Instructor: Dr. Roy Joe Harris  
Department: Mathematics & Statistics  
Email: rharris@sfasu.edu  
Phone: 936-468-1486  
Office: 346 Math/Nursing  
Office Hours: Monday 9-11; Tuesday 9:30-12:30  
Class meeting time and place: TTh 8-9:15, Mathematics 203  
Lab: W 2:30-3:45 Mathematics 358  
August 28—December 15.


Course Requirements: There will be three in-class exams and a comprehensive final exam. Each exam date will be announced at least one week in advance. If a student must miss an exam due to an excused absence, special arrangements should be made in advance. Student ID with photo may be required for all exams.

Course Calendar:  
Class begins on August 28 and ends on December 15. The final exam will be during the week of December 11-15.

Course description:  
Limits, continuity, differential calculus of algebraic and transcendental functions with applications, basic antidifferentiation with substitution, definite integrals.

Department syllabus:  
Please read the official Department of Mathematics & Statistics syllabus for MTH 233 at http://www2.sfasu.edu/math/docs/syllabi/MTH233Syllabus.pdf.

Grading Policy:  
The homework/quiz average will be worth 10% of the student’s final average, the average of the first three exams will constitute 50% of the student's final average, the lab grade will be worth 12% of the student's final average and the final exam will be worth 25% of the student's final average. The remaining 3% of the final grade is assigned by Dr. Harris. Dr. Harris reserves the right to allow the final exam score to replace a lower exam score. A final average ranging from 90 to 100 will be an A in the course, 80 to 89 a B, 70 to 79 a C, 60 to 69 a D, and below a 60 will be an F.

Attendance Policy:  
Students who have 3 or more unexcused absences may have points deducted from their final average.
Course outline:

- **Limits and continuity**
  - Limits at a point
    - Formal definition
    - Existence
    - Infinite limits/vertical asymptotes
  - Limits to infinity/horizontal asymptotes
  - Algebraic evaluation
    - Basic rules/techniques
    - Sandwich Theorem
  - Continuity/Intermediate Value Theorem

- **Derivatives and Antiderivatives**
  - Definition of derivative/interpretations
  - Derivative rules
    - Basic rules
    - Transcendental rules
    - Product and Quotient rules
    - Chain rule/implicit differentiation
  - Antiderivative rules
    - Basic rules
    - Transcendental rules
    - Substitution

- **Applications of derivatives**
  - Related rates
  - Position, velocity, and acceleration
  - Extreme values/optimization
  - Mean Value Theorem
  - Curve sketching
  - Newton's method
  - L'Hopital's Rule

- **Definite integration**
  - Definition of the definite integral/interpretation (area, etc.)
  - Riemann sums
  - The Fundamental Theorem of Calculus
  - Definite integrals with substitution

**Academic Integrity (A-9.1)**

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp)

**Witheld Grades Semester Grades Policy (A-54)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).