

Class Information and Policies Math 160, Fall 2016 - Ludwick

Professor: Kurt Ludwick, 108 Devilbiss Hall, keludwick@salisbury.edu, 410-543-6549.
Office Hours: MTWF 10:00-11:50 AM (or by appointment)

Course Textbook: “Applied Calculus for the Managerial, Life, and Social Sciences: A Brief Approach,” by Tan; Brooks/Cole, Cengage Learning, 10th edition, custom edition with WebAssign.

Calculator: A TI-83/84 (or comparable) is required. (There will be some test questions for which it’s assumed you have access to a graphing calculator.)

Class Meeting Times: This class will meet Mondays, Wednesdays, and Fridays.

- Section 509 meets 9:00-9:50 AM in Henson 115
- Section 507 meets 1:00-1:50 PM in Henson 113

Exam Dates: All dates except the final exam are tentative; any changes will be announced in class.

- Test #1: Friday, September 23
- Test #2: Friday, October 21
- Test #3: Friday, November 11
- Test #4: Friday, December 9
- Final Exam: Depends on which section you are in:
 - Section 509 (9AM class): Wednesday, December 14, 10:45AM-1:15PM, Henson 115
 - Section 507 (1PM class): Friday, December 16, 1:30-4:00 PM, Henson 113

Attendance: While attendance will not be factored directly into your grade, it is expected that you will attend all class meetings, with exceptions due only to circumstances beyond your control. When circumstances prevent you from attending class, please let me know as soon as possible. In particular, if you must miss a test date, I may (at my discretion) allow you to make up the test outside of class if you let me know about your absence at your earliest opportunity. (Note that missing a test, while undesirable, will not *directly* lower your semester grade – see “grading policy” below.)

Grading Policy:

We will be using a “mastery based” grading system in this course to determine your exam score (which will count for 80% of your semester average).

The “mastery based” grading system is based on your performance on 18 specific problem types (listed in the Math 160 Study Guide), which we will refer to as “mastery topics.” During the semester, you will have several opportunities (on tests and quizzes) to demonstrate “mastery” of each of these topics. The workings of this system are described in more detail on the following page; however, by way of introduction, the following bullet list briefly outlines a few of its most important aspects:

- For each type of problem, you will have *several opportunities* to demonstrate “mastery”
- You will *only* receive credit for a correct and thorough solution (mastery) of a problem
- Once you’ve earned mastery credit for a topic, it’s yours to keep for the rest of the semester

- In this system, mistakes are not penalized; to the contrary, they are to be regarded as opportunities to learn. (*"The only real mistake is the one from which we learn nothing."* - Henry Ford)

Exams: Each exam will be cumulative, and will include one problem for each of the mastery topics we have covered in class up to that point. So, the first exam will consist of (approximately) 5 problems, one for each of the first 5 mastery topics. The second exam will consist of (approximately) 10 problems – the first five of these will be variations on the first five problems on the first exam, while the other five problems will be new. In a similar manner, the third exam will consist of (approximately) 14 problems, and the fourth exam and the final exam will both consist of 18 problems. There will also be weekly quizzes to allow for further attempts at each type of problem.

(Note: The number of problems on each exam will depend on what we've actually covered by the time of the exam. The numbers used above may not turn out to be exactly correct, but they'll be close.)

On each exam problem that you attempt, you will receive one of three grades – "M," "I," or "B," which stand for "Master," "Intermediate," and "Beginner," respectively:

- "Master" means you have demonstrated a full and deep understanding ("mastery") of the topic.
- "Intermediate" means you have demonstrated some understanding, but have not yet fully mastered the topic. You will likely benefit from spending some more time studying the topic.
- "Beginner" means you have demonstrated only a minimal understanding of the topic. You are not yet close to mastery, and so you will probably need to spend a lot more time studying this topic in order to achieve mastery.

