

Math 121 Syllabus Spring 2015

INSTRUCTOR: _____ SECTION: _____

COURSE TITLE: Calculus and Applications

CREDIT: 3 semester hours

EMAIL: You can reach your instructor by emailing your instructor at ma121mtlc@as.ua.edu. Please put your instructor's name in the subject box. Replies to automated emails will not be answered.

PREREQUISITE: C- or higher in MATH112 or placement.

TEXTBOOK AND ACCESS CODE: "Calculus with Applications: Brief Version, 10th edition" by Lial, Greenwell, and Ritchey, published by Addison Wesley. An access code is required to complete all assignments and tests for this course. The access code allows the student to access the publisher's website for the course, where all assignments and tests must be completed and where the entire textbook may be viewed online. Access codes can be purchased with or without a hard copy of the textbook at a bookstore or online from the publisher.

CALCULATOR: For tests, you will be allowed to use the CASIO FX-260-SOLAR "SCHOOL" version (available at the University bookstores) or the testing calculator that is available on the computer. Using another calculator is considered academic misconduct.

COURSE DESCRIPTION AND OBJECTIVES: This course is intended to give a broad overview of Calculus and is taken primarily by students majoring in Commerce and Business Administration. This course does not provide sufficient background for students who will need higher levels of Calculus. Note: This course does not satisfy the requirement for Math 125 or 126. Evaluation will be based on online homework, quizzes, four tests, and a comprehensive final.

- The course presents the essential characteristics and basic processes of inquiry and analysis in the discipline.
- The course encourages the development of critical thinking skills and requires students to analyze, synthesize, and evaluate knowledge. The course considers its subjects in relation to other disciplines and to the human condition.
- The course is not limited to majors in any discipline.
- The course does not focus on professional skills.

GENERAL LEARNING OUTCOMES FOR 100-200 LEVEL COURSES:

- Students will be able to discriminate between reliable and less reliable information in their decision-making.
- Students will develop effective mathematical communication skills.

LEARNING OUTCOMES FOR THIS COURSE:

Upon completion of this course students will be able to

- Differentiate and integrate algebraic, exponential, logarithmic, and multivariable functions.
- Analyze graphs to determine where the graphs are increasing, decreasing, continuous, and determine the limits of functions.
- Classify values as the minimum or maximum values of functions.
- Calculate the area between two curves.
- Apply the methods taught in this course to real-life business applications.

GRADE: The course grading is under the "A, B, C, D, or F" policy, +/- grades will be given. The final grade will be based on the following breakdown of graded work.

COURSE GRADE COMPOSITION

Class Attendance	1%
Homework	9%
Quizzes	10%
Study Plan	10%
4 Tests (10% each)	40%
Final Exam	30%

COURSE GRADE SCALE

A+ 98%-100%,	A 92%-97%,	A- 90%-91%
B+ 88%-89%,	B 82%-87%,	B- 80%-81%
C+ 78%-79%,	C 72%-77%,	C- 70%-71%
D+ 68%-69%,	D 62%-67%,	D- 60%-61%
	F < 60%	

Students must earn at least 70% (C-) to successfully pass this course

Note: The last day to drop this course is Wednesday, March 25. No withdrawals from this course after this date.

TEST DEADLINES

Test 1	Wednesday	February 4
Test 2	Wednesday	February 25
Test 3	Wednesday	March 25
Test 4	Wednesday	April 15
Final Exam	Monday-Friday	April 27-May 1

ONLINE TEST REGISTRATION

Tests 1-4: 8am 1/19 – 5pm 1/23
Final Exam: 8am 4/20 – 5pm 4/24

Test times available: Times to be announced in class and through email.

Final Exam times available: 8 am, 11:30 am, 3:30 pm, 7 pm (all times may not be available each day)

Please read **Test Rules** of this syllabus for detailed information.

