

Math 121 – College Algebra Syllabus – Spring 2017

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

SOFTWARE (REQUIRED): College Algebra: A Concise Approach, Hawkes; ISBN: 9781941552773

The ISBN above is for the required Software + eBook Bundle. The eBook (digital textbook) and software are good for life. **DO NOT** purchase a used License Number or Access Code (from other students or online vendors), as License Numbers and Access Codes are registered to the original purchaser only. You **should not** download and install anything; follow the instructions on Blackboard for enrolling in the Hawkes portion of the course. For those who may want a “physical” book, it is suggested that you use either: *College Algebra, 2nd Edition*, by Paul Sisson; ISBN: 9781932628272, or *College Algebra: A Concise Approach*, by Paul Sisson; ISBN: 9781935782025. Both of these are usually under \$10 on Amazon.

COURSE DESCRIPTION

This is a 23-section course in Algebra; coursework and testing are entirely online. Topics include linear, quadratic, higher-order, rational, radical, exponential, and logarithmic equations. Other topics consist of linear inequalities, rational inequalities, the algebra of functions (including polynomial, rational, exponential, and logarithmic functions), the graphs of some of these functions, and systems of equations in two variables.

COURSE OBJECTIVES – STUDENTS WHO SUCCESSFULLY COMPLETE MATH 121 WILL BE ABLE TO:

- Simplify, add, subtract, multiply, and divide rational expressions, as well as simply complex rational expressions.
- Solve linear, rational, and radical equations in one variable.
- Solve quadratic and higher order polynomial equations using a variety of methods; graph these functions.
- Write the equation of a line in various forms, as well as find slope, intercepts, and graph linear equations.
- Evaluate, combine, compose, and find inverses of functions; determine the domain of a function.
- Divide polynomials using long division and synthetic division.
- Find equations of vertical, horizontal, and oblique asymptotes of a rational function.
- Solve linear, polynomial, and rational inequalities in one variable.
- Solve logarithmic and exponential equations; solve application problems with exponential functions.
- Set-up and solve systems of equations in two variables using the substitution and elimination methods.

HOMEWORK

Algebra 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 (23 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 class on the due date.
- 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!).
- **You must attempt at least 60% of “Practice” before you can access “Certify.”**
- 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, you must complete “CERTIFY.”**
- 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 approximately 85% of the questions in an assignment correctly in order to “Certify” and receive credit for that assignment.**
- You have four attempts at each question before it is considered a “Strike.”
- **Accruing more “Strikes” than allowed in “Certify” will force you to restart the assignment from the beginning.**
- Assignments must be submitted by the start of class on the posted due date to receive full credit.
- Late homework incurs a 10% per-day penalty, up to 5 days.
- Assignments can still be completed after 5 days, but no credit will be given.
- Any non-submitted homework assignment will be given a grade of zero (0).
- The lowest two homework scores will be dropped.
- There are six assignments (1.1, 1.2, 1.3a, 1.4a, 1.4b, 1.5) that are “bonus” homework assignments. These sections cover pre-algebra skills that are not taught in this class, but they are skills that you should be very familiar and comfortable with. You are **strongly** encouraged to do these assignments (especially the factoring)! Completion of these assignments can add up to 2% to your overall course grade. The deadline for receiving full credit for these assignments is the day before the first test (see the course calendar).

QUIZZES

- There will be a total of thirteen (13) quizzes during the semester (three per test cycle—plus one).
- Quizzes have a fifty (50) 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 may be taken from any location (Home, JAC Lab, Library, Weir Hall, etc.).
- 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.**
- The lowest quiz grade will be dropped.

PRACTICE TESTS

A practice 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 five (5) 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 practice test, with only your best score recorded.
- Practice tests must be submitted by the posted deadlines to receive credit.
- Your practice test average can add up to a total of two (2) percentage points to your overall course grade.

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 14% (for a total of 56%) 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** Quiz 13. 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 24% of your overall grade (38% 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 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.

JACKSON AVENUE CENTER MATHEMATICS LAB

- 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, quizzes, 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 (except for testing) so 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 AT THE JACKSON AVENUE CENTER MATHEMATICS LAB

- Students in Math 121 will take all tests in web-based 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](http://ummathlab.appointy.com/) and reschedule their test.
- Unit Test 1: Wednesday-Friday, February 15-17, covering sections 2.1a, 2.2, 2.3, 2.4, 2.5, and 2.6.
- Unit Test 2: Wednesday-Friday, March 8-10, covering sections 3.2, 3.3, 3.4, 4.1, 4.5, and 4.6.
- Unit Test 3: Wednesday-Friday, April 5-7, covering sections 4.2a, 5.1, 5.2, 6.1a, and 6.1b.
- Unit Test 4: Wednesday-Friday, April 26-28, covering sections 7.1, 7.2, 7.3, 7.4, and 7.5.
- The final exam will be available Mon-Fri of finals week (May 8-12), and the hours of availability will be announced at a later date. The final exam will cover all sections above **AND** section 8.1.
- **Cell phones must be checked with the lab attendant prior to entering the testing area.**
- Tutoring will be available Wed-Fri on test weeks in the Hume 326 Math Lab (10-6 on Wed/Thu & 10-5 on Fri). **No tutoring will be available at JAC during test weeks!**

CALCULATORS

You will be provided a TI-30XS Multiview calculator for tests. You may also use the Windows installed on the lab computers. **NO OTHER** calculator may be used during testing. Calculators will be available to use in the lab for homework/quizzes/practice tests, and tutoring if you need one. 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 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.
- It is suggested that you read through the sections prior to class to get an idea of the material to be covered on a given day. 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 your attempts at 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 (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).

OVERALL GRADE

The following scale will be used to determine your overall grade (a perfect score in this course is 104 with max bonus):

Grade	Percentage
A	90 – 100
A-	88 – 89.999
B+	86 – 87.999
B	80 – 85.999
B-	78 – 79.999
C+	76 – 77.999
C	70 – 75.999
C-	68 – 69.999
D	60 – 67.999
F	Below 60

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

Percentage = $0.56 * (\text{Test Avg.}) + 0.12 * (\text{Quiz Avg.}) + 0.24 * (\text{Final Exam}) + 0.08 * (\text{HW Avg.}) + 0.02 * (\text{Bonus HW Avg.}) + 0.02 * (\text{Practice Test Avg.})$

Please note that there will not be a curve, nor will there be any “grade bumps” in this course!