Math 267 – Calculus for Business, Economics, and Accountancy I Syllabus – Fall 2015

This is a generic syllabus for reference for all sections of Business Calculus 1. For an instructor-specific copy, please see your Blackboard course.

TEXTBOOK & SOFTWARE

Text: <u>Essential Calculus with Applications</u> (Second Edition) by Wright, Hurd, New; ISBN: 0-918091-95-0 **Software (Required):** Hawkes Learning Systems, Essential Calculus.

COURSE OBJECTIVES

The purpose of this first course in Business Calculus (Math 267) is to master derivatives and their applications, particularly with respect to business, economics and accountancy. Students should be able to take derivatives, and use the first and second derivative tests for optimization problems. Students should also have a firm understanding of profit, cost, revenue, and price functions and how they relate.

HOMEWORK

There is no required "homework" in the traditional sense in this course. Calculus is not a spectator sport; it requires active participation and <u>PRACTICE</u>. You can "study", and you can "review"; however, above all else, you must <u>PRACTICE</u>. The assignments that have been created for each section of material are intended to prepare you for the quizzes and tests. They are <u>VERY</u> useful and powerful tools, as the tests, quizzes, and final exam will be built from these assignments. It is suggested that you do <u>ALL</u> of them. However, rather than being penalized for not doing homework as in most courses, in this course you will be rewarded with <u>BONUS POINTS</u> for completing the assignments. Of course, if you neglect to do these assignments, you will most likely be penalizing yourself with lower test scores due to being unprepared.

- There will be a total of nineteen (19) homework assignments during the semester.
- In addition to those above, there will be seven (7) "algebra refresher" assignments available for credit.
- Homework assignments must be submitted by the posted deadlines (see course calendar) to receive credit.
- Read through the "Learn" mode of each section (see the PowerPoint and watch the video on HawkesTV!).
- Work through the "Practice" mode of each section (utilize the tutor tab when needed!).
- When you have gone through "Learn" and "Practice," complete the assignment in the "Certify" mode.
- You should keep a "homework" notebook of all problems worked.
- In order to receive credit for homework it must be done in CERTIFY MODE.
- Questions will be similar in format to the examples in class.
- Homework assignments will be done using Hawkes Essential Calculus Software, and may be completed at the location
 of your choice (Home, JAC Lab, Library, Weir Hall, etc.).
- Each assignment is an "all or nothing" proposition. That is, you have to answer each and every question in an assignment correctly in order to "Certify" and receive credit for that assignment.
- You have an unlimited number of attempts at each question as long as you do not accept a "Strike."
- Accepting a "Strike" for an incorrect answer in the "Certify" mode will force you to restart the assignment from the beginning, so always select "Try Similar Question" after an incorrect response.
- Note that simplification of expressions, fractions, etc. is not required, though proper mathematical notation is required.
- Your homework average can add up to five (5) percentage points to your overall course grade.

QUIZZES

- You must complete the COURSE AGREEMENT CONTRACT in Hawkes (from any computer) before you have access to quizzes, practice tests or tests.
- There will be a total of nine (9) quizzes during the semester (two per test cycle plus a cumulative review quiz).
- Please see the course calendar for sections covered and submission deadlines.
- Quizzes will be taken using Hawkes Essential Calculus Software in the Jackson Avenue Center Mathematics Lab.
- Quizzes DO NOT need to be scheduled.
- You must scan in to take a quiz and scan out when you leave.
- Quizzes have a seventy-five (75) minute time limit and are open note/open book.
- You will be allowed two (2) attempts per quiz, with only your best score recorded.
- Tutors in the Jackson Avenue Center Mathematics Lab CANNOT help you on quizzes.
- Questions will be similar in format to the examples in class and homework problems.
- Note that simplification of expressions, fractions, etc. is not required, though proper mathematical notation is required.
- Quizzes must be completed by the posted deadlines to receive credit.
- Your quiz average will count as 15% of your overall grade.
- If a quiz is missed for ANY reason, a grade of zero (0) will be given.
- THERE ARE NO MAKE-UP QUIZZES GIVEN FOR ANY REASON.
- At least one quiz grade will be dropped.
- Quiz passwords:
 - o Quiz 1: Quiz1
 - o Quiz 2: Quiz 2
 - o Quiz 3: Quiz 3
 - o Quiz 4: Quiz4
 - o Quiz 5: Quiz 5
 - o Quiz 6: Quiz 6
 - o Quiz 7: Quiz 7
 - o Quiz 8: Quiz 8

PRACTICE TESTS

A practice test will be created for each of the semester tests as well as for the final exam. Like the "homework," these practice tests are <u>VERY</u> useful and powerful tools. Each test will be built <u>directly</u> from its respective practice test. It is suggested that you work <u>EACH</u> of them prior to the test. In addition to gaining essential practice, you will receive <u>BONUS</u> <u>POINTS</u> based on your practice test scores.