Mastery of a question earns you full credit for the corresponding mastery topic; you do not earn any credit for any other grade. There is no "partial credit" under this system. If you fail to master a topic on the first try, you may attempt a problem on that topic again on subsequent tests and/or quizzes until you have achieved mastery.

NOTE: Once you have mastered a topic, you have credit for it forever; you never need to attempt it again for the rest of the semester! This means *you* will need to *keep track* of which topics you have mastered, so that you don't spend time working on problems you don't need to do.

Quizzes: In addition to the four exams, there will be weekly quizzes (on weeks when no exam is given). Each quiz provides an opportunity for you to demonstrate mastery of *one* mastery topic. These quizzes are optional – in fact, you will only be *allowed* to take a quiz if you notify me beforehand of which mastery topic you would like to attempt. (I will need the advance notice in order to print out the specific quiz questions that will be needed for that day.) You may choose to attempt a question corresponding to *any* mastery topic we have covered (or at least introduced) in class up to the date of the quiz.

Again: quizzes are optional, in that there is no penalty for skipping a quiz (other than missing out on an opportunity to display mastery).

Why “Mastery Based” Grading?

This method of arriving at a course grade may seem unusual, but it has several advantages over a standard, points-based grading system. One of these is that, as mentioned earlier, you will have several chances to display mastery of each topic. Once you have displayed mastery of a topic, there is no need to attempt problems on that topic on any subsequent exams or quizzes. It is entirely possible that, if you work hard during the semester and perform well on exams and quizzes, you may only have to do one or two problems on the final exam. In fact, it is theoretically possible that a few students will earn “A” grades without even have to take the final exam at all!

This system emphasizes three important notions:

- a) *Learning* from mistakes (*without* being penalized for them!)
- b) Working out problems *correctly* and *thoroughly*, rather than trying for “just good enough” to get some partial credit. (As a reminder – there is no partial credit under this system!)
- c) Finding out what parts of the course you *really* understand, and which parts you need to spend more time working on. (Note that “spend more time working on” *can*, and *should*, include visits to my office hours, supplemental instruction sessions, and/or departmental tutoring – any or all of which you are *strongly encouraged* to take advantage of!)

Details on how your semester grade will be computed (based on your exam score and homework score) are given in the “Evaluation” section below.

If, at any point during the semester, you are uncertain about how you are doing in the class, please do not hesitate to ask – I will be happy to help you to determine where you stand at any time.

Homework: There will be frequent homework assignments administered online via WebAssign. Cumulatively, homework will count for 20% of your semester average.

WebAssign assignments will be given on each section of the textbook that we cover in class. Once we introduce a section in class, the corresponding WebAssign assignment will be made available online. You will be allowed several (though not unlimited) attempts at each problem. Your homework score will be based on the average of your assignment scores, with a few of the lowest scores “dropped” from the calculation. (For example, if we end up with, say, 24 homework assignments, your homework score may be based on the average of your best 20 assignment scores.)

An important benefit of these assignments is that they provide you with timely and accurate feedback, so it’s okay to try problems multiple times. In particular, finding problems that particularly challenge you will help to indicate content areas where you need to spend more time. You are welcome and encouraged to ask about such problems by email, in class, or out of class (office hours, SI sessions, or department tutors).

More information on WebAssign, including instructions on how to register, can be found through the “Homework” link on the class web page.

(Note: I *may* elect to give a few written homework assignments, in addition to the online assignments. Grades on these assignments, if any, will be incorporated into your homework score in a manner similar to scores on online assignments.)

Evaluation

Your semester average will be the sum of your test score (out of 80 points possible) and your homework score (out of 20 points possible). Grade cutoffs are: at least 90 points for an A, 80 for a B, 70 for a C, 60 for a D.

Test score: Your test score (out of 80 points possible) will be determined by the following table:

| | | | | | | | | | | | | | |
|------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Number of topics mastered | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Test score (out of 80 poss.) | 40 | 43 | 47 | 50 | 53 | 57 | 60 | 63 | 67 | 70 | 73 | 77 | 80 |

(Note: it will not be possible to pass the course without mastering at least six topics.)

