1. COURSE INFO: Math 244


At the end of this course, you will understand how differential equations are used to model some particular physical phenomena. You will understand what it means to solve a differential equation using algebraic methods and graphical methods, and what it means to analyze the behavior of said solutions. We will also discuss the underpinning theory that tells us when and over what regions the solutions will exist.

3. Calculators: If calculators are allowed on an examination (to be announced prior to each), you may use graphical, programmable calculators, but you may NOT use calculators that can perform symbolic manipulation. You only need a cheap scientific calculator that can compute trigonometric functions.


   • Exams. There will be three exams (Wed, Feb 15, Fri, Mar 9 (the Friday before Spring Break) and Fri, Apr 20. The exam dates will not change, so make your plans accordingly. The last exam will be the Final Exam, which we will take at the published time. Exams will make up 80% of the overall class grade (each is 20% of the overall grade).

   • Quizzes will make up 15% of the overall grade. There are 10 total, and you may drop your two lowest scores- You are allowed these drops in case you need to miss class, so don’t use these drops unless you need them. NOTE: Make-up quizzes are allowed ONLY when your absence is college authorized (oversleeping for example, is not college authorized).

   • Involvement: Attendance and participation are essential for learning. I am reserving 5% of your course grade for this portion- If you attend class on time and try your best to participate, then you will not need to worry about the 5%.
• Homework: The homework problems form the basis for the weekly quiz. It is expected that you will spend some time thinking about and completing the homework problems! Do not procrastinate—There is time during the beginning of each class meeting to discuss the previous day’s homework assignment—This is an excellent time to ask questions!

GRADING: Grading is done on a standard scale:

- $A = 92 - 100$
- $A- = 90 - 91$
- $B+ = 88 - 89$
- $B = 82 - 87$
- $B- = 80 - 81$
- $C+ = 78 - 79$
- $C = 72 - 78$
- $C- = 70 - 71$
- $D = 60 - 69$
- $F = 59$ and below

5. Help! I encourage you to come see me. If you can’t make it during office hours, either email me if you have short questions, or make an appointment.

6. Academic Honesty. Academic standards will be strictly adhered to as outlined in the College’s policies. This means that cheating will not be tolerated. Looking at another student’s exam or quiz (whether or not you mean to copy answers) while taking it will be considered cheating. Please don’t test this policy!

7. If you are a student with a documented disability who will need accommodations in this course, please meet with the Academic Resource Center for assistance in developing a plan to address your academic needs. Additionally, I will be relying on you to contact me in advance of each session where you will need accommodations. Please do this early enough so that reservations can be made, where appropriate.

8. Please be courteous to your fellow students:

- Class begins exactly on the hour, and the first 5-10 minutes are the most important, so please be on time (also see the 5% of your grade in the previous section).
- Please silence your cell phones, and store them during quizzes and examinations.
- No laptop computers, ipads or cell phones during class, please! They tend to be very distracting!

9. Be sure to check your Whitman email regularly. I will occasionally send out important information about the class via email.

If we knew all the Laws of Nature, could we verify our past and predict our future exactly, through all time? This was the driving force behind the creation of differential equations—As a means of capturing the Laws. Where are we in this drive to understand Nature? Hopefully, we will come closer to answering this question at the end of the semester.