Instructor: Dr. F. Abedi

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Office Hours: MWF 9:00 – 11:00, TH 9:30-11:00, MTWH 1:30 – 3:30 or by appointment

Course Title and Credit Hours: MATH 2255 (ACTS Equivalent # Math 2405), Calculus I, 5 credit hours

Course Prerequisites: Trigonometry, MATH 1033 (ACTS Equivalent # Math 1203), and College Algebra, Math 1043 (ACTS Equivalent # Math 1103), or Precalculus, MATH 1175 (ACTS Equivalent # Math 1305).

Course Objectives: The purpose of this course is developing the fundamentals of differential and integral calculus which includes both the ability to perform manipulations and conceptual understanding of basic themes. Specific objectives are:

1. To understand the concepts of limit and continuity, including the ability to calculate limits of various functions.

2. To understand the concept of derivative as both a rate of change and a function, including the ability to calculate the derivative of various functions.

3. To apply the understanding of derivatives to real-world problems.

4. To understand the concept of integral as limit of Riemann Sums and the relationship between the derivatives and the definite integrals as expressed in the Fundamental Theorem of Calculus. Student should learn how to calculate integrals using various techniques.

Course Content and Schedule Outline: Revision will be announced as needed.

Review of Algebra, Sections 1.1 – 1.7

Tuesday, September 1

Test 1

Limits, Tangents, Continuity and Derivatives, Sections 2.1 – 2.7

Tuesday, September 15

Test 2
Derivatives, Differentiation Rules and Rates of Change, Tuesday, September 29
The Product and Quotient Rules, Sections 2.7, 2.8, 3.1, and 3.2

Test 3

Derivatives of Trigonometric, Inverse Trig and Logarithmic Functions, the Chain Rule, Implicit Differentiation, and Rate of change, Sections 3.3 – 3.8
Thursday, October 15

Test 4

Linear Approximations, Related Rates, Applications of Differentiation, Maximum, Minimum Values, Graphing with Calculus and L’ Hospital’s Rule, Sections 4.1 – 4.5
Thursday, November 5

Test 5

Optimization Problems, Anti derivatives, Evaluating Definite Integrals, the Fundamental Theorem of Calculus, Sections 4.6 – 4.8 & 5.1– 5.3
Tuesday, November 24

Test 6

Comprehensive Final Exam, 1:30 – 3:30
Wednesday, December 9

Required Text and Materials:


2. A WebAssign access code. This code can be purchased at a local bookstore or online at [http://www.webassign.net](http://www.webassign.net).

3. All students must have access to a graphing calculator. Strongly recommended models are TI-83, TI-83 Plus or the TI-84 Plus. Other calculators of equal capability may be used, but it is the student’s responsibility to understand how to use them. A Texas Instruments TI-89 graphing calculator is recommended for checking your answers. Calculators such as the TI-89 that have a CAS system should not be used in the class because they are not allowed on the examinations.

Special Policies:

**Missed and Late Work**

1. Late homework will be accepted for partial credit. There are no make-up tests, unless a prior arrangement is made. If you miss a unit exam, the grade that you make on the final will be substituted for the missed exam grade.

**Grading and Tests**

2. If no tests are missed and the percentage grade on the final examination is greater than the
lowest test grade then the final examination percentage grade will be substituted for the lowest test grade.

3. To prevent distractions to others, all cell phones, beepers, etc. should be turned off in class.

4. Students are expected to attend all required class sessions during the semester. The University does not allow for unexcused absences. Each faculty member will determine his or her individual policies regarding excused absences, except in the case of a University sponsored event. Students involved in University sponsored events should be considered excused unless the proper notifications were not delivered to the instructor according to Policy XV on page 71 of the UAM Faculty Handbook. I keep track of absences regularly, this is the university policy and I am required to send the last date of attendance periodically. You are expected to attend all class meetings and make a serious effort to do the assigned work. Poor attendance is the greatest factor in unsuccessful performance in this course and college in general. You cannot possibly learn the material if you do not go to class. If the number of unexcused absences exceeds 8 hours the student may not be able to complete the course requirements or demonstrate the expected student learning outcomes within the timeframe of the course. The student may be recommended to withdraw, award the student a failing grade (at end of term) or, if warranted, assign the student an Incomplete. You are responsible for all material covered in these meetings.

