Instructor Information

Austin Christian Email: austin.christian@pepperdine.edu
Office: RAC 177 Office Hours: Mon-Thurs 12:30pm - 1:30pm and by request.

Course Information

Course website: www.math.ucla.edu/~archristian/teaching/141-sum17
Meeting Time: Mon-Thurs 8:30 am - 12:00 noon, RAC 175
Prerequisites: Math 140 or the equivalent with a grade of C- or better.
Materials: Pearson Custom Mathematics, Math 141. ISBN 9781269283748. It should be noted that because this is a custom textbook, new copies are available only in the Pepperdine bookstore.
Schedule: A rough course schedule will be maintained at www.math.ucla.edu/~archristian/teaching/141-sum17/schedule.
Departmental Student Learning Outcomes: Upon completion of this course, students should be able to do the following:

- Find first and second order partial derivatives of a given function using differentiation rules.
- Maximize or minimize a function of several variables, including using Lagrange’s method for one constraint.
- Use matrix methods to solve systems of linear equations, and to consider business applications of these methods.
- Use basic rules of counting such as the addition, complement, and multiplication rules, and understand permutations and combinations.
- Compute and interpret probabilities for a wide variety of discrete random processes.
- Use tree diagrams and Bayes’ theorem to compute, interpret, and apply conditional probabilities.
- Find the probability distribution for discrete random variables, and compute and interpret the mean and standard deviation.

General Education Learning Outcome: This course fulfills the General Education requirement in Quantitative Reasoning and aligns with the following program learning outcome: “Students reason and solve quantitative problems and explain mathematical concepts and data.”

Evaluation

Your grade in this course will be determined by your performance on 2 midterm exams, homework, and 1 final exam. Your grade will be computed according to

\[ \text{0.1(homework grade) + 0.25(midterm 1 grade) + 0.25(midterm 2 grade) + 0.4(final exam grade)} \] (1)

We will have seven homework assignments, from which your five highest scores will be used to compute your homework grade for the term. On each homework assignment, some problems will be graded in detail while others will be graded for completion. The final exam will be cumulative.

The assignment of letter grades in this course will follow the following scale, and scores will not be rounded:

<table>
<thead>
<tr>
<th>Min Score</th>
<th>Letter Grade</th>
<th>Min Score</th>
<th>Letter Grade</th>
<th>Min Score</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93%</td>
<td>A</td>
<td>80%</td>
<td>B-</td>
<td>67%</td>
<td>D+</td>
</tr>
<tr>
<td>90%</td>
<td>A-</td>
<td>77%</td>
<td>C+</td>
<td>63%</td>
<td>D</td>
</tr>
<tr>
<td>87%</td>
<td>B+</td>
<td>73%</td>
<td>C</td>
<td>60%</td>
<td>D-</td>
</tr>
<tr>
<td>83%</td>
<td>B</td>
<td>70%</td>
<td>C-</td>
<td>0</td>
<td>F</td>
</tr>
</tbody>
</table>
To be clear, your final grade — as computed by (1) — must achieve a minimum score *without rounding* in order to receive the corresponding letter grade.

There will be exactly one extra credit opportunity available to you in this course. During each class meeting we will work 5-8 problems in groups; you may earn 2 additional points on your final grade by submitting a well-organized notebook containing carefully-written solutions to *all* of the group work problems from the term. Exact parameters and the due date for this notebook will be announced in class.

**Instructor’s Policies**

**Make-Up Exams:** Make-up exams will not typically be given; the only exceptions are those mandated by the University and extenuating circumstances about which I have been previously informed and which I agree merit a make-up exam. Unless excused, you will receive a grade of 0 for any exams taken during classes for which you are not present.

**Academic Honesty:** Any and all forms of academic dishonesty will be prosecuted to the fullest extent allowed by the University. Collaboration on homework assignments is allowed and encouraged, but *the work you submit must be written by you, in your own words.*

**Electronics/Calculators:** You are encouraged to bring laptops, tablets, or other devices for taking notes, accessing online course content, and other uses conducive to the class's goals. However, please refrain from using these devices for other purposes, as this will only serve to distract me and your classmates. Some of the exams this term will allow calculators; exact parameters on acceptable calculators will be announced in class as necessary, but it will always be the case that internet-capable devices will not be allowed as calculators on exams.

**University Policies**

Important university policies regarding disability services and other academic matters may be found at [http://www.pepperdine.edu/about/administration/provost/policies/](http://www.pepperdine.edu/about/administration/provost/policies/). For the University's policies on academic integrity, see [http://seaver.pepperdine.edu/academics/academic-support/integrity/](http://seaver.pepperdine.edu/academics/academic-support/integrity/).

**Note:** It is important to me that you not become overwhelmed in this class. Mathematics can be very challenging and is often frustrating, but you shouldn’t feel that succeeding in mathematics is impossible. If you feel that the coursework is beginning to slip away from you, please let me know *before* you become completely lost. I expect you invest a lot of time and energy in this course, but I am committed to helping you learn and enjoy the material and will do my best to help you succeed.

**Disclaimer:** This syllabus represents my expectations for the content and timing of this course as well as possible. However, because these expectations may change, I reserve the right to modify course policies as the need arises. If this happens, students will be notified in class.