- There will be a total of five (5) practice tests during the semester.
- Practice tests are untimed (you should time yourself to get used to a clock—about 90 minutes should be the max).
- Questions will be similar in format to the examples in class, homework, and quizzes.
- Practice tests will be done using Hawkes Essential Calculus Software. Practice tests may be completed at the location of your choice (Home, JAC Lab, Library, Weir Hall, etc.).
- You have an unlimited number of attempts for each test, with only your best score recorded.
- Note that simplification of expressions, fractions, etc. is not required, though proper mathematical notation is required.
- Please see the course calendar for due dates/times. Submission must be made by deadlines for credit.
- Your practice test average can add up to five (5) percentage points to your overall course grade.

TESTS

- There will be four unit (4) tests during the semester.
- Please see the course calendar for sections covered and dates.
- Tests will have a one-hour (60 minute) time limit.
- Questions will be similar in format to the examples in class, homework, quizzes, and the practice tests on Hawkes.
- Tests will be taken using Hawkes Essential Calculus Software in the Jackson Avenue Center Mathematics Lab.
- You must make an appointment to take a test at http://ummathlab.appointy.com/.

- During the testing week, class will only meet on Monday for a MW class and on Tuesday for a TTh class.
- You will schedule your appointment to take the test on the Wednesday through Friday of that week.
- You must have your access code to take a test. <u>Email your access code to your Ole Miss email only.</u> NO WRITTEN ACCESS CODES or PHONES will be allowed in the testing area.
- You must check your phone before entering the testing area. Having a phone out <u>for any reason</u> will be considered cheating.
- You must arrive at the correct answer to receive credit. Partial credit will only be awarded in rare circumstances.
- Note that simplification of expressions, fractions, etc. is not required, though proper mathematical notation is required.
- Each test will count as 15% (for a total of 60%) of your overall grade.
- If a test is missed for ANY reason, a grade of zero (0) will be given.
- THERE ARE NO MAKE-UP TESTS GIVEN FOR ANY REASON.
- Any student who must miss a scheduled test because of an official University function must reschedule and take the
 test at a time <u>BEFORE</u> the test is scheduled to be given (this includes the final exam). <u>NO OTHER</u> rescheduling will be
 allowed. Signed documentation on University letterhead is required.
- The lowest of the four major test grades will be replaced with final exam grade at the end of the semester if and only if the final exam grade is higher.

FINAL EXAM

- There will be a comprehensive final exam in this course.
- There will be a two-hour (120 minute) time limit on the final exam.
- The final will be taken using Hawkes Essential Calculus Software in the Jackson Avenue Center Mathematics Lab.
- You must arrive at the correct answer to receive credit. Partial credit will only be awarded in rare circumstances.
- Note that simplification of expressions, fractions, etc. is not required, though proper mathematical notation is required.
- The final exam will count as 25% of your overall grade.

DEADLINES

The exact dates of all deadlines can be found on the course calendar on Blackboard and on the Hawkes Progress Report (www.hawkeslearning.com/umissesc). Listed are the times of those deadlines.

- Tests must be completed by 5:00 p.m. on Friday of test weeks.
- Homework must be submitted by 8:00 a.m. Wednesday of the testing week. That is, test 1 material homework is due by 8:00 a.m. on the Wednesday of test 1 week, test 2 material homework is due by 8:00 a.m. on the Wednesday of test 2 week, and so on for tests 3 and 4. No late homework is accepted.
- The "algebra refresher" sections must be submitted by 8:00 a.m. on the Wednesday of test 1 week to receive credit.
- Practice tests are to be completed by 4:00 p.m. on Friday of test weeks (Practice test 1 during test 1 week and so on for practice tests 2-4). The practice final exam is due by Friday at 2:00 p.m. during finals week.
- See the course calendar for quiz due dates.

ATTENDANCE POLICY

Please note that all MWF classes will only meet on Monday and Wednesday other than the week of Labor Day. We will only meet on Friday in the case of an unforeseen closure earlier in the week.

