Instructor: Prof. Amin Boumenir
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Office Hours: Tuesday and Thursday 2:00pm-3:30pm, & by appointment.
Prerequisites: Math 1113 or Math 1111 & Math 1112 with C or better
Credit Hours: 4
Class Time and Place: T&R 11am-12:15pm, Boyd 301
Recitation: Friday 11:05am-11:50am Boyd 305 by Ms. Fangzhou Liu
Course Description: This is the first course in the Calculus sequence. Topics include limits, Derivatives and their applications to problems in engineering. The last chapter is on integration. We cover everything in chapters [2, 5].
Text: Stewart, Single Variable Calculus, Early Transcendentals, 7th ed.
Quizzes: ON assigned homework on Fridays 10%.
Tests: There will be three tests. Each will be worth 20%, Final 30% & Quizzes = 10%
Test 1: Tuesday September 17, 2019
Test 2: Tuesday October 15, 2019
Test 3: Tuesday November 19, 2019
Final exam: Tuesday 10 December 11-1pm
Grading Scale:
A= 90-100%, B= 80-89%; C= 70-79%; D= 60-69%; F= 0-59%
Learning Outcomes: The student will be able:
- To compute limits and derivatives of functions
- To apply calculus to optimization, and curve sketching problems
- To understand the definition of the indefinite and definite integrals
- To apply the Fundamental Theorem of Calculus,
- To compute integrals using rules and also by substitution.
Attendance Policy: If you miss a class, you are responsible for the missing material.
If you miss five classes or more you will get a WF in this course.
Grading: Your final grade will be determined as follows:
Tests are 20% x 3 + Quizzes 10% + Final Exam 30%.
ACADEMIC DISHONESTY
Academic dishonesty is NOT tolerated. It will result in failure on assignment(s) as well as possible disciplinary sanction(s) as stipulated by university rules. The University of West Georgia Student Conduct Code defines academic dishonesty as cheating, fabrication, plagiarism, and facilitating or allowing academic dishonesty in any academic exercise.
Cheating: Using or attempting to use unauthorized materials, information or study aids
Students, please carefully review the following information at this link
http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf
Topics include: (pace: 2 sections a week 2x16w=32)

2 Know your limits
2.0 Review of Precalculus
2.2 The Limit of a Function 87
2.3 Calculating Limits Using the Limit Laws 99
2.5 Continuity 118
2.6 Limits at Infinity; Horizontal Asymptotes 130
2.7 Derivatives and Rates of Change 143
2.8 The Derivative as a Function 154

3 Why do we need Rules in Differentiation
3.1 Derivatives of Polynomials and Exponential Functions 174
3.2 The Product and Quotient Rules 184
3.3 Derivatives of Trigonometric Functions 191
3.4 The Chain Rule massacre 198
3.5 Implicit Differentiation 209
3.6 Derivatives of Logarithmic Functions 218
3.7 Rates of Change in the Natural and Social Sciences 224
3.8 Exponential Growth and Decay 237
3.9 Related Rates 244
3.10 Linear Approximations and Differentials 250

4 Differentiation in Action 273
4.1 Maximum and Minimum Values 274
4.2 The Mean Value Theorem 284
4.3 How Derivatives Affect the Shape of a Graph 290
4.4 Indeterminate Forms and l’Hospital’s Rule 301
4.5 Summary of Curve Sketching 310
4.6 Graphing with Calculus and Calculators 318
4.7 Optimization Problems 325
4.8 Newton’s Method 338
4.9 Antiderivatives 344

5. Integrals...Sum them up!
5.1 Areas and Distances 360
5.2 The Definite Integral 371
5.3 The Fundamental Theorem of Calculus 386
5.4 Indefinite Integrals and the Net Change Theorem 397
5.5 The Substitution Rule 407

Be smart. Do not let yourself fall behind till it is too late.
Seek help Early and Keep ahead of the class.
Budget your time smartly.
If it is not clear, do not be shy, ask!!
Do as many problems as you can... know that Tests are by the book!
MTC is downstairs and I am in my office (hours)
the only way to learn calculus is by solving problems.

Good LUCK.