Course Information:

Fall 2019 MA 120 - 703: Calculus and Its Applications Course Format: Blended MSPB 350 TR 8:00 am - 8:50 am

Instructor Information:

Name: Dr. Armin Straub Phone: (251) 460-7262 (please use e-mail whenever possible) Email: straub@southalabama.edu Office Hours: TR 9:00 am - noon MSPB 313 and by appointment

Course Description:

Introduction to calculus with an emphasis on problem solving and applications. Key concepts are presented graphically, numerically and algebraically, although the stress is on a clear understanding of graphs and tabular data. The course covers: algebraic, exponential and logarithmic functions, their properties and their use in modeling; the concepts of derivative and definite integral and their applications to marginal analysis, optimization and probability; examples of multivariable functions, partial derivatives and applications to optimization problems. Students are encouraged to have a graphing calculator. Credit for both MA 120 and MA 125 not allowed. Prerequisite: C or better in MA 112 or sufficient mathematics placement test score. MA 120 is not a prerequisite for subsequent calculus courses. <u>Core Course. Note: MA 120 does not exempt you from any of the prerequisites for MA 125. If you want or need MA 125, do not take MA 120.</u>

Goals and Objectives:

Upon the successful completion of the course a student will have an understanding of the idea of the derivative as a rate of change and as a slope; be able to compute simple derivatives using the rules of differentiation; be able to use the derivative as a tool for applied problems; be able to compute simple antiderivatives and have an understanding of the concept of a definite integral.

Quantitative Reasoning:

In this course, the students will demonstrate proficiency with quantitative reasoning and use of mathematics and statistics. As defined by The Association of American Colleges & Universities (AACU), Quantitative Reasoning requires the student to think critically and apply mathematics and statistics to interpret data, draw conclusions, and solve problems within a disciplinary or interdisciplinary context. Specific learning outcomes based on course content will be mapped to at least one of the following:

- 1. Evaluate information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- 2. Convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

Course Materials:

Text: Brief Calculus and its Applications, fourteenth edition by Goldstein, Lay, Schneider, and Asmar. We will cover most of chapters 1-6.

Computer and internet access: Students are required to have access to a computer and high speed internet access. Any computer or internet issues that arise are the responsibility of the student to deal with. This means that when issues arise, you contact Tech support at MLP or at your Internet provider. You do not contact the instructor.

MyLabsPlus: The website for the course is usouthal.mylabsplus.com

The username is your Jag number (J00...), the password is PASSWD (all capital letters) But if you have used MyLabsPlus before for any other course, then you should use your previously established password.

NOTE: The instructor cannot help with technical issues with MyLabsPlus. For technical questions, please visit <u>https://support.pearson.com/getsupport/s/?tabset-dd12d=1</u> or call 1-888-883-1299, available 24/7.

Online Materials: The USAOnline course site will have the course syllabus and assorted announcements. We will be making use of the MyLabsPlus (MLP) course website for the ebook, instructional videos, homework, quizzes, and tests, as well as the final test. We will use the gradebook on the MLP site. (Note- an ebook version of the text can be found on the MLP site.)

Ebook and Instructional Videos: The MLP site has a number of valuable resources, including an ebook version of the text, instructional videos, an interactive study plan, as well as other items. These resources are free to use and will not impact your grade. Feel free to use them as needed. Also there are lots of good calculus videos on youtube, as well as elsewhere.

Calculator: Any TI-30X is required. The use of any other calculator will be considered cheating.

Homework:

Problems from the text will be assigned for most book sections in MyLabsPlus. Homework is graded online and will contribute to 25% of the course average. Problems are scored immediately and students will be allowed to redo homework problems as many times as they wish. In order to take a quiz or access the practice tests, you must score at least 70% on the homework assignments for the textbook sections that are covered on that assignment. All homework assignments are due on Tuesday, December 10th at 8:00 am. No homework will be accepted late.

Quizzes:

Quizzes will be taken on-line at home and will contribute to 10% of the course average. The purpose of the quiz will be for you to practice without the help buttons that are available in the homework. You will have 2 attempts on each quiz and the highest score from those 2 attempts will be recorded. Upon completion of material, quizzes will be due the night of the next class meeting at 11:59 pm. After this due date, quizzes will incur a 30% penalty. All quizzes will close on Tuesday, December 10th at 8:00 am. <u>Note about quizzes</u>: Once you open a quiz, you must finish it and submit it. You may not pause the quiz for any reason. Any such attempt will result in the loss of an attempt. If a quiz is not attempted by the due date and time, a zero will be recorded for an attempt.

Practice Tests:

Before each test, there will be a practice test available in the MyLabsPlus homework section. These practice tests will not contribute to the homework average. However, students who score at least 90% on the Practice Test will have a 3% bonus on their corresponding test grade.

Tests:

There will be three (3) tests and an in class comprehensive final exam. Each test will contribute 15% of the course average. The final exam will contribute to 20% of the course average. All tests are given during your regular class time. You must <u>bring your own</u> Texas Instruments TI-30X calculator. Scratch paper and formula sheet will be **provided**. The final exam grade cannot be dropped or replaced. If you do not take the final exam, your final exam score will be zero.

