OFFICE OF ACADEMIC AFFAIRS
COURSE APPROVAL FORM
COURSE CHANGE

College: Science  Prefix/Subject Code: MA  Course Number: 120
Course Title: Calculus with Applications  Credit Hours: 3  Cross Listed: N/A

Nature of Change:
(Check all that apply)

☐ Add to Charger Foundations
☐ Course Title Change
Old Title: Calculus with Applications  New Title: Math with Applications to Business and Economics

☐ Course Number Change  Old Number:  New Number:

☐ Course Description Change
Old Description:

New Description:

☐ Course Requisite Change
Old Requisite:

New Requisite:

☐ Course Restriction Change
Old Restriction:

New Restriction:

☐ Fee Change  Old Fee:  New Fee:

☐ Move to Inactive  ☐ Return to Active  ☐ Delete

Effective Date: Fall 2017
Justification of Change:

Absolute majority of the students taking the course are from the College of Business Administration. It is observed by the CBA (Dr. Wilhite, Dept Chair, Dept of Economics, Accounting, and Finance; Dr. MacKenzie, Interim Associate Dean) that they lose students to Athens State, because UAH business programs require students to take calculus and Athens State does not. In the opinion of CBA faculty, the deletion of “calculus” from the title of MA 120 may have measurable effect on student recruitment and retention.
Calculus with Applications  
MA 120-01: MWF 10:20 – 11:15am  
Shelby Center Room 121

**Instructor & Course Coordinator:**  
Mrs. Shelley Lenahan  
Shelby Center Room 201F  
lenahas@uah.edu  
256-824-2223

**OFFICE HOURS:**  
Monday: 9:15 – 10:15am, 2 – 3:30pm  
Tuesday: 9:15am – 11:00am, 2 – 3:30pm  
Wednesday: 9:15am – 10:15am, 2 – 3:30pm  
Thursday: none  
Friday: 9:15 – 10:15am, 2 – 2:45pm

**PREREQUISITES:** Students enrolled in MA 120 must meet one (or more) of the following requirements:  
1. Level 2 placement on the UAH Math Placement Test  
2. Earned a grade of ”C” or better in MA 107  
3. ACT math score 25 or higher (or SAT math score 560-590)

**TEXT:** Mathematics with Applications, 11th edition, Lial & Hungerford, 2015  
**CREDIT HOURS:** 3 hours

**STUDENT SUPPLEMENTS:**  
1. Student Solutions Manual (optional)  
2. MyMathLab (required)  
3. Free tutoring in Shelby Center Lower Level Room 008 (hours TBA)  
4. Tutoring in the Student Success Center (www.uah.edu/SSC - you must schedule an appointment)  
5. Other 120 instructors – you may visit the office hours of any other MA 120 instructor

**COURSE SEQUENCE:**  
Chapter 11  Differential Calculus  
Chapter 12  Applications of the Derivative  
Chapter 13  Integral Calculus  
Chapter 14  Multivariate Calculus

**EVALUATION:**  
Homework  10%  
Quizzes  20%  
Tests  40%  
Final Exam (comprehensive)  30%
GRADING SYSTEM: The course is graded using A, B, C, D, F and may include + or –

HOMEWORK: Homework will be assigned daily, and you will access MyMathLab through Canvas to complete the homework online. An access code is required (please see the instructor if you are repeating the course). Homework is designed to give students an opportunity to develop mastery over the material and to identify areas of weakness. If you choose not to take advantage of these opportunities, it will be reflected in your homework average as well as your performance on the quizzes, tests, and final exam. (Note: The textbook is included as an e-book with access code purchase.)

***Students are responsible for seeking help outside of class when needed. Class time will be spent covering new material and answering questions over the new material. Homework questions or questions over past material will be answered during office hours, over the phone, by email, or in tutoring.

ATTENDANCE POLICY: As required by the Dean of the College of Science, attendance will be checked. Your absences will be made available to the math department, the dean of your college, and to your advisor. A lack of regular attendance will be reflected in your grade. No make-ups will be given for daily grades (homework and quizzes), regardless of the circumstances. A zero will be recorded for each absence that occurs on the day that a daily grade is given. At the end of the term, the lowest one of your daily grades will be dropped to allow for extenuating circumstances. Note: Three tardies and missing more than 20 minutes of class both count as absences. Being on time is extremely important - tardies will be recorded each class.

MAKE-UP TESTS: Make-ups for any of the tests will only be given if 1) you have made prior arrangements with the instructor, 2) have an approved reason for missing, and 3) can provide approved documentation within 3 days of your return to class. If you do not meet all three of these requirements, you will receive a zero for your test score. Make-up tests will be deferred until the end of the semester. For those with prior approval, the make-up tests will be held on Monday, April 24th at 10am in Shelby Center (SST) 121. There will be no make-ups for the final exam without prior written permission from the chair of the math department.

