Math 120 – Quantitative Reasoning
Syllabus – Spring 2017

Instructor: Kelvin Holmes
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Office: Hume Hall 222
Office Hours: MWF 9:00 – 9:50
TTH 12:00 – 12:50

SOFTWARE (REQUIRED): Hawkes Learning Systems, Viewing Life Mathematically

The software will be provided to you free of charge this semester by agreement with the software publisher.

COURSE DESCRIPTION

This is a semester course in Quantitative Reasoning. Topics include set theory, statistical reasoning, logical statements and arguments, personal business applications, estimations, and approximation.

COURSE OBJECTIVES – STUDENTS WHO SUCCESSFULLY COMPLETE MATH 120 WILL BE ABLE TO:

- Using Polya's problem solving steps in estimation
- Using deductive reasoning in estimation
- Estimating using graphs
- Develop an understanding of set operations
- Use Venn Diagrams to represent sets and solve problems with sets
- Solve problems involving survey analysis
- Construct truth tables and statements using logic symbols
- Determine the validity of formal arguments
- Identify common fallacies in arguments
- Distinguish between sampling techniques
- Interpret different types of graphs
- Calculate numerical descriptors of data, such as measures of center, variance, and standard deviation
- Create a budget
- Calculate sales prices and discounts
- Calculate percentage increase/decrease
- Calculate simple and compound interest
- Understand present and future value
- Understand savings plans
- Calculate annual percentage yield, monthly payments, and credit card payments

HOMEWORK

An applied math course is not a spectator sport; it requires active participation and repetitive **PRACTICE**. You can "study," you can "review," and you can watch someone do examples; however, above all else, you must **PRACTICE**. The homework assignments that have been created for each section of material are intended to prepare you for the unit tests. They are **VERY** useful and powerful tools, as the unit tests will be built from these assignments. It is suggested that you do **ALL** of them not just for the points that they contribute to your overall grade, but also to maximize your test scores!

- You must complete the "COURSE AGREEMENT CONTRACT" in Hawkes (from any computer) before you have access to any homework assignment, quiz, practice test, or test.
- Homework is assigned for each section covered (16 total), and will count as 8% of your overall grade.
- Please see the course calendar for due dates. All homework is due by the start of the testing dates for that unit.
- Read through the "Learn" mode (or the eBook for a deeper presentation) of each section (watch the videos!).
- 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 for your review and for potential questions.
- In order to receive credit for homework, it must be done in the "CERTIFY" mode.

- Each "Certify" assignment contains the same question set as the respective "Practice."
- Questions will be similar in format to the examples in class.
- Homework assignments will be done in web-based Hawkes. Homework can be completed at any location of your choice (Home, JAC Lab, Library, Weir Hall, etc.).
- Each assignment is an "all or nothing" proposition. You must answer 80% of the questions in an assignment correctly in order to "Certify" and receive credit for that assignment.
- You have 2 attempts at each question before it is considered a "Strike."
- Accruing more "Strikes" than allowed in the "Certify" mode will force you to restart the assignment from the beginning.
- Assignments must be submitted by 11:59pm on the posted due date to receive full credit.
- Late homework incurs a 25% penalty.
- Assignments can still be completed up until the Sunday before finals, late penalty still being applied.
- Any non-submitted homework assignment will be given a grade of zero (0).
- At least one homework scores will be dropped.

REVIEW TESTS

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

- There will be a total of seven (7) practice tests during the semester.
- Please see the course calendar for due dates/times.
- 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 taken in web-based Hawkes.
- Practice tests can 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, achieving mastery to get full credit.
- Practice tests must be submitted by the posted deadlines to receive credit.
- Your practice test average can add up to a total of three (3) percentage points to your overall course grade.