Academic Alert:

The Academic Alert System is a retention program that puts students in contact with the appropriate campus resources to assist them in meeting their educational goals at UAM. If you are doing poorly in your academic work, are chronically absent from class, are exhibiting disruptive behavior or are having difficulty adjusting to campus life, University faculty, staff or a fellow student may report you to the Office of Academic Affairs through the Academic Alert system.

Academic Resources:

GENERAL EDUCATION TUTORIAL LAB
Harris Hall, (870) 460-1454
Any student who desires to be successful in his/her general education classes can receive assistance through tutoring services available on the 2nd floor of Harris Hall. Please watch for emails from Laura Hughes detailing this semester’s tutoring availability.

MATH TUTORIAL LAB
Math and Science Center, 870-460-1016
Free one-on-one tutoring is available for any mathematics class. Help with ALEKS, WebAssign, and MyMathLab is available. Math tutoring is located in SC A23, the Computer Lab. Tutoring is available Monday through Thursday from 8:30-2:00, and on Friday 8:30-12:00. To receive tutoring assistance other than above schedule contact Dr. Abedi.
Students with Disabilities:

It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities. It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University’s commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Harris Hall Room 120; phone 870 460-1026; TDD 870 460-1626; Fax 870 460-1926; email: whitingm@uamont.edu.

For assistance on a College of Technology campus contact:
McGehee: Office of Special Student Services representative; phone 870 222-5360; fax 870 222-1105.
Crossett: Office of Special Student Services representative; phone 870 364-6414; fax 870 364-5707.

Grading Policy: Each student’s grade will be determined by quizzes/homework, chapter tests, and a final exam. Quizzes are normally announced in advance and homework is assigned/graded through WebAssign (http://www.webassign.net). Tests cover those topics presented in the text and lecture. The final exam is comprehensive. The course grade is determined as follows:

Homework & Quizzes 7%,  WebAssign 18%,  Tests 60%,  Final Exam 15%

Grades will be assigned on the following basis:

A  90 – 100%    B  80 – 89%    C  70 – 79%    D  60 – 69%    F  0 – 59%

(1) WEBASSIGN: Go to www.webassign.net and register for the class. You may use the following a link to a video to assist you to enroll in the course.
http://www.wadsworthmedia.com/tlc/EWA_StudentVideos/Self_Enrollment/EWA_Student_SelfEnrollment.html.
Here is some more information that you may find helpful:
https://webassign.com/students/getting-started/
http://www.webassign.net/manual/student_guide/c_s_help_landing_page.htm
https://webassign.com/support/student-support/

(2) The class key for our class is: uamont 1006 6512
(3) Once you are enrolled in the course, check the calendar and a link to each homework assignment should show up on the due date of the assignment. All assignments are open on Wednesday, August 19, 2015 and each assignment will close the class meeting after the section is finished, Thursday December 10.

Student Conduct Statement:

Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic Dishonesty:
1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
   a. Copying from another student’s paper;
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
   c. Collaboration with another student during the examination;
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
   e. Substituting for another person during an examination or allowing such substitutions for oneself.

2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.

3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.

4. Plagiarism: Plagiarism is defined as adopting and reproducing as one’s own, to appropriate to one’s use, and to incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student(s) involved will be a grade of zero. In addition, all occurrences will be reported to the Vice Chancellor for Academic Affairs for other possible actions.

**Expectations of the Student:**

While this course is not particularly difficult for those who make a commitment to working on the course it does require both time and energy. Students usually have some difficulty with the course material, especially the content dealing with limits, integrations, and application problems. The pace of the course is rapid and it is necessary for you to not only attend class but to seriously attack the homework, review recent lectures, and preview material to be discussed at the next lecture. It is recommended that the student spend at least two hours of study time for each hour of lecture and you should focus on understanding the basic principles presented rather than simply mimicking procedures.

**Important Dates:**

- **Wednesday, August 19** First day of classes
- **Friday, August 21** Last day to register or add classes
- **Monday, September 7** Labor Day Holiday
- **Wednesday, October 28** Last day to drop or withdraw with a W.
- **Monday, November 2 - Friday, November 13** Preregistration for spring
- **Wednesday, November 25 - Friday, November 27** Thanksgiving holidays
- **Friday, December 4** Last day of classes
- **Monday, December 7 - Friday, December 11** Final exam period
- **Wednesday, December 9, 1:30 – 3:30** Final exam