CLASSROOM RULES:
- Hats must be taken off or worn backwards for tests, quizzes, and the final exam.
- Cell phones must be turned OFF for tests and the final exam and stored under your desk or in your purse or backpack (not in your lap or pocket).
- Cell phones must be on vibrate during class, and texting is for emergencies only.
- You may not leave the room during a test, quiz, or the final exam.
- Students are expected to behave in a courteous and respectful manner. Please refrain from doing any activity that could be disruptive to the class.
- Please be on time for class every day - this is very important.
IMPORTANT DATES:
   First day of class – Jan 9
   Last day to withdraw with a refund – Jan 23
   Holiday – Jan 16 (Martin Luther King, Jr. Day)
   Spring Break – March 13 – March 17
   Last Day to withdraw – March 27
   Last Day of Class – April 21
   Final Exam – Monday, May 1st 8:00am – 10:30am

TEST DATES:
Test 1 - Jan 30
Test 2 - Feb 22
Test 3 - Mar 22
Test 4 - Apr 17

INCOMPLETES: An incomplete will only be assigned when a student, due to circumstances beyond his or her control, has not satisfied some major requirement of the course. The circumstances must be extreme (such as a prolonged serious illness requiring hospitalization) to qualify and must be approved by Student Services. Documentation is required and will be checked.

ACADEMIC HONESTY: Your homework, quizzes, tests, and final exam must be your own work. Any form of cheating or academic misconduct will not be tolerated and will be reported to the disciplinary board. To ensure that you are aware of what is considered academic misconduct, you should carefully review the University’s Code of Conduct in the Student Handbook.

WITHDRAWALS: Through the tenth week of the fall or spring semester, a student may withdraw from any course by executing a withdrawal on the UAH website, meeting with their advisor, or submitting a Registration/Schedule Adjustment form to Charger Central. After the tenth week, a student may withdraw from a course only under extenuating circumstances and with the approval of the dean of the college in which the student is enrolled. Avoidance of an undesirable grade does not justify withdrawal. Class non-attendance does not constitute withdrawal nor does notification to the instructor. Any student failing to follow the established procedure for withdrawal will remain enrolled in the course and may receive a failing grade.

GRIEVANCE PROCEDURE: Resolution of a student’s grievance shall begin with the instructor. If the problem cannot be resolved at this level, the matter may be pursued through the appropriate administrative chain. For academic appeals, this chain is the instructor, the course coordinator, the department chair (Dr. Boris Kunin, SST258B, 256-824-6470, kuninb@uah.edu), the associate dean of the college (Emanuel Waddell, MSB C207, 256-824-6844, adeancos@uah.edu), the dean of the college, and the Provost, in that order. For non-academic appeals, this chain is the chair of the department and then the appropriate vice president. Appeals are always to be submitted in written form.
STUDENTS WITH DISABILITIES: Any student who has a documented condition that substantially limits his or her learning activities can request coordination of appropriate academic support services with the Office for Disability Services. Before accommodations will be provided for the student, proper documentation from Disability Services must be provided to the instructor.

UALERT EMERGENCY NOTIFICATION SYSTEM:
UAHuntsville has implemented the UAlert emergency notification system. UAlert allows you to receive time-sensitive emergency messages in the form of e-mail, voice mail, and text messages. Everyone who has a UAHuntsville e-mail address will receive emergency alerts to their campus e-mail address. In order to also receive text and voice message alerts, you are asked to provide up-to-date phone contact information. Participation in UAlert text and voice messaging is optional, but enrollment is strongly encouraged. **You can’t be reached through UAlert unless you participate.** The information you supply is considered confidential and will not be shared or used for purposes other than emergency notification. To review your UAlert account, add or update phone and alternate e-mail addresses, and set the priority for your contact methods, please visit the UAlert web site: http://ualert.uah.edu.

COURSE GOALS / OBJECTIVES:
MA 120 has two main objectives
- To complete the two-course business math sequence; the first course is MA 107, Mathematics with Applications I.
- To stand alone, as a self-contained course in college calculus.

More specifically, a student who successfully completes MA 120 should acquire
- A basic understanding of the special language, notation, and point of view of calculus
- The ability to solve basic computational problems involving derivatives and integrals
- A basic understanding of the fundamental theorem of calculus
- The ability to model and solve basic applied problems, particularly those arising in administrative science
- An improved ability to read, write, speak, and think in mathematical terms