MTLC INFO: LOCATION: B1 Tutwiler

PHONE: 348-2592

WEBSITE: www.mtlc.ua.edu

HOURS: Monday - Thursday: 8am – 10pm
Friday: 8am – 4:45pm

CLOSINGS: MLK Day: Monday 1/19
Spring Break: Monday 3/16 – Friday 3/20

NOTE: Last day for help in MTLC is Friday 4/24

MATH SOFTWARE LOG IN INFORMATION:

- Option 1: Log into myBama, go to your Blackboard Learn courses, click on Math 121, click Bridge
- Option 2: Go to www.ua.mylabsplus.com. Your username: Crimson email prefix example: jksmith
Your password: CWID example: 12345678

Then you will find your current course under the **Alabama Spring 2015** Term.

All Assignments (both Homework and Quiz) are due by 8:00AM on the given date.

Test 1 Material: Test 1 is on Wednesday 2/4			
Class Date	Section	Title	Completion Deadline
1/8		ORIENTATION	
1/13	3.1/3.2	Limits/Continuity	Thur. 1/15
1/15	3.3/3.4	Rates of Change/ Definition of Derivative	Tue. 1/20
1/20	4.1	Techniques for Finding Derivatives	Thur. 1/22
1/22	4.2	Derivatives of Products and Quotients	Tue. 1/27
1/27	4.3	The Chain Rule	Thur. 1/29
1/29	4.4/4.5	Derivatives of Exponential Functions/ Logarithmic Functions	Tue. 2/3
2/3		Test 1 Review	Wed. 2/4

Test 2 Material: Test 2 is on Wednesday 2/25			
Class Date	Section	Title	Completion Deadline
2/5	5.1	Increasing and Decreasing Functions	Tue. 2/10
2/10	5.2	Relative Extrema	Thur. 2/12
2/12	5.3	Higher Derivatives; Concavity, & the 2 nd Derivative Test	Tue. 2/17
2/17	6.1/6.2	Absolute Extrema/ Applications of Extrema	Thur. 2/19
2/19	6.4/6.6	Implicit Differentiation/ Differentials: Linear Approximation	Tue. 2/24
2/24		Test 2 Review	Wed. 2/25

Test 3 Material: Test 3 is on Wednesday 3/25			
Class Date	Section	Title	Completion Deadline
2/26	7.1	Antiderivatives	Tue. 3/3
3/3	7.2	Substitution	Thur. 3/5
3/5	7.3	Area and the Definite Integral	Tue. 3/10
3/10	7.4	The Fundamental Theorem of Calculus	Thur. 3/12
3/12	7.5	The Area Between Two Curves	Tue. 3/24
3/24		Test 3 Review	Wed. 3/25

Test 4 Material: Test 4 is on Wednesday 4/15			
Class Date	Section	Title	Completion Deadline
3/26	9.1	Functions of Several Variables	Thur. 3/31
3/31	9.2	Partial Derivatives	Tue. 4/2
4/2	9.3	Maxima and Minima	Thur. 4/7
4/7	9.4	Lagrange Multipliers	Tue. 4/9
4/12		No Class	
4/14		Test 4 Review	Wed. 4/15

Final Exam Material: Final Exam is on Monday 4/27-Friday 5/1 (you choose)			
Class Date	Section	Title	Completion Deadline
4/16		No Class	
4/21		Final Exam Review	Mon. 4/27
4/23		Final Exam Review	Mon. 4/27

EMAIL: All correspondence for this course will be made through your crimson email account. If you have trouble with your crimson account, then you can get help at the OIT help desk located in Gordon Palmer. You can reach your instructor by emailing your instructor at ma121mtlc@as.ua.edu. **Please put your instructor's name in the subject box.** Replies to automated emails will not be answered.

WORKING FROM HOME: The Math 121 course work can be done on your personal computer with internet access.

