Section number: MATH 1314-08   CRN: 20076
Prerequisites: Credit for or out of Math 1310. Students with prior credit for Math 1431 (Calculus) will not be permitted to enroll in or receive credit for Math 1314.

Instructor: Dr. Matthew Caputo  
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Website: http://math.uh.edu/~caputo

Textbook: Available in electronic form (PDF) through CASA for all enrolled students.

The information contained in this class outline is an abbreviated description of the course. Additional important information is contained in the departmental course policies statement in your CASA account. You are responsible for knowing all of this information.

The information contained in this class syllabus is subject to change without notice.

**Learning Objectives**

Upon successful completion of this course students will be able to use Geogebra for curve sketching and graphical analysis. Differentiation and integrations of elementary functions will be expected along with interpretation of the numerical results. Students will be able to handle certain topics in functions of several variables and will be competent in handling application problems in a business setting.

**Assessments/Grading Scheme:**

Test 1 (prerequisite): 10%  
Three Regular Exams: 45% (15% each)  
Final Exam: 20%  
Online Quizzes: 10%  
Daily Classroom Quizzes (Poppers): 5%  
Homework: 10%  
Total: 100%

**Note:** No make-up tests. The percentage grade on the final exam (raw score) can be used to replace your lowest test score.

**POPPERS**

- For each lecture starting on the third week of classes you will be asked a series of problems
that will have to do with the recent lecture.

- This requires buying a poppers scantron package from the bookstore. Make sure that the package is for your section.
- You are required to fill in your id number, popper number and blacken the correct circles. Make sure that your id number and popper number are correct before turning in the popper at the end of the lecture. If these are not filled out correctly or if the darken circles are too light you will not get credit for that day’s lecture even if you attended.
- The total number of questions for the course will be counted, 85% of the total number of questions will be the 100%. For example, if there are 5 questions each class for 24 classes, which is 120 questions. Your grade will be calculated out of 120(.85) = 102 points.

ONLINE QUIZZES

- There is a Course Policies Quiz due at the very beginning of the semester which covers the information on this Syllabus and Course Policies on your instructor’s website. Everyone must score a 100% on it to be able to see any other quizzes, practice tests and Test 1 on CASA.
- The quizzes are located in the CASA website under the “Online Assignments” tab.
- The quizzes will close on the due dates indicated on CASA at 11:59 pm.
- Once a quiz closes, it will not reopen.
- One of the lowest quizzes will be dropped.

CASA HAS A FINITE NUMBER OF LOGGINS. DO NOT WAIT UNTIL THE EVENING OF THE DUE DATE TO COMPLETE THE QUIZ, AS YOU MAY NOT BE ABLE TO LOG IN, COMPLETE THE QUIZ OR HAVE OTHER TECHNICAL ISSUES.

HOMEWORK

- Homework will be submitted online via your CASA account. See the link to the “Assigned Homework” page in your CASA account on how to submit homework.
- An equivalent of two homework scores will be dropped at the end of the semester.

LATE ASSIGNMENT, MAKE-UP AND INCOMPLETE POLICIES

- This course is a cumulative course. You as a student need to keep up with the course. Thus late work or make-ups will not be accepted. Hence, the following is calculated for the final grade:
  - An equivalent of two homework assignments will be dropped.
  - One of the lowest quizzes is dropped.
  - 85% of the total number of popper questions will be the 100%.
  - The final exam score will replace the lowest exam score out of four, only if it is higher than it.
• Incomplete policy: A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject **successfully** until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work.

**EXAM INFORMATION**

<table>
<thead>
<tr>
<th>Test</th>
<th>Material Covered</th>
<th>Dates</th>
<th>Location</th>
<th>Attempts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>Prerequisite + Lesson 1</td>
<td>8/23-9/3</td>
<td>Online via your CASA Account</td>
<td>Two</td>
</tr>
<tr>
<td>Test 2</td>
<td>Lessons 2 – 8</td>
<td>9/29-10/2</td>
<td>@CASA Testing; Reservation Required</td>
<td>One</td>
</tr>
<tr>
<td>Test 3</td>
<td>Lesson 9 – 15</td>
<td>10/27-10/30</td>
<td>@CASA Testing; Reservation Required</td>
<td>One</td>
</tr>
<tr>
<td>Test 4</td>
<td>Lessons 16-24</td>
<td>11/29-12/2</td>
<td>@CASA Testing; Reservation Required</td>
<td>One</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Comprehensive</td>
<td>12/9-12/11</td>
<td>@CASA Testing; Reservation Required</td>
<td>One</td>
</tr>
</tbody>
</table>

• For the tests given at CASA Testing, see the “Proctored Exams” tab in your CASA account for details and how to make a reservation.
• The exams given in CASA will consist of multiple choice questions.
• The scheduler will be available approximately 2 weeks prior to the start of the exam cycle. Sign up for a slot asap.

