Math 1431  
Section 14839  
M and TH 4:00 – 6:00 pm Online  
Lab Sessions 2 per week – dates and times to follow

Instructor: Susan Wheeler, 648 PGH, swheeler@math.uh.edu.

Office Hours: TBD and by appointment

Course Homepage: http://www.math.uh.edu/~swheeler/math1431.html

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. The first portion of these materials is 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 $47.35 from the University Bookstore. You will have access to the text electronically on CourseWare once you enter your Course Access Code.

****Note-If you are a distance education student, you need to purchase your access code ASAP since it will arrive by regular mail.

In Class Poppers: Daily grades will be given in lecture beginning the first day of class. Questions will be asked in lecture at random times. You need to submit your answers in your CASA Course Account by the Saturday at 11:59 PM of the week of the lecture. The only way you will be able to see these questions is by attending the lecture or listening to the lecture video. There will be 5 questions on Monday and 5 on Thursday.

EMCFs: "EMCF" HW stands for "Electronic Multiple Choice Form." EMCF assignments will be downloaded and submitted online using the EMCF link/section on CourseWare. EMCF assignments will also be posted on the course calendar on the course webpage. The frequency of these assignments is roughly one per week, but may vary at different points in the semester.

Written Homework: Homework will be submitted in CASA. A list of problems will be posted on the course webpage along with instructions. You must print off this file and provide your work and answers on the sheets, and submit them through CASA as a pdf file.

In general homework assignments (EMCF and written) will be due by 11:59 PM on Mondays.

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.

Tests: All sections of Math 1431 take common tests. Four midterm tests will be given during the semester. The first test is an online test that will be available by the first day of class at
The other three tests will be given in CASA (located on the second floor of Garrison). You can access the scheduler for these exams by logging into CourseWare at 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.

Each student is responsible for scheduling his or her exams and for taking his or her exams at the appointed time. There are no make-up exams in this course. A missed exam will result in a zero. The Final exam can replace ONE missed test. No calculators are allowed during exams.

Remote students, those that live more than 100 miles from UH campus, need to email their instructor regarding remote administration of exams 2, 3, 4 and the final. It will be the student’s responsibility to find a university or testing site that will administer the exams. More information can be found at http://www.uh.edu/distance/student-resources/proctoring/.

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

**Major Assignments/Exam**

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

**Note:** The percentage grade on the final exam (without any extra credit) can be used to replace your lowest test score for ONE test only.

- 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:** Attendance will be taken in lab and lecture by means of daily popper completion. Attendance may occur by either attending live lectures or by means of listening to video recordings.

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

**Chapter 5  Further Applications of the Derivative**
5.1  Optimization
5.2  Differentials
5.3  L’Hospital’s Rule

**Chapter 6  Integration**
6.1  The Definite Integral
6.2  The Fundamental Theorem of Calculus
6.3  Basic Integration Rules
6.4  Integration by Substitution