

Course Information Sheet

Course: Math 151-01 - College Algebra - 4 Credit/Contact Hours - Fall 2015

IAI Code: None

Delivery Mode: Face-to-face

Meeting Time: MW 8:00am-9:40am

Meeting Place: Room 3290

Instructor: Steve Kifowit, Rm 2305, Ph. (708) 709-3954

Email: skifowit@prairiestate.edu

Web: <http://stevekifowit.com>

Office Hours: MW 12pm-1pm, TTh 11am-12:30pm, or by appointment

Text: *College Algebra*, (2012); Paul Sisson

Course Description: This course extends on the concepts previously studied in Intermediate Algebra. Course material is approached both algebraically and graphically. The graphing calculator is used extensively. Topics covered include linear, quadratic, polynomial, rational, exponential, and logarithmic functions and their applications. This course uses the Hawkes Learning Systems.

Course Prerequisite: Math 095 (Intermediate Algebra) and Math 096 (Geometry) with C's or better, or equivalents.

Course Goals/Objectives:

Upon successful completion of this course, students will be able to:

- 1.) Solve various types of equations including linear, quadratic, polynomial, rational, exponential, and logarithmic equations.
- 2.) Sketch the graphs of functions.
- 3.) Perform the operations of addition, subtraction, multiplication, division, and composition of functions.
- 4.) Demonstrate an understanding of the concepts related to functions and their inverses.
- 5.) Solve linear, quadratic, polynomial, and rational inequalities.
- 6.) Solve application problems involving functions.
- 7.) Use matrices to solve systems of linear equations.
- 8.) Use the graphing calculator as an aid in the problem solving process.

Attendance Policy: Regular class attendance is an essential component of successful learning. Students are responsible for prompt attendance and participation in all class meetings. If you miss class, you will not be allowed to make up any tests, quizzes, or past-due assignments that you may have missed. All material covered in class is the student's responsibility.

Grading: Your grade will be based on your performance on three 100-point tests, a 150-point final exam, approximately ten 10-point quizzes, and twenty sections of 10-point homework assignments. Very roughly, tests count for about 40% of your grade, the final exam counts for about 20%, quizzes count for about 13%, and homework counts for about 26%. The grading scale is as follows:

- A --- 90% and above
- B --- 80% - 89%
- C --- 70% - 79%
- D --- 60% - 69%
- F --- below 60%

You may estimate your current grade at any time during the semester by computing the following percentage: $100\% * (\text{Total points accumulated}) / (\text{Total points possible})$. Please feel free to discuss your grade with me at

any time during the semester. Throughout the semester, grades will be posted in your Hawkes gradebook.

Homework: Homework problems, via the Hawkes Learning Systems software, will be assigned and due a regular basis. Homework points will be awarded on an all-or-nothing basis at 10 points per homework section. The full 10 points will be awarded per homework section for each assignment certified. **Keep up to date with the homework!** You may not be allowed to certify assignments that are past due.

Tests/Exams: Test problems will be similar to class examples, quiz problems, and homework problems. Some of the test problems may be multiple choice or writing problems, but you should mostly expect computational problems. Partial credit may be awarded on any type of problem, but only for correct work. You must work individually on all tests. No make-up tests will be given. At the end of the semester, your lowest test score will be replaced by two-thirds of your final exam score (if this helps you).

Quizzes: Be prepared for a ten-point quiz on each Wednesday (unless a test is scheduled). No make-up quizzes will be given. All quiz work is to be done on an individual basis unless otherwise stated. At the end of the semester, your lowest quiz score will be dropped.

Final Exam: The final exam is comprehensive and will be worth 150 points toward your final grade. See the lecture pace for the date of the final exam.

Calculators: The TI-83/84 Graphing Calculator (or equivalent) is required for this course. We may also make use of computer algebra systems such as Wolfram-Alpha or Maxima.

Disability Statement: Any student needing to arrange reasonable accommodations for a documented disability (learning, physical, psychological, or other) should contact the Disability Services Office (Room 1192).

Religious Observance Accommodation: Prairie State College is required to excuse students who need to be absent from class, examinations, study, or work requirements because of their religious beliefs, and provide students with a make-up opportunity, unless to do so would unreasonably burden the institution. Students must notify their instructor well in advance of any absense for religious reasons. If you require special accommodations for observance of a religious holiday, please notify me during the first week of the term.

Misc. information:

- 1.) The last day to withdraw from the course is November 6. For refund information, refer to the fall schedule book. If you wish to withdraw from the course, it is your responsibility to do so. Any student who does not come to class, yet fails to withdraw, will be given the FW grade.
- 2.) You are expected to spend roughly 12 hours per week on coursework - 4 hours in class and 8 hours out of class. If you cannot make this commitment, you may want to reconsider taking this course.
- 3.) The grading scale will be strictly adhered to! Final percentages will be rounded to the nearest whole number.
- 4.) This is a fast-paced course! We will cover much material in little time. You are responsible for keeping up with the assigned material.

Course information, including tests, quizzes, and answer keys, can be found at <http://stevekifowit.com/classes/m151.htm>



Lecture Pace

Math 151-01 - College Algebra

Week 1	Aug 17 & Aug 19	Course information; Sections 4.1, 4.2	Course information; Intro to functions
Week 2	Aug 24 & Aug 26	Sections 4.2, 4.3	Linear, quadratic, and other common functions
Week 3	Aug 31 & Sep 2	Sections 4.4, 4.5	Operations on functions
Week 4	Sep 9	Section 4.6	Inverse functions
Week 5	Sep 14 & Sep 16	Review; Test 1	
Week 6	Sep 21 & Sep 23	Sections 5.1 5.2	Zeros and graphs of polynomials, Polynomial division
Week 7	Sep 28 & Sep 30	Sections 5.3, 5.4	More on polynomial zeros, Fund Thm of Algebra
Week 8	Oct 5 & Oct 7	Review/Catch-up; Section 6.1	Rational functions
Week 9	Oct 12 & Oct 14	Review; Test 2	
Week 10	Oct 19 & Oct 21	Sections 7.1, 7.2	Exponential functions and applications
Week 11	Oct 26 & Oct 28	Sections 7.3, 7.4	Logarithmic functions and applications
Week 12	Nov 2 & Nov 4	Section 7.5; Review/Catch-up	Exponential and logarithmic equations
Week 13	Nov 9 & Nov 11	Review/Catch-up; Test 3	
Week 14	Nov 16 & Nov 18	Sections 8.1, 8.2	Linear systems and applications
Week 15	Nov 23 & Nov 25	Section 8.2	Matrices, Gaussian elimination, RREF
Week 16	Nov 30 & Dec 2	Review/Catch-up	
*****	Tuesday, Dec 8	Final Exam --- 1pm-2:50pm	

*** November 6 is the last day to withdraw ***