It is the philosophy of both the Department of Mathematics and the University that regular class attendance is conducive to learning and mastering the material. We suggest attending each and every class; however, we realize that this is an unrealistic expectation of some students. Attendance in this class will be <u>recorded</u> for information purposes, and it will be <u>reported</u> to the University as per policy. However, there is no punitive attendance policy in this course, and thus your grade will not be explicitly reduced due to your number of absences. Please understand that there is often material that presented in class that is not presented elsewhere, and you are responsible for <u>ALL</u> material presented in class. Consider this when making the decision to not attend a lecture. Attendance will be recorded using the automated attendance scanners located in the classroom. Attendance will be taken by scanning your student ID card on one of the scanners in the classroom. Students must make sure that the screen says "Scan Successful" when they scan their ID. Keep in mind that the scanner beeping does not give any indication on whether or not a scan was successful. Students may scan in to class beginning 10 minutes before class and no later than 5 minutes after the start of class. Students can view their absences and scan logs at

attendance.olemiss.edu. Please note students <u>are not</u> allowed to scan for other students. Also, scanning in and leaving before the end of a lecture will not be tolerated. If you are not going to be able to stay for an entire lecture, then do not scan in. Any attempt at attendance fraud will be reported to the University, and appropriate actions will be taken. Note: As per the new university policy dictated by federal guidelines, students who do not attend within the first two weeks may be administratively dropped from the course.

JACKSON AVENUE CENTER MATHEMATICS LAB

- The Mathematics Lab is located in the Jackson Avenue Center complex on Jackson Avenue (the Malco complex). All quizzes, tests, and final exams must be taken at the Jackson Avenue Center Mathematics Lab. In addition, the lab is open to students for homework, practice tests, general studying, and tutoring (except during testing periods).
- The lab is for math coursework only. No other work is allowed! This includes coursework for other classes, email, internet browsing, cellphone conversations, or texting.
- Please see http://mathlab.olemiss.edu/ for more information about the Math Lab.
- If you do not have a commuter or park & ride parking sticker, you may utilize the OUT Shuttle (Brown Line). Please see http://www.oxfordms.net/visitors/transit/bus-routes-a-schedules.html.
- Each student is required to bring his or her Ole Miss ID card to the lab. Students are required to scan in with their cards upon entrance to and exit from the lab so that that their times are recorded in the computer system. It is the responsibility of the student to swipe in and out properly. Students must pick their class on the scanner screen after scanning their id card. Absolutely no cell phones are allowed in the Math Lab!
- Math Lab Hours: Monday-Thursday 9:00am-7:00pm; Friday 9:00am-5:00pm
- Testing at the Math Lab: Students in this course will take their tests via computer in the Mathematics Lab at the Jackson Avenue Center. Tests will run on Wednesday, Thursday, and Friday on test weeks. In order to take a test, students must schedule an appointment. The lab will not accept walk-ups. Test scheduling is done at http://ummathlab.appointy.com/. Note that you must use your olemiss edu email address when you register. In order to avoid disturbing other test takers, students MUST be on time for their appointment (10 minutes early would be better). If a student is more than 5 minutes late, their appointment will be cancelled and they will not be allowed to enter the lab. The student will then have to go back to http://ummathlab.appointy.com/ and reschedule their test.
- If you need assistance scheduling or rescheduling in appointy, email mathlab@olemiss.edu.
- Quizzes do not need to be scheduled.
- The final exam will be available Monday-Friday of finals week, and the hours of availability will be announced at a later date.
- Help/tutoring will be available Wed-Fri on test weeks in Hume 326 during the posted Math Lab hours.

CALCULATORS

You will be provided a TI-30XS Multiview calculator for tests. You may also use the Windows calculator or SpeedCrunch (http://www.speedcrunch.org/) installed on the computer. MO OTHER calculator may be used during testing. It is suggested that students familiarize themselves with one of these calculators before taking the first test.

ELECTRONIC DEVICES

Cell phones, laptops, pagers, and other electronic devices <u>shall be silenced and stowed during lectures</u>. **The instructor** reserves the right to remove any student caught using these devices during a lecture.

THE FOLLOWING IS THE POLICY OF THE DEPARTMENT OF MATHEMATICS REGARDING CHEATING:

Offenses: Cheating on any exam or quiz, theft or attempted theft of exam questions, possession of exam questions prior to the time for examination, the use of a cell phone, or the use of a personal calculator on tests shall all be offenses subject to appropriate penalties. Furthermore, the presence of any mathematics (review tests, etc.) during tests shall be subject to the appropriate penalty.

Penalties: The penalty for commission of any offense set out above is a zero (0) on the exam in question, and a recommendation of failure in the course to the Academic Discipline Committee. Furthermore, if you are found guilty of cheating, then the penalty could also include, subject to the approval of the Chancellor, dismissal or suspension from the University. Please note that any grade of zero (0) given for cheating <u>will not</u> be replaced if the Academic Discipline Committee does not follow the recommendation of course failure.

WITHDRAWAL DEADLINE

Monday, October 5th is the course withdrawal deadline. After the Course Withdrawal Deadline, courses dropped will be recorded on University records, and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise the grade recorded will be an F. After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergency <u>as determined by the academic dean</u>; dropping a course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student is changing his or her major.