Test Dates: September 26th, October 24th, November 26th

Final Date: Tuesday, December 10th from 8:00 am -10:00 am

Make-Up Policy:

- Homework: All homework assignments are due on Tuesday, December 10th at 8:00 am. No homework will be accepted late.
- Quizzes: Quizzes are allowed to be turned in late (with a penalty) up until Tuesday, December 10th at 8:00 am.
- Tests: There are no makeup tests. If a test is missed, a score of zero will be recorded. At the end of the semester, the final exam score will replace the lowest of the 3 test scores for students who have **4 or fewer** absences. This replacement will not be made for any student who has been reported for academic misconduct regardless of the number of absences.

<u>Grading Scale:</u> There is a 10-point grading scale.

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

<u>Final Grade Calculation:</u> Your final grade is calculated as follows:

Homework: 25%	Quizzes: 10%	Tests: 45% (3 @ 15% each)	Final: 20%	Total: 100%

Attendance:

Upon registering for this class, you are taking responsibility for the course and you are expected to attend. If you do miss, it is your responsibility to get caught up. Roll will be taken daily. Four tardies equals 1 absence.

<u>Tutoring</u>: The Center for Academic Excellence offers individual and small-group peer tutoring for a large variety of general education courses, as well as writing consultations for courses in a discipline. Additionally, the CAE provides workshops, events, and programs aimed at empowering USA students to succeed in their coursework and beyond. It is located on the 2^{nd} floor of the Marx Library and is open Monday-Friday from 10:00am – 6:00pm. To schedule a subject tutoring appointment or a writing consultation with the Center for Academic Excellence, please visit <u>www.southalabama.edu/cae</u>, email <u>cae@southalabama.edu</u>, or call (251) 460-6480.

Important Dates:	
Labor Day Holiday:	Monday, September 2 nd
Fall Break:	Thursday and Friday, October 10 th – 11 th
Last Day to Drop Course:	Friday, October 25 th
Thanksgiving Holiday:	Wednesday, Thursday, Friday, November 27 th – 29 th
Last day of Class:	Friday, December 6 th

<u>Academic Misconduct</u>: A grade of 0 will be given to any assignment in which copying or cheating is observed and this score cannot be dropped or replaced. An academic misconduct report will be submitted to the university. All tests must be taken in the computer lab. Taking a test from home will be considered cheating.

<u>Note</u>: If you get to the point where you are considering dropping the course, please speak with me, the department chair (Dr. Mulekar) or the assistant to the chair (Dr. Brick) before dropping.

Please see the link below for additional academic course policies that are common to all academic courses offered at the University of South Alabama. <u>http://tinyurl.com/additionalcoursepolicies-pdf</u>

Fall 2019 Student Assignment Checklist - MA 120

Please note: The following schedule may be modified at the discretion of the instructor. Change notification will be made via email or the announcement page of MyLabsPlus.

Check	Assignments	Check	Assignments
	HW About/Orientation		HW 4.4 and 4.6
	HW Ch 0 and 1.1		HW 4.5
	HW 1.2		Quiz 7: Sections 4.4, 4.5, and 4.6
	HW 1.3 &1.6		Review
	Quiz 1: Sections 1.2, 1.3, and 1.6		Practice Test 2
	HW 3.1		Test 2: Sections 2.5, 2.7, 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6
	HW 3.2		HW 5.1 and 5.2
	Quiz 2: Sections 3.1 and 3.2		HW 5.3
	HW 1.7		Quiz 8: Sections 5.1, 5.2, and 5.3
	HW 1.8		HW 6.1
	Quiz 3: Sections 1.7 and 1.8		HW 6.2
	HW 2.1 and 2.2		Quiz 9: Sections 6.1 and 6.2
	HW 2.3		HW 6.3 and 6.4
	Quiz 4: Sections 2.1, 2.2, and 2.3		HW 6.5
	Review		Quiz 10: Sections 6.3, 6.4, and 6.5
	Practice Test 1		Practice Test 3
	Test 1: Chapter 1, and Sections 2.1, 2.2, 2.3, 3.1, and 3.2		Test 3: Sections 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, and 6.5
	HW 2.5		Final Practice Test
	HW 2.7		Final Exam: Comprehensive See the syllabus for date & time.
	Quiz 5: Sections 2.5 and 2.7		
	HW 4.1 and 4.2		
	HW 4.3		
	Quiz 6: Sections 4.1, 4.2, and 4.3		



HOW TO LOG INTO MYLABSPLUS

Note: Google Chrome OR Mozilla Firefox recommended. SAFARI DOES NOT ALWAYS WORK.

- 1. Go to http://usouthal.mylabsplus.com/
- 2. The username is your Jag number (J00...), the password is PASSWD (all capital letters)
 - a. If you cannot log in, click Forgot Password and change your password to whatever you wish
- 3. Click on your course link.
- 4. Accept User Agreement (if needed).
- If you have any technical issues, please contact Pearson at <u>https://support.pearson.com/getsupport</u> or call <u>1-888-883-1299</u> (press 1 for STU)