all of my email all of the time, usually very shortly after receiving it. Urgency of replying varies by the hour, day and nature of the message. Office Hours are 10:00–11:50 on Monday and Friday, 10:30–12:20 on Tuesday and Thursday. Office Hours are first-come, first-served, so I do not make appointments for these times, nor do you need to ask me if I will be present at these times. You may assume I will be there, unless I have announced otherwise in class or by email. You **may** make an appointment for other times, or just drop by my office to see if I am in. Office Hours are your opportunity to receive extra help or clarification on material from class, or to discuss any other aspect of the course.

Class Preparation You are expected to read and study the day's section of the textbook **in advance of the lecture**. The daily homework (described below) will contain routine questions on this material and these will be due prior to the lecture.

Computation I will demonstrate certain concepts in class using the open source software system Sage, and you will be encouraged to use this system as well. You can make a free account at CoCalc, `cocalc.com`. That said, examinations will be designed for exact computations and therefore inexact calculators will not be used during examinations.

Practice We will work problems in WeBWorK, an online system. These will be due at 6:00 AM on the mornings when we begin the next section. I will demonstrate the system in class and you can find a link on the course page. Your total percentage correct for each of three intervals (prior to each exam) will be equally weighted to form your score on this part of the course. These problems cannot be accepted late.

It is your responsibility to be certain that you are learning from the homework exercises. The best ways to do this are to work the problems diligently, start studying them early, and participate in classroom discussions. If at this point you are still unsure about a problem, then a visit to my office is in order, since you are obviously not prepared for the examination questions. Making a consistent effort outside of the classroom is the easiest way (only way?) to do well in this course.

Mathematics not only demands straight thinking, it grants the student the satisfaction of knowing when he [or she] is thinking straight.

—D. Jackson

Mathematics is not a spectator sport.

—Anonymous

I hear, I forget. I see, I remember. I do, I understand.

—Chinese Proverb

An education is not received. It is achieved.

—Anonymous

Examinations   There will be three 50-minute timed examinations. Planned dates are all listed on the **tentative** schedule. The comprehensive final examination will be given on Friday, December 14 at Noon. The final exam cannot be given at any other time, so be certain that you do not make any travel plans that conflict, and also be aware that I will allow you to work longer on the final exam than just the two-hour scheduled block of time.

Grades   Grades will be based on the following breakdown:

- Examinations: 50%

- WeBWorK Questions: 25%

- Final Examination: 25%

Attendance and improvement will be considered for borderline grades. Scores will be posted anonymously on the web at a link off the course page.

Academic Policy Reminders   Here are three reminders about important academic policies which are described thoroughly in the *Academic Handbook*. You can find a link to a PDF version at <www.pugetsound.edu/academichandbook>, or a printed copy may be requested from the Registrar's Office (basement of Jones Hall).

Registration for Courses of Instruction, Non-Attendance "Regular class attendance is expected of all students. Absence from class for any reason does not excuse the student from completing all course assignments and requirements."

Grade Information and Policy, Withdrawal Grades Withdrawal grades are often misunderstood. A Withdrawal grade (W) can only be given prior to the university deadline listed on our course schedule, and after that time (barring unusual circumstances), the appropriate grade is a Withdrawal Failing (WF), **even if your work has been of passing quality**. See the attached schedule for the last day to drop with an automatic 'W'.

Academic Integrity All of your graded work is expected to be ***entirely*** your own work, this includes the WeBWorK exercises. Anything to the contrary is a violation of the university's comprehensive policy on Academic Integrity (cheating and plagiarism). Discovered incidents will be handled strictly, in accordance with this policy. Penalties can include failing the course and range up to being expelled from the university.

Purpose One of the goals of your college education is to progress to becoming an independent scholar. To this end, you will be given a great deal of freedom in how you choose to learn calculus. Of course, with freedom comes responsibility.

Read the book before the lectures, work the exercises diligently, tidy up your class notes each evening, and ask questions. Arriving late to class, or having conversations with others during class, not only disrupts your peers, but tells me you are not serious about your education. Our class is small enough that I will notice when you are not here, and again this will be another way that you signal me about your commitment to the endeavor.

Calculus is one of the most amazing intellectual developments of the past several hundred years and is responsible in large part for many of the advances in science and engineering that we take for granted today. The study of multivariable calculus will solidify what you learned about single-variable calculus, while also introducing you to the process of generalizing broad areas of mathematics. Your commitment to this course will be rewarded, and your inattention will be a waste of your tuition and your time.