Quizzes

- There will be a total of eleven (11) quizzes during the semester (three per test cycle—plus one).
- Quizzes have a sixty (60) minute time limit.
- You will be allowed two (2) attempts per quiz; only your best score is recorded.
- You have the ability to review the first attempt before using the second attempt.
- Questions will be similar in format to the examples in class and homework problems.
- Quizzes can be taken at a place of your convenience.
- Tutors in the Jackson Avenue Center Mathematics Lab CANNOT help you on quizzes.
- You must arrive at the correct answer to receive credit; partial credit will only be awarded in rare circumstances (and only if you use both attempts).
- Quizzes must be completed by the posted deadlines to receive credit.
- Your quiz average will count as 12% 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

.TESTS

- There will be four (4) unit tests during the semester.
- Tests will have a one-hour (60 minute) time limit.
- Please see the course calendar for sections covered and dates.

- Questions will be similar in format to examples in class, homework, quizzes, and the practice tests on Hawkes.
- Tests will be taken in web-based Hawkes in the Jackson Avenue Center Mathematics Lab only.
- You must arrive at the correct answer to receive credit; partial credit will only be awarded in rare circumstances.
- Each test will count as 13.75% (for a total of 55%) 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 due to an official University function must reschedule and take the test at a time BEFORE the test is scheduled to be given (this includes the final exam). NO OTHER rescheduling will be allowed. Signed documentation on University letterhead is required.
- The lowest of the four unit 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.
- The practice final will be built from the four unit tests AND quizzes. The final will be built from the practice final.
- There will be a two-hour (120 minute) time limit on the final exam.
- The final will be taken in web-based Hawkes in the Jackson Avenue Center Mathematics Lab only.
- You must arrive at the correct answer to receive credit; partial credit will only be awarded in rare circumstances.
- The final exam will count as 25% of your overall grade (38.75% if higher than the lowest unit test grade).

ATTENDANCE POLICY

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, and as such, we suggest attending each and every class; however, we realize that this is an unrealistic expectation of some students. The attendance policy for this class is as follows:

- Students are allowed a cumulative total of five (5) absences without penalty.
- Students who accumulate more absences than allowed will have one (1) percentage point deducted from their final average for each absence above the limit.
- There is no such thing as an "excused" absence, other than having to miss class for an official University function.
- If you must miss due to an official University function, then you must inform the instructor beforehand, and documentation must be provided by the convening authority.
- It is the student's responsibility to make sure that their attendance record is correct.
- This class meets twice a week (either M/W or T/Th) for a fifty (50) minute lecture.
- The M/W classes will meet on W/F of Labor Day week.
- The remaining fifty (50) minutes comes from the weekly quizzes.
- Classes do not meet on the second day of classes (Wed or Thu) of test weeks.
- Failure to take a quiz or a test will result in an absence for that week.
- Note: Students who do not attend within the first two weeks of the semester may be dropped from the roll!

- 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 no earlier than 10 minutes before and no later than 5 minutes after class starts. Students are only allowed to scan for themselves. Scanning for others, as well as scanning and leaving prior to class being dismissed are considered to be attendance fraud. If you are not going to be able to stay for an entire lecture, then do not scan in. Random checks will be made to ensure that physical attendance matches the scan log. Attendance (and identity) fraud is a form of academic dishonesty (cheating). Academic dishonesty charges will be filed with the Academic Discipline Committee against students engaging in fraud. Students can view their absences and scan logs at attendance.olemiss.edu.

MATHEMATICS LAB (JAC)

- The Mathematics Lab is located in Room A01 of (to the left after you enter the main entrance) the Jackson Avenue Center complex on Jackson Avenue (the Malco complex).
- All 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. You will be asked to leave if you violate these rules.
- Please see http://mathlab.olemiss.edu/ for more information about the Math Lab.
- The Jackson Center parking lot is one of the "Park and Ride" lots. This means that students with other parking decals (such as dorm/fraternity/sorority decals) will not be able to park at the Jackson Center until after 5pm. UPD will give tickets if students with other decals park in the lot before 5pm.
- 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. The Brown Line runs every 5-10 minutes between JAC and Paris-Yates Chapel. Other stops are Guyton Hall and the ROTC building.
- 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 scan in and out properly. Students must pick their class on the scanner screen after scanning their id card. You must scan for each entry/exit—including restroom breaks, checking phone, etc.
- Absolutely no cell phones, laptops, or food are allowed in the Math Lab!
- Math Lab Hours: Monday-Thursday 9:00am-7:00pm; Friday 9:00am-5:00pm

