UWG: MATH 1413-Online: Survey of Calculus   Fall 2017

Instructor: Dr. Amin Boumenir
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Online Office Hours: Monday, Wednesday, and Thursday 4pm-6pm.
Credit Hours: 3 hours
Class Type: This class is 95% or more online. Final exam is Proctored!
Prerequisites: MATH 1111 or MATH 1113
Course Description: This course will provide a survey of the differential and integral calculus of polynomial, rational, exponential, and logarithmic functions with an emphasis on applications to problems from business, economics and life sciences.
Website: MyMathLab is run by Pearson.com
https://www.pearsonmylabandmastering.com/northamerica/mymathlab/
Course ID: boumenir74235
You have two weeks free access to buy the access code for the course, which has the e-book and online homework, and much more.

Topics: The following sections of the textbook will be covered:
Review of Algebra….. Diagnostic Quiz… (1st week)
1.1 Limits: A Numerical and Graphical Approach
1.2 Algebraic Limits and Continuity
1.3 Average Rates of Change
1.4 Differentiation Using Limits of Difference Quotients
1.5 Differentiation Techniques: The Power and Sum-Difference Rules
1.6 Differentiation Techniques: The Product and Quotient Rules
1.7 The Chain Rule
1.8 Higher-Order Derivatives
Test#1 on Chapter 1.

2.1 Using First Derivative to Find Maximum and Minimum Values and Sketch Graphs
2.2 Using Second Derivative to Find Maximum and Minimum Values and Sketch Graphs
2.4 Using Derivatives to Find Absolute Maximum and Minimum Values
2.5 Maximum-Minimum Problems: Business and Economic Applications
2.6 Marginals and Differentials
2.7 Implicit Differentiation and Related Rates
Test#2 on Chapter 2.

3.1 Exponential Functions
3.2 Logarithmic Functions
3.3 Applications: The Uninhibited Growth Model dp/dt=kP
3.4 Applications: Decay
3.6 An Economics Application: Elasticity of Demand
Test#3 on Chapter 3.

4.1 The Area under a Graph
4.2 Area, Anti-derivatives and Integrals
4.3 Area and Definite Integrals
4.5 Integration Techniques: Substitution
Test#4 on Chapter 4.
Review and then the Final exam (comprehensive).

**Calculators:** You are allowed to use Calculators such as TI-84 in your final exam.

**Homework:** Homework exercises are online and a score of **90% is required to take** the weekly quizzes.

**Quizzes:** There will be quizzes at the end of each of the 26 sections; All quizzes are online. Two quizzes/week. Do your best!!!….

**Tests:** There will be four one hour online tests at the end of chapters 1, 2, 3, and 4. These will be available on 12pm on Friday and due by 12pm on Saturday. There will be no make up.

**Proctored Final exam:** The final exam will be on Saturday 2nd December 2017 at 10am-12pm on campus (Location to be determined).

*The dates for tests and final exam are subject to change.*

**Grading:** Your final grade will be determined as follows:
Quizzes: 20%, Tests: 4x10% = 40%, and Final exam: 40%.

**Grading Scale:** A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: 0-59%.

Students, please carefully review the following information at this link [http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf](http://www.westga.edu/assetsDept/vpaa/Common_Language_for_Course_Syllabi.pdf).

It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

**Learning Outcomes:**
1. The student will be able to compute limits (L1).
2. The student will be able to differentiate polynomial, rational, exponential, and logarithmic functions (L1).
3. The student will be able to apply differential calculus to problems from business, economics, and life science (L1).
4. The student will be able to integrate polynomial, rational, exponential, and logarithmic functions and to apply the Fundamental Theorem of Calculus (L1).
5. The student will be able to apply integral calculus to problems from business, economics, and life science (L1).
6. The student will understand the basic techniques of integration (L1).

**ACADEMIC DISHONESTY**
Academic dishonesty is NOT tolerated. It will result in failure on assignment(s) as well as possible disciplinary sanction(s) as found in the 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 (friends…);
Fabrication: Falsification or unauthorized invention of any information or citation;
Plagiarism: Representing the words or ideas of another as one's own. Direct quotations must be indicated and ideas of another must be appropriately acknowledged.

Academic dishonesty in any form compromises your grade and lowers the quality of your diploma. A
fellow student who cheats may actually lower your grade, sometimes causing unfair and inflated grading scales. I hope each one of you values your college education enough to protect yourself from dishonest classmates.

**General advice for an online course:** Be and stay connected!
If you experience connection/ website problems using MyMathLab, please
1. Visit their support links below:
   - [https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/index.html](https://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/support/index.html)
   - [https://support.pearson.com/getsupport/s/](https://support.pearson.com/getsupport/s/)
2. If the issue is not resolved please email me boumenir@westga.edu with subject line math1413 is fun and details such as your ID and the problem/issue.

If you need help with Math:
1. email me and I will try to reply within 24 hours.
2. You can also visit the Math Tutoring Center

1. Do not wait 2-3 days to report a problem. Do it immediately!
2. Notify me if your problems have not been resolved within 2 business days.
3. Have an alternate computer access plan.
If you lose internet access or you experience hardware issues, you are responsible for having an emergency alternative computer access plan. Know in advance where you can go (library, Internet cafe, friend's house, workplace) if your primary system fails!
4. If you are experiencing technical issues with MyMathLab that are preventing you from turning in an assignment, responding to mail/discussions, or taking a quiz/test
1. Contact their support & Notify me via e-mail.

**Attendance/Participation Policy**
Students in an online course are expected to login a minimum of 3 times a week. To do well try to set up a routine by which you login daily. Please set up MyMathLab to email/text your phone for new postings, emails, announcements, etc.
If you are having trouble please contact me and talk with me rather than just dropping out of the course. We all want you to succeed at UWG and make a difference in this world.

**Library Resources**
UWG students have access to many online resources through the UWG Library.
- [http://www.westga.edu/library/](http://www.westga.edu/library/)

**ADA**
AMERICANS WITH DISABILITIES ACT STATEMENT If you are a student who is disabled as defined under the Americans with Disabilities Act and requires assistance or support services, please seek assistance through the Center for Disability Services. A CDS Counselor will coordinate those services.

**Affirmative Action Statement**
University of West Georgia adheres to affirmative action policies to promote diversity and equal opportunity for all faculty and students.

**Equal Opportunity Statement**
No person shall, on the grounds of race, color, sex, religion, creed, national origin, age, or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity conducted by UWG.

Wishing you good luck and a happy class experience.