Conduct Daily attendance is required, expected, and overall a pretty good idea. Class will begin on-time, so be here, settled-in and ready to go. In other words, walking in the door at the exact time class is to begin is not considered arriving on-time. Repeated tardieness and absences will result in grade penalties, in accordance with university policies. Do not leave class during the lecture unless your continued presence would be a greater interuption — fill your water bottles, use the toilet, and so on, **in advance**. I do not care how much food or drink you bring to class, so long as it does not distract others or make me hungry. Please do not offer me sweets. Please keep phones in your pocket or bag, unless you are using them to read course material. In short, we are here to learn and discuss mathematics together. It is your responsibility to not distract your peers who are serious about their education or distract me as I endeavor to make the best use of the class time for you and your colleagues.

University Notices These are two notices the university administration requests we relay to you.

Student Accessibility and Accommodation "If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Peggy Perno, Director of the Office of Accessibility and Accommodation, 105 Howarth, 253.879.3395. She will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential."

I request that you give me at least two full working days to respond to any requests from this office.

Classroom Emergency Response Guidance Please review university emergency preparedness and response procedures posted at www.pugetsound.edu/emergency/. There

is a link on the university home page. Familiarize yourself with hall exit doors and the designated gathering area for your class and laboratory buildings.

If building evacuation becomes necessary (e.g. earthquake), meet your instructor at the designated gathering area so she/he can account for your presence. Then wait for further instructions. Do not return to the building or classroom until advised by a university emergency response representative.

If confronted by an act of violence, be prepared to make quick decisions to protect your safety. Flee the area by running away from the source of danger if you can safely do so. If this is not possible, shelter in place by securing classroom or lab doors and windows, closing blinds, and turning off room lights. Lie on the floor out of sight and away from windows and doors. Place cell phones or pagers on vibrate so that you can receive messages quietly. Wait for further instructions.

Tentative Daily Schedule

Monday	Tuesday	Thursday	Friday
Aug 27 Syllabus WeBWorK Section 11.1	Aug 28 Section 11.2	Aug 30 Section 11.3	Aug 31 Section 11.4
Sep 3 Labor Day	Sep 4 Section 12.1	Sep 6 Section 12.2	Sep 7 Section 12.3
Sep 10 Section 12.4 Drop w/out Record	Sep 11 Section 12.5	Sep 13 Section 12.6	Sep 14 Section 12.7
Sep 17 Review	Sep 18 Exam 1 Chapters 11, 12	Sep 20 Section 13.1	Sep 21 Section 13.2
Sep 24 Section 13.3	Sep 25 Section 13.4	Sep 27 Section 13.4 Section 13.5	Sep 28 Section 13.5
Oct 1 Section 14.1	Oct 2 Section 14.3	Oct 4 Section 14.2	Oct 5 OKC
Oct 8 Section 14.4	Oct 9 Section 14.5	Oct 11 Section 14.5	Oct 12 Section 14.6

Mid-Term

Tentative Daily Schedule

Monday	Tuesday	Thursday	Friday
Oct 15 Fall Break	Oct 16 Fall Break	Oct 18 Section 14.7	Oct 19 Section 14.7
Oct 22 Section 14.8	Oct 23 Review	Oct 25 Exam 2 Chapters 13, 14	Oct 26 Section 15.1
Oct 29 Section 15.2	Oct 30 Section 15.3	Nov 1 Section 15.3	Nov 2 Section 15.4 Drop w/Auto W
Nov 5 Section 15.5	Nov 6 Section 16.1	Nov 8 Section 16.2	Nov 9 Section 16.2 Section 16.3
Nov 12 Section 16.3	Nov 13 Section 16.4	Nov 15 Section 16.4 Section 16.5	Nov 16 Section 16.5
Nov 19 Section 17.1	Nov 20 Section 17.1	Nov 22 Thanksgiving	Nov 23 Thanksgiving
Nov 26 Section 17.2	Nov 27 Section 17.2	Nov 29 Section 17.3	Nov 30 Section 17.3
Dec 3 Review	Dec 4 Exam 3 Chapters 15, 16, 17	Dec 6 Reading Period	Dec 7 Reading Period

Final Examination: Friday, December 14 at Noon