

Calculus I - MATH 2554 Course Syllabus - Summer 2014

Textbook: *Calculus, Early Transcendentals*, Briggs, Cochran, 2011 (Recommended/Not Required).

TEXTBOOK AND SOFTWARE: The homework for all sections will be done on the computer, using the MyLabsPlus (MLP) software. The MLP software is REQUIRED for this course. The textbook is recommended, but not required, since an electronic version of the textbook is automatically included with the MLP software.

SOFTWARE: MYLABSPPLUS (MLP) Student Access Kit- This access kit is REQUIRED for this class. The text book is recommended, but is not required since an electronic version of the textbook is included in the kit. If you have taken Calculus 1 at the University of Arkansas in the previous year, you shouldn't need to purchase the kit. To log in to MLP,

- (1) go to the website <http://uark.bb.mylabsplus.com>;
- (2) Find and click the "Forgot your password" link;
- (3) Enter the first part of your uark email in the box labeled "User ID:" (e.g. if you were mathstudent@uark.edu, you would enter "mathstudent");
- (4) Check your email for a message with the subject "Password Reset Information" from PasswordReset@ResetCredentials.com and follow the directions in the email.

PROBLEMS WITH THE SOFTWARE: If you cannot access your MLP course:

- Check your browser-click on SUPPORT then MYMATHLAB BROWSER CHECK near the top of the page
- Delete your cookies
- Try a different browser (i.e., Firefox, Chrome, etc.)
- Try a different computer (i.e., study lab or university lab)
- Contact Pearson Tech Support by clicking on TECH SUPPORT link at the top of the page and select one of the means listed
- Call Pearson Helpline at 888-883-1299

CLASS AND HOMEWORK: Class will meet for 80 minutes every day. You are expected to attend every class. If you miss a class it is your responsibility to check the due dates for any online course work that is due in addition to anything that your instructor may have assigned. Any graded work during class time CANNOT be made up due to missing class.

All homework assignments are done on the computer. The computer grades the homework and posts your score immediately in the Gradebook. If you believe an error was made in the grading, please notify your instructor as soon as possible. You may work on each assignment to improve your grade until it is due by clicking on the navigational tab HOMEWORK on the opening page of the course. After the assignment is due the computer will not allow you access to the homework in order to improve your score but you may review your homework at anytime without changing your grade by clicking on the GRADEBOOK navigational tab. Homework will not be accepted late for credit.

QUIZZES: There are numerous graded online quizzes that you will take outside of class time using the MYLABSPPLUS (MLP) software. You will have 3 attempts for each outside of class quiz and the highest score is counted as your grade for the quiz. Each quiz must be completed by the date and time listed in

MLP. There will also be numerous in class quizzes that will be given throughout the semester. There will only be one attempt on these quizzes. There are no make-ups for missed in class or online quizzes.

TESTS: There are 4 in class exams and a comprehensive final exam on **Friday July 18th**. These exams are written by the course coordinator, and graded by *all* course instructors. Review materials will be available to you.

DETERMINATION OF GRADE:

HOMEWORK	50 pts
IN CLASS ACTIVITY/GROUPWORKS	50 pts
QUIZZES (in class and online)	100pts
IN-CLASS EXAMS (4 at 100 pts each)	400 pts
FINAL	<u>200pts</u>
TOTAL	800 pts

The final grade is based on the following percentage scale:

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

CALCULATOR POLICY: Graphing calculators will not be allowed on any of the in class exams or the final exam. Calculators are not needed nor required for exams in this course. Simple scientific calculators, such as the TI-30X IIS or the TI-30XA, will be allowed, but any calculator capable of graphing, or symbolic differentiation or integration will definitely not be allowed.

ACADEMIC INTEGRITY: "As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail." Each University of Arkansas student is required to be familiar with and abide by the University's Academic Integrity Policy which may be found at <http://provost.uark.edu/>. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

ANNOUNCEMENTS: You are expected to regularly check your UA email and the announcements in MLP for information relating to this class. Not reading these announcements and thus not learning about the necessary information is not a valid excuse, even if it affects your grade.

ACCOMODATIONS: Under University policy and federal and state law, students with documented disabilities are entitled to reasonable accommodations to ensure the student has an equal opportunity to perform in class. If you have such a disability and needs special academic accommodations, please report to Center for Educational Access (CEA). Reasonable accommodations may be arranged after CEA has verified your disability. You must submit your paperwork to your instructor or Dr. Cleaveland (SCEN 220) as soon as possible. To receive accommodations this must be done at least a week before you take a test/online quiz/exam. Do not hesitate to contact your instructor or a member of the MRTC staff if any assistance is needed in this process.

NOTE: WE RESERVE THE RIGHT TO MAKE CHANGES TO THE SYLLABUS DURING THE SUMMER SESSION. IF CHANGES ARE MADE, YOU WILL BE NOTIFIED OF THE CHANGES IN

CLASS OR IT WILL BE POSTED ON THE MLP HOMEPAGE OR SENT TO YOUR UNIVERSITY EMAIL ADDRESS. IT IS YOUR RESPONSIBILITY TO CHECK YOUR EMAIL REGULARLY AND TO CHECK FOR POSTINGS ON THE HOMEPAGE IN THE MLP COURSE.

MATH 2554 COURSE OUTLINE:

Material to Cover

- 2.1 The Idea of Limits**
- 2.2 Definition of Limits**
- 2.3 Techniques for computing limits**
- 2.4 Infinite Limits**
- 2.5 Limits at Infinity**
- 2.6 Continuity**
- 2.7 Precise Definitions of Limits**
- 3.1 Introducing the Derivative**
- 3.2 Rules of Differentiation**
- 3.3 The Product and Quotient Rule**
- 3.4 Derivatives of Trigonometric Functions**
- 3.5 Derivatives as Rates of Change**
- 3.6 The Chain Rule**
- 3.7 Implicit Differentiation**
- 3.8 Derivatives of Logarithmic and Exponential Functions**
- 3.9 Derivatives of Inverse Trigonometric Functions**
- 3.10 Related Rates**
- 4.1 Maxima and Minima**
- 4.2 What Derivatives Tell Us**
- 4.3 Graphing Functions**
- 4.4 Optimization of Functions**
- 4.5 Linear Approximation and Differentials**
- 4.6 Mean Value Theorem**
- 4.7 L'Hopital's Rule**
- 4.8 Antiderivatives**
- 5.1 Approximating Areas under Curves**
- 5.2 Definite Integrals**
- 5.3 Fundamental Theorem of Calculus**
- 5.4 Working with Integrals**
- 5.5 Substitution Rule**