SPECIAL NEEDS

It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (915-7128) in 234 Martindale Center. SDS will then contact the instructor through the student by means of an "Instructor Notification of Classroom Accommodations" form. The instructor will then be happy to work with the student so that a reasonable accommodation of any disability can be made.

Important Note: If you receive accommodations for tests you must provide a copy of the "Instructor Notification of Classroom Accommodation" form to not only your instructor, but also the Jackson Center Mathematics Lab. A mailbox at the main desk is provided for submitting these forms. Ask the desk worker if you need help submitting the form. To receive accommodations on tests, the forms must be submitted to the Mathematics Lab <u>no later than 5:00pm on the Friday before a test week begins</u>.

OTHER NOTES

- If a student wishes to discuss the grading policy, the testing policy, or wishes to have any conversation regarding the instructor of the course, please make an appointment with the course supervisor in the Department of Mathematics.
- An "I" grade will not be given without the permission of the Department of Mathematics.

OVERALL GRADE

The following scale will be used to determine your overall grade.

Grade	Percentage Necessary
Α	93
A-	90
B+	87
В	83
B-	80
C+	77
С	70
D	60
F	Below 60

To calculate your grade:

Percentage = 0.6*(Test Avg.) + 0.15*(Quiz Avg.) + 0.25*(Final Exam) + 0.05*(Homework Avg.) + 0.05*(Practice Test Avg.)Where Test Avg. = (Add the 4 highest of the tests and Final Exam) \div 4

A LAST WORD

- Keep up! You will need to be comfortable with the material from the beginning of the course to be successful in the end.
- Try reading the sections ahead of time to get an idea of the material before class. After class, read back over the section for understanding and work through "Practice."
- Make use of all of the resources provided within Hawkes and on Blackboard (such as videos and PowerPoints).
- You can stop by anytime during office hours or email to set up an appointment at another time. Help will be much more
 effective if you know what it is that you don't understand, and if you bring specific questions!
- When communicating via email, please include your course (Math 267 or BCal1) and the days/time your class meets.
- All emails will be answered within one (1) business day. I reply to emails at various times throughout the day, but I generally do not reply after 5:00 p.m. (nor on weekends).

Course ID: UMISSESC

To install the Hawkes Learning Systems software (PC or MAC), navigate to the following web page (or see Blackboard!): http://support.hawkeslearning.com/supportcenter/index.php?/article/AA-00281/

The software is installed at the Weir Hall Computer Lab. Business Calculus students are welcome to use Weir Hall during their extensive operating hours. The schedule is posted at http://www.olemiss.edu/itlabs/

STEPS TO FOLLOW AFTER RECEIVING A CERTIFICATION CODE:

- After saving the lesson, select the quit option.
- If you do have internet access, you should receive a message that the certificate has been successfully submitted to the instructor's grade book. Check your progress report (www.hawkeslearning.com/UMISSESC) to ensure that the earned points have been entered in the grade book.
- If you do not have internet access, you will have to submit the certification code later ... directions given below.
- If the earned points fail to appear in the progress report, you need to resubmit the saved certification code before the due date to get full credit.

If you do not have internet access and Certify offline, you will need to electronically submit your certification codes to the instructor's grade book:

- Go to www.hawkeslearning.com/UMISSESC and log in using your access code.
- Choose the <u>Submit Certificate(s)</u> tab at the top of the page.
- Browse to find the saved certificate if you saved it and click Submit Certificate.

Please read the following in case it happens to you!

Q: I didn't save my certificate to a file and my instructor won't allow me to type the certificate from the Progress Report. How can I get credit for my work?

A: Backup copies of all completed certificates are located in the "Hawkes Learning Systems" folder in the folder "My Documents" on the computer used for the work. Open your Progress Report, click Submit Certificates, and click the Load from File tab. Browse to the folder mentioned above and choose the lesson to be submitted. Click the Submit Certificate button to register the appropriate certificates.

Other common questions and solutions can be viewed at the link: www.hawkeslearning.com/PC Support.htm

- o Students may submit a request for technical assistance by visiting the above link.
- o The technical support office is open Monday Friday from 7:30am until 4:30pm (central time)
- Students may call (843) 571-2825 to receive assistance with the software.
- Students may also email their office: support@hawkeslearning.com

HAWKES HW ... MORE IMPORTANT INFORMATION!

- Submit certificates ON or BEFORE the due date (by 10:00am) to get credit for each assignment.
- It is the student's responsibility to make sure that the earned points from doing the HW lessons are recorded in their Hawkes progress report (and therefore in the instructor's grade book).
- Instructors will only accept certificates that are electronically submitted to their grade books. Printed certificates or handwritten codes will NOT be accepted.