- **Two ways to get to our course:**
 1. Log into MyBama go to your Blackboard Learn courses, and click on Math 121
 2. Log into ua.mylabsplus.com with your email prefix and your CWID
- The course software **MAY NOT WORK with Safari**; use a different internet browser.
- If you get a “**timeout error**” when using the software, delete your browser’s cookies and/or try a different browser.
- **No deadline extensions will be given because of issues with a home computer.** To be safe, work well ahead of the deadlines at home, so that if there is any problem you will be able to go to the MTLC and complete the assignment before the deadline.
- **Tests must be taken in the MTLC.**

ATTENDANCE/PARTICIPATION: Attendance for this course is mandatory. You are expected to attend all of your scheduled classes. Class meets each Tuesday and Thursday unless noted. You are expected to attend class in its entirety and participate in the classroom lectures and discussion. *The use of personal laptop computers and texting during class time is prohibited.* The MTLC in B1 Tutwiler is available for you to do homework and quizzes and get free tutoring.

QUIZZES and HOMEWORK: A graded homework AND quiz will be assigned for each section. They must be completed before each expiration date and time. **Homework can be worked on until all questions are correct.** You can select “similar exercise” for any question that you miss and try again until you get it correct. **You will have an unlimited number of attempts each quiz; only the higher score will be counted.** You must hit the “Submit” button to score your quiz. Due dates and times are posted in the syllabus and software. **At the end of the semester the lowest 3 homework grades and the lowest 3 quiz grades will automatically be dropped.** All deadlines are Tuesdays and Thursdays at 8:00 am for homework and 8:00 am for quizzes.

NOTE: You will not be given help on your quizzes or tests. Tests must be taken in the MTLC.

STUDY PLAN: The study plan is due by the end of the semester. It consists of topics that were not mastered on quizzes during the semester. Please use it as a way to study for each test and your final exam. The study plan is worth just as much as one test grade, so make sure to take it seriously.

TESTS: Tests must be taken in the MTLC by the scheduled deadlines posted on the front page of this syllabus. You must register for a time to take your tests on your scheduled test days. The dates and times for online registration are shown on the front page of this syllabus. Instructions for registration are in Test Rules below. You may take any test early (before its deadline week).

MAKE-UP POLICY: Missed assignments will be scored zero. No makeup tests will be given.

- If homework or quizzes are missed due to any circumstance, the zero scores will be part of your three dropped homework’s or quizzes at the end of the semester.
- If a test is missed due to ANY circumstance, no makeup test will be given. The zero score will be considered your lowest and will be replaced by the final exam score. Only one zero test score may be replaced.
- Students who will miss any assignments due to official University business must make other arrangements **beforehand.**

REPLACEMENT POLICY: All students will be allowed to replace the lowest test grade with the grade made on the final exam. However, zeros due to academic misconduct will not be replaced.

MTLC RULES

1. The MTLC is a math classroom. Please be quiet during your visit to the MTLC.
2. Other than mathematics, no activities such as talking, surfing the Internet, playing computer games, typing a paper, sleeping, etc. are allowed in the MTLC. If these activities are observed, you will be asked to leave the MTLC.
3. Please do not hesitate to ask questions in the MTLC. Staff members in the MTLC are there to help you

TEST RULES

1. There are four 70-minute tests and a 150-minute comprehensive final exam. Test deadlines are listed on the front page of this syllabus.
2. You are encouraged to take your tests early. “Early” means **any time before the Test Week** for that particular test. No registration is needed for early tests. However, no tests will be given at all on Sundays. You must begin your exam between the hours of 8am and 4:45pm Monday through Thursday, and 8am and 3pm on Fridays (2pm for Final Exams).
3. **You must register for a time to take an exam on a test deadline day.** Test weeks are a logistical challenge; you must tell MTLC when you will come on your scheduled test days, and you must keep your appointments. The front page of the syllabus lists beginning and ending dates/times for online registration. To **register online**, go to the MTLC website (www.mtlc.ua.edu), select link *Test Registration*, log in as instructed, select link *Register*, then choose an available time. You will register for the 4 tests at the same time. A separate online registration will occur for the Final Exam. You may freely change your test time while online registration is active. **Be sure to verify your registration:** log back in to the test registration site OR check for your confirmation email message.
4. **If you miss a test,** your zero score will be considered your lowest and may be replaced by your final exam score. However, only one score can be replaced.