**PRACTICE TESTS**

• Each exam has a practice exam. Ten percent of your practice test score will be added to your exam score as bonus.
• Practice exams are taken via your CASA account and can be found under the “Online Assignments” tab.
• Each practice exam covers the material that each respective exam covers.
• Practice exams will close on the due dates indicated on CASA at 11:59 pm. The open dates are indicated on CASA as well.
• You have 20 attempts at each practice exam.
• There is a 120 minute time limit for each practice exam.

**DISCUSSION BOARD**

• There is a class discussion board located in your CASA account at [http://www.casa.uh.edu](http://www.casa.uh.edu) on the Welcome Page. It is to receive or give help related to course content.
• You may use MathJax to type equations. Here is a list of some commands.
REQUIRED READING

- See your CASA account link for this course.
- The textbook and additional help materials will be made available by logging into CourseWare at http://www.casa.uh.edu. The first portion of these materials are freely available for the first two weeks of class. All students must purchase a Course Access Code and enter it on CourseWare by the deadline indicated in your CASA account to continue accessing the course learning materials. A Course Access Code must be purchased from the University Bookstore.

COMPUTER REQUIREMENT

- Geogebra, a free program to everyone, and will be required to do a lot of the problems in this course. It may be downloaded at geogebra.org.
- This program will be available to you for your exams at CASA Testing.

EXEMPTION FROM FINAL EXAM

- If your letter grade calculated by the Letter Grade Calculator in your CASA account is a B- or better on Sunday, 12/3 and you have completed the teacher evaluation, you will be able to opt out of the Final Exam. Otherwise you will be required to take the Final Exam, which also requires a CASA reservation. If you choose to exempt, you may not change your mind after the deadline has passed.
- Instructions on how to opt out will be provided to you in class and via email from your instructor towards the end of the semester.

ACADEMIC ADJUSTMENTS/AUXILIARY AIDS

The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please visit The Center for Students with DisABILITIES (CSD) website at http://www.uh.edu/csd/ for more information.

ACCOMMODATIONS FORMS

Students seeking academic adjustments/auxiliary aids must, in a timely manner (usually at the beginning of the semester), provide their instructor with a current Student Accommodation Form (SAF) (http://www.uh.edu/csd/services/online_accommodation_form.html) from the CSD office before an approved accommodation can be implemented.
Details of this policy, and the corresponding responsibilities of the student are outlined in The Student Academic Adjustments/Auxiliary Aids Policy (01.D.09) document under [STEP 4: Student Submission (5.4.1 & 5.4.2), Page 6]. For more information please visit the Center for Students with Disabilities FAQs page.

Additionally, if a student is requesting a (CSD approved) testing accommodation, then the student will also complete a Request for Individualized Testing Accommodations (RITA) paper form to arrange for tests to be administered at the CSD office. CSD suggests that the student meet with their instructor during office hours and/or make an appointment to complete the RITA form to ensure confidentiality.

*Note: RITA forms must be completed at least 48 hours in advance of the original test date. Please consult your counselor (http://www.uh.edu/csd/about/staff.html) ahead of time to ensure that your tests are scheduled in a timely manner. Please keep in mind that if you run over the agreed upon time limit for your exam, you will be penalized in proportion to the amount of extra time taken.

**UH CAPS STATEMENT**

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

**Math 1314 – Topics List**

Finding and Using Regression Models
Finding Limits and Derivatives
  Finding Limits
  Continuity
  Average Rate of Change
  Limit Definition of the Derivative
  Finding Derivatives Using Rules and Using Technology

Applications of Derivatives
  Rate of Change and Average Rate of Change Problems
  Break-Even Analysis and Market Equilibrium
  Marginal Analysis
Average Cost and Marginal Average Cost Functions
Elasticity of Demand
Exponential Models
Analyzing Polynomial Functions
Analyzing Other Types of Functions
Optimization
Integration
Riemann Sums (by hand)
Riemann Sums, Upper Sums and Lower Sums (using technology)
Indefinite Integrals
Definite Integrals (by hand and using technology)

Applications of Integration
Basic Applications
Average Value of a Function
Area Between Two Curves
Producers’ Surplus and Consumers’ Surplus
Probability
Functions of Several Variables
Evaluating Functions of Several Variables
Finding Domain of a Function of Several Variables
Finding Partial Derivatives
Optimizing Functions of Two Variables