Homework score: This will simply be your homework percentage divided by 5. For example, a 100% homework percentage is worth 20 points; an 80% is worth 16 points, etc.

For example: Suppose Ruby ends up with 14 topics mastered, and gets an 80% average on her WebAssign homework. From the test score table, we see that 14 mastery credits are worth 67 points; for the homework score, we have $80/5 = 16$ points. So, her total would be $67+16=83$ points, which is good for a B grade for the semester.

One more example: Suppose Bob ends up with 13 topics mastered, but only gets a 25% average on his WebAssign homework. From the test score table, Bob's test score is 63 points; his homework score will be $25/5=5$ points. So, his total would be $63+5=68$ points, giving him a D for the semester. (Notice that Bob could easily have earned a C by spending just a little more time on the homework!)

If, at any point during the semester, you are uncertain about how you are doing in the class, please do not hesitate to ask – I will be happy to help you to determine where you stand at any time.

Grade Notification

I intend to periodically post grades on MyClasses. To find out where you stand in the course, consult MyClasses or (preferably) come to my office to discuss your grades confidentially. At the end of the semester, I intend to post final exam and course grades on MyClasses as soon as quickly as possible.

Academic Integrity

Unless specifically instructed otherwise, you are to do your own work on all tests, homework assignments, and quizzes. A student who is caught cheating on any graded assignment will receive a zero on that assignment, and may (at my discretion) receive an F for the course as well. If you receive an F for the course due to academic misconduct, you will not be permitted to withdraw to avoid the F on your grade report. For more details, please read the University policy on academic misconduct: <http://www.salisbury.edu/provost/AcademicMisconductPolicy.html>

Electronic Device Policy

Any device capable of receiving calls, text messages, etc. is to be turned off and kept out of sight during class meetings - particularly during tests. (Note that this means you cannot use such a device as your calculator during a test.)

Computers and/or tablets *may* be used during class meetings (except during tests, at which time they are prohibited). Any such use during class must be appropriate to the classroom environment

(e.g. taking notes, or finding a web page that is relevant to current class discussion). If your activity is inappropriate and/or distracting to any of your classmates, then you will be asked to discontinue using your device for the rest of the class meeting.

Repeated violations of this policy may result in a grade penalty, at my discretion.

Supplemental Instruction

A supplemental instruction (SI) leader, Jacob Adkins, has been assigned to this course. Jacob took Math 160 last fall and was very successful in the course, earning an "A" grade. He will attend class meetings and organize out-of-class study sessions during the semester, which you are strongly encouraged to attend. Please feel free to talk to me or to Jacob for more information about the SI sessions.

Tutoring

Free one-on-one tutoring is available from our departmental tutors in the "Math Emporium," room 201 of the new Academic Commons. No appointment is necessary! For more information, visit the Tutoring Center page at <http://www.salisbury.edu/mathcosc/TutoringCenter.html>, or drop by the Math Emporium to see the posted schedule.

(Note: Due to the ongoing work in the academic commons, tutoring at the start of the semester will be located in Henson 117. I'll let you know when the tutors have moved to their new home in the Math Emporium.)

Disability Support Services

If you require an accommodation in this course due to the effects of a documented disability, contact me as soon as possible to arrange for a meeting to discuss accommodations. In particular, see me For further information on Salisbury University's disability accommodations, visit the Disability Support Services website: <http://www.salisbury.edu/students/dss/>.

Henson School Course Repeat Policy

This course is subject to the Henson School Course Repeat Policy. The short version of this policy is that a student is allowed only two attempts (the original, plus one repeat) for any Henson course without special permission. For more details, visit the Henson Course Repeat Policy page at http://www.salisbury.edu/henson/advising/course_repeat_policy.html .

If you have any questions about the class policies or about the course in general, please send me an email or drop by my office to ask. In particular, please address any questions or concerns about the class policies during the drop-add period (i.e. the first week of classes).

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