Math 1450, Accelerated Calculus

Course times: Lecture times are Tuesday and Thursday 2:30pm-4:00pm, L 212S.

Office hours: Suggested office hours are 9.00am -10.00am, Tuesday and Thursday or by appointment. These times are to be discussed at our first meeting on Tuesday to see if suitable.

Recitation Class. The recitation classes are held in L 212S on Mondays, Wednesdays and Fridays from 10 am to 11am and from 11am to noon. You should be assigned to just one recitation. Attendance is compulsory. The Teaching Assistant in charge of the 11am to noon recitation class is Meagan Woodford, Room 343 PGH, email: meagan@math.uh.edu. The Teaching Assistant assigned to the 10am to 11am recitation class is Shang-Huan Chiu, Room 343 PGH, email:schiu@math.uh.edu.

Contact Details: Dr Matthew Nicol , Office PGH Room 651A, Extn: 6181.
Email: nicol@math.uh.edu

Course Description: Here is a rough outline of the course syllabus, subject to change depending on time constraints etc.

- Differentiation and applications.
- Linear approximation and the chain rule; related rates.
- Integration, fundamental theorem of calculus.
- Concept of work and force; applications in physics, economics and biology.
- Area and volume by integration; techniques of integration.
- Polar coordinates and complex numbers. Conic sections.
- Newton's laws of motion.
- Mean value theorem and Taylor's theorem with remainder.
- Sequences and series.
- Introduction to differential equations and applications.

Recommended Texts: The textbook is "Calculus-early transcendentals" by James Stewart 6th edition but lecture notes will also cover other material. We will (loosely) cover Chapters 3, 4, 5, 6, 7 and 11. This book is available on Amazon for example.

Please see reverse side

Assessment: Your final grade will be based on:

(85) 25 points for each of two midterms and 35 points for a final exam scheduled provisionally on Thursday December 10 from 2-5pm.

(15) 15 points for homeworks.

A random selection of homework problems will be graded from among those assigned.