Instructor: Moses Sosa, 617 PGH, mmsosa@math.uh.edu.

Office Hours: TBD or by appointment

Course Homepage: http://www.math.uh.edu/~mmsosa/

Course Learning Materials: The textbook, online quizzes, EMCF assignments, and additional help materials will be made available by logging into CourseWare at http://www.casa.uh.edu. These 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 first day of the third week of class to continue accessing the course learning materials. A Course Access Code can be purchased for about $55 from the University Bookstore.

The material covered in the course is listed below:

Chapter 1 Limits and Continuity
1.1 A Review of Functions
1.2 An Intuitive Introduction to Limits
1.3 Definition of Limit and Arithmetic Rules
1.4 Continuity
1.5 The Intermediate Value Theorem
1.6 Limits of Trigonometric Functions and the Pinching Theorem

Chapter 2 Differentiation
2.1 The Definition of the Derivative
2.2 Derivatives of Polynomials and Trigonometric Functions
2.3 Differentiation Rules
2.4 Implicit Differentiation

Chapter 3 Applications of the Derivative
3.1 Related Rates
3.2 The Mean-Value Theorem
3.3 Intervals of Increase and Decrease
3.4 Extreme Values
3.5 Concavity and Points of Inflection
3.6 Curve Sketching

Chapter 4 The Transcendental Functions
4.1 Inverse Functions
4.2 The Exponential Function
4.3 Natural Logarithm Function
Daily Poppers: Daily grades will be given in lecture beginning the first day of the third week of class. You need to purchase a course packet of Popper Forms for Math 1431 with your section number from the BOOK STORE. You must bring one of these forms to class every day beginning week 3. No other form will be accepted. Questions will be asked in lecture at random times. You will mark your answers on your form and drop the form in a box at the end of class. Your forms will not be returned. If you are caught filling out multiple popper forms, you will lose attendance credit for that day.

Lab Quizzes: 5% of your average will come from lab quizzes (given on during recitation). If you are in a face to face recitation, you will complete the lab quizzes on Tuesday and Thursday. If you are in an online recitation, you will answer online with EMCF. "EMCF" stands for "Electronic Multiple Choice Form" and are answered on CourseWare using the EMCF tab. All of these grades are out of 10 points each. See the CourseWare handout for more information.

Homework: 5% of your average will come from homework. Homework is submitted online through CourseWare. Instructions are given in the CourseWare handout located on the class webpage. No late homework is accepted. Homework is graded on accuracy. All of these grades are out of 10 points each.

Online Quizzes: There will be 2-3 online quizzes given each week. You can attempt these quizzes up to 20 times, and the highest grade will be used for your score. You can access the quizzes by logging into CourseWare at http://www.casa.uh.edu. Quizzes will not reopen once they have closed.

Exams: All sections of Math 1431 take common exams. Four regular exams will be given during the semester. All four exams will be given in CASA (note the test location when you
You can access the scheduler for these exams by logging into CourseWare at 
\url{http://www.casa.uh.edu}. The exams given in CASA will consist of both multiple choice and written questions. The multiple choice questions will be machine graded. The written questions will be graded by the instructors and teaching assistants for all sections of Math 1431, and they will be returned in lab. The scheduler will be available 2 weeks prior to the start of the exam cycle. There are no make-ups for missed exams. Your final exam grade will replace your lowest test grade.

**Final Exam:** A comprehensive final exam will be given in CASA. You can access the scheduler for this exam by logging into CourseWare at \url{http://www.casa.uh.edu}. The final exam is MANDATORY for this class.

**Grades:**

- Test 1 - 5%
- Tests 2, 3, 4 - 15% each
- Final exam - 25%
- Lab Quizzes - 5%
- Homework - 5%
- Online Quizzes - 10%
- In-class Poppers and Attendance - 5%

**Note:** The percentage grade on the final exam can be used to replace your lowest test score.

- 90% and above - A
- at least 80% and below 90% - B
- at least 70% and below 80% - C
- at least 60% and below 70% - D
- below 60% - F

**Attendance is Mandatory!!** Attendance will be taken in lab, and the daily poppers will be used to determine your attendance in lecture. I will allow you a total of 3 unexcused absences from lecture and lab (total). Documented University of Houston excused absences will be permitted.

**Whenever possible, and in accordance with 504/ADA guidelines, we will attempt to provide reasonable academic accommodations to students who request and require them.**