5. Arrive on time for your test. Tardiness will cost you working time on the test. Bring your ID and pencils with you. Follow signs to the back hallway. Staff will check your ID and give you a personalized test paper (which is your initial scratch paper), then direct you to your seat.
6. Absolutely **NO HAND-HELD ELECTRONIC DEVICES** other than a CASIO fx-260 SOLAR SCHOOL calculator may be active in the testing area. Use of any unapproved electronic device during a test will be treated as academic misconduct.
7. When you sit down at your computer, place your cellphone face down on the table with your ID next to it. Cellphones must be turned completely off and all other belongings must be placed on the floor. Once you enter the testing area, all review material must be put away. As soon as you are seated, you may begin your exam. The MTLC will give you additional scratch paper as needed; no other paper is allowed. When you are finished, staff will collect all papers.
8. You will be allowed to review your test before you leave the lab. You may **not** write down any information pertaining to test questions to take with you when you leave the MTLC after an exam. You may not share any test information with anyone who hasn't taken the test. Violators will be charged with academic misconduct.
9. **You may not leave your table during a test without permission.** This includes getting water and using the restroom. Cell phones must be left at the table.
10. Special MTLC Study Hours during test weeks: Monday 8am-10pm (except during Test 3), Tuesday – Thursday 9pm- 10pm ONLY, Friday 2pm-4:45pm. The lab will be closed for all studying, and open only for testing, during finals week.

CODE OF ACADEMIC CONDUCT: All students in attendance at the University of Alabama are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. The University expects from its students a higher standard of conduct than the minimum required to avoid discipline. Academic misconduct includes all acts of dishonesty in any academically related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student. The Academic Misconduct Disciplinary Policy will be followed in the event of academic misconduct.

DISABILITY STATEMENT: Students with disabilities must be registered with the Office of Disability Services (ODS) before receiving any special academic accommodations. If you have a disability, but have not yet contacted ODS, please call 348-4285 or visit 133-B Martha Parham Hall East to make an appointment to register for services. ODS will provide packets of information about your specific accommodations, which you must distribute to your instructors and to the MTLC (B1 Tutwiler). **The MTLC must receive your paperwork at least one week prior to a test to allow for accommodations on that test.**

SEVERE WEATHER PROTOCOL: In the case of a tornado warning (tornado has been sighted or detected by radar; sirens activated), all university activities are automatically suspended, including all classes and laboratories. If you are in a building, please move immediately to the lowest level and toward the center of the building away from windows (interior classrooms, offices, or corridors) and remain there until the tornado warning has expired. Classes in session when the tornado warning is issued can resume immediately after the warning has expired at the discretion of the instructor. Classes that have not yet begun will resume 30 minutes after the tornado warning has expired provided at least half of the class period remains.

UA is a residential campus with many students living on or near campus. In general classes will remain in session until the National Weather Service issues safety warnings for the city of Tuscaloosa. Clearly, some students and faculty commute from adjacent counties. These counties may experience weather related problems not encountered in Tuscaloosa. Individuals should follow the advice of the National Weather Service for that area taking the necessary precautions to ensure personal safety. Whenever the National Weather Service and the Emergency Management Agency issue a warning, people in the path of the storm (tornado or severe thunderstorm) should take immediate lifesaving actions.

When West Alabama is under a severe weather advisory, conditions can change rapidly. It is imperative to get to where you can receive information from the [National Weather Service](#) and to follow the instructions provided. Personal safety should dictate the actions that faculty, staff and students take. The Office of Public Relations will disseminate the latest information regarding conditions on campus in the following ways:

- Weather advisory posted on the UA homepage
- Weather advisory sent out through Connect-ED--faculty, staff and students ([sign up at MyBama](#))
- Weather advisory broadcast over WVUA at 90.7 FM
- Weather advisory broadcast over Alabama Public Radio (WUAL) at 91.5 FM
- Weather advisory broadcast over WVUA 7. WVUA 7 Storm Watch provides a free service you can subscribe to that allows you to receive weather warnings for Tuscaloosa via e-mail, pager or cell phone. Check <http://www.wvua7.com/stormwatch.html> for details.