TESTING

- Students in Math 120 will take all tests in Hawkes in the Mathematics Lab at the Jackson Avenue Center.
- Tests will run on Wednesday, Thursday, and Friday on test weeks during regular lab hours.
- 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.
- For assistance with scheduling/rescheduling, email: mathlab@olemiss.edu.
- 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 appointy and reschedule their test.
- **Cell phones must be turned off and stowed during tests.**
- Help/tutoring in the Math Lab will be available Wed-Fri during test weeks at an alternate location to be announced.

CALCULATORS

A scientific calculator is sufficient for this course. We suggest the TI-30XS Multiview calculator. Graphing calculators are not allowed in this course as well as any calculator with Computer Algebra System and/or a QWERTY key board. This includes, but is not limited to, TI-89, TI-92, Casio Algebra FX 2.0, and TI Multi-View calculators. Note that calculators might not be allowed on certain tests.

ELECTRONIC DEVICES

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

ACADEMIC MISCONDUCT

The following statement 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 possession 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 will not be replaced if the Academic Discipline Committee does not follow the recommendation of course failure.*

WITHDRAWAL DEADLINE

Friday, March 3rd 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 **as determined by the academic dean**; 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 not only to your instructor, but also to 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 no later than 5:00pm on the Friday before a test week begins.

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.

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 my office hours or email me 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 from lecture or from Hawkes!
- When communicating via email, please include your course and the days/time your class meets.
- All emails will be answered within one (2) business days. I reply to emails at various times throughout the day, but I generally do not reply after 7:00 p.m. (nor on weekends).

OVERALL GRADE

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

Grade	Percentage Necessary
A	90 – 100%
A−	88 – 89.99%
B+	86 – 87.99%
B	80 – 85.99%
B−	78 – 79.99%
C+	76 – 77.99%
C	70 – 75.99%
C-	68 – 69.99%
D	60 – 67.99%
F	0 – 59.99%

Where Test Avg. = (Add the 4 highest of the tests and Final Exam) ÷ 4

Percentage = 0.55*(Test Avg.)   + 0.25*(Final Exam) + 0.20*(HW Avg.) +0.05*(Practice Test Avg.)

Student Directions

Instructor Name: Kelvin Holmes

Section Name: Math 110 – Section (choose correct section)

Create Your Hawkes Account
Go to **learn.hawkeslearning.com** and click **New User** to create an account.
1. An Access Code will be given to you in class.
   Enter you Access Code in the New User Setup page.

2. Fill out the form with your information or confirm the preloaded information.
3. Set your password, time zone, and security questions.
4. Add a profile image.

Enroll in Your Course
Select your instructor and section from the drop-down menus and click **Enroll**.
You are now ready to complete assignments for this course!

Explore Your Course
Watch the Video Tour located under the profile menu to learn more about Hawkes.
- The **Dashboard** includes your course information and the mini To-Do List.
- The **To-Do List** shows you when you need to complete homework or take a test.
- The **Navigation Toolbar** contains links to important tools such as your grades, eBooks, the notifications center, and messages.

Complete Your Homework
Each lesson involves three phases: Learn, Practice, and Certify. Use Learn and Practice to learn the concepts and work out practice problems. When you feel confident in the material, move to Certify to complete your homework.
For additional help, go to **http://www.hawkestv.com** to watch videos on every lesson.

Get Help
If you have any questions about registering your email address and password, enrolling in your course, or using the site, please contact Hawkes Technical Support.

Phone:	800.426.9538
Phone Hours:	Monday - Friday, 8:30am - 10:00pm ET
Online Chat Support:	**http://www.hawkeslearning.com/chat**
Chat Hours:	24 hours a day, 7 days a week
Technical Support Email:	**support@hawkeslearning.com**