

COLLEGE ALGEBRA

Course Outline

This syllabus gives a detailed explanation of the course procedures and policies. You are responsible for all of this information, and should ask your instructor if anything is unclear.



PREREQUISITES

This is not a beginning algebra course. The course presumes that the student has attained a B or better in Intermediate Algebra, or has an ACT math score of 22 or better, or has an equivalent level of preparation. Units 1 and 2 review the prerequisite material.



RESOURCES

The course materials packet *College Algebra Units 1-5* (Hawkinson) is available through Varney's Bookstore. I will give you a CD which includes the Course Info, Textbook, and Sample Quizzes.



CALCULATOR

You will need a calculator with exponential and logarithmic capabilities, typically designated as "scientific" and having some combination of y^x , \wedge , $\ln x$ and **LN** keys. A TI-30X IIB(S) is suggested. A graphing calculator is acceptable, but not required.



STUDY

Each class meeting will have lecture/discussion over topics as listed in the course schedule. A *Lecture Outline* for each lecture can be found in the course packet. The text for the course is on the course CD, and is designed to be read carefully by the student after the corresponding class presentation. These are then reinforced by the homework assignment. Question and Answer (Q&A) days are scheduled on a regular basis to provide assistance with the homework and course material. Please feel free to contact me in my office, by phone or by e-mail.



HOMEWORK

The homework questions for each lesson are located in the course packet; these should be done in the space provided in a neat, organized manner, and turned in for a grade when the quiz for the unit is given. Each lesson *Exercises* set is worth 6 points. The homework for each lesson includes an *Investigation*, which is an extension of the lesson designed to help the student think independently about a selected topic. Each Investigation is worth 4 points. SHOW WORK - no credit will be given for answers only. Late homework submitted within one week after the due date will receive half credit.

NOTE that the homework comprises 46% of the final course grade.



COMPUTER WORK

You will need to have access to a computer with a modern web browser to complete the readings and applications for the course. A graphing utility is also included on the

course CD to show the impact of current technology on the study of mathematics. To use the CD, open the file `index.html` .



QUIZZES

You should plan on taking a quiz over each unit as listed in the course schedule. Each quiz is worth 30 points toward your final course grade. Two quizzes may be taken for a better grade during the class meetings listed in the course schedule.



SAMPLE QUIZZES

A sample quiz for each unit is available in an interactive computer format on the course CD. The help files are particularly useful in reviewing the unit material. Note that these samples are meant only for practice, not an iron clad representation of a Unit Quiz.



GRADING

The total points possible for the course are as follows.

Quizzes (5@30 points)	150 points	
Homework (23@6 points)	138 points	
Investigations (23 @ 4 points)	92 points	
Final Exam	<u>120 points</u>	
	500 points	Total

A final course grade will be assigned according to the scale below.

A	450 to 500 points
B	400 to 449 points
C	350 to 399 points
D	300 to 349 points
F	less than 300 points



TIME REQUIREMENTS

Any 16 week course in a quantitative subject such as this requires a great deal of time investment on your part. Please be prepared to spend at least 8 hours per week studying for this course.



COURSE WEB PAGE

Announcements / Info / Frequently Asked Questions (FAQ)
<http://www.math.ksu.edu/~dph/math100pilots.html>



POLICY NOTES

⇒ If you have any condition (e.g. physical or learning disability) which will require academic accomodations, please notify the instructor.

⇒ Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper, or project, failure in the course and/or expulsion from the University.

Dale P. Hawkinson	dph@math.ksu.edu
KSU - Holton 101E	(785)532-5386 office
Manhattan, KS 66506	(785)539-3377 home

COLLEGE ALGEBRA Spring 2008

DATE	LEC.	UNIT	LES.	TOPIC
Jan 18				Orientation
Jan 21		NO	CLASS	M. L. King Holiday
Jan 23	1	1	1	Polynomials
Jan 25	2	1	2	Factoring
Jan 28	3	1	3	Algebraic Fractions
Jan 30	4	1	4	Linear Equations & Inequalities
Feb 1	5	1	5	Linear Graphs and Systems
Feb 4				Q&A
Feb 6				Quiz 1
Feb 8	6	2	1	Roots and Fractional Exponents
Feb 11	7	2	2	Quadratic Equations
Feb 13	8	2	3	Polynomial Equations
Feb 15				Q&A
Feb 18	9	2	4	Root and Fractional Equations
Feb 20	10	2	5	Solving Equations Using Graphing Technology
Feb 22				Q&A
Feb 25				Quiz 2
Feb 27				Return Quiz 2
Feb 29				Retake - Quiz 1 or 2
Mar 3	11	3	1	Functions
Mar 5	12	3	2	Functions & Word Problems
Mar 7		No	Class	DPH out of town
Mar 10				Q&A
Mar 12	13	3	3	Functions & Variable Inputs
Mar 14	14	3	4	Functions & Graphs
Mar 17-21		No	Class	Spring Break
Mar 24	15	3	5	Interpreting Graphs
Mar 26				Q&A
Mar 28				Quiz 3
Mar 31	16	4	1	Linear Functions & Models
Apr 2	17	4	2	Quadratic Functions & Models
Apr 4				Q&A
Apr 7	18	4	3	Polynomial Functions & Models
Apr 9	19	4	4	Rational Functions & Models
Apr 11				Q&A
Apr 14				Quiz 4
Apr 16	20	5	1	Exponential Functions
Apr 18	21	5	2	Logarithmic Functions
Apr 21				Q&A
Apr 23	22	5	3	Exponential & Logarithmic Equations
Apr 25	23	5	4	Exponential & Logarithmic Models
Apr 28				Q&A
Apr 30				Quiz 5
May 2				Q&A
May 5				Retake - Quiz 3 or 4 or 5
May 7				Final Exam Outline
May 9				Q&A
May 16				Final Exam - 11:50am - 1:40pm