COLLEGE ALGEBRA

MATH 105, SPRING 2012 - SECTION #38925 (4 UNITS)
TUES & THURS, 8:00 AM – 9:50 AM, BLDG. 21, ROOM 157

INSTRUCTOR

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Office Hours	MTWTh 7:15 AM – 7:40 AM Wed & Thurs 10:00 AM – 11:15 AM

COURSE

DESCRIPTION

This course covers factoring; radicals and rational exponents; rational expressions; solutions of linear, quadratic, and polynomial equations and inequalities; absolute value equations and inequalities; graphing relations and functions; solutions of systems of equations; exponential and logarithmic functions; conics; partial fraction decomposition; complex numbers; binomial theorem, determinants and matrices of any order; arithmetic and geometric progressions; and proof by mathematical induction.

PREREQUISITES

Math 90 with a grade of "C" or better, or by eligibility by placement on the VVC assessment exam. You may be asked to provide proof that you have met this prerequisite. Acceptable forms of proof include (but not limited to) VVC Assessment Test results, WebAdvisor or MicroGrade printout, or prerequisite challenge approval.

TEXTBOOK / MATERIALS

COLLEGE ALGEBRA, 2ND EDITION, BY JOHN W. COBURN.

Choice #1: Purchase ALEKS-360 online for $80, tax included. The e-book is included.

Choice #2: Purchase ALEKS-360 from VVC bookstore for $109.60 plus tax (same as choice #1, but you can use your financial aid for the purchase). The e-book is included.

Go to "www.aleks.com/sign_up" and enter the Course Code: **GKWP4-VCHPY**. If you have an access code which you purchased at the bookstore (choice #), enter it. Otherwise, click on "purchase an access code online" link (choice #1). Choose the 18-week option.

The 2-week financial aid code for this course is **CF5D5-CCD27-C19AA-49041**. Note that it **does not** give add an additional two weeks to your course. You will need to extend your account BEFORE the end of the two weeks.

HOW TO STUDY AND WORK IN THIS CLASS

LECTURE NOTES:

Download your notes for each unit at either of my websites listed above. If you miss a class meeting or wish to hear a lecture again, you may watch the corresponding lecture(s) online. If you wish to obtain a filled-in copy of any day's notes, denote it on the class sign-in sheet. You will then be sent the lecture notes electronically through Aleks. If you are absent for a lecture, you will have to watch the video(s) on your own to fill in the notes.

USING ALEKS:

Obtain your text as described above. When you arrive at the ALEKS web site, take 15-20 minutes to follow the orientation. After that, take the initial assessment. **This is the most important test you will take in the class, as it will determine your starting point in Aleks**.

Next, go to the "My Pie" tab within the ALEKS website. **Work as many of the problems in the light blue** *(Algebra & Geometry Review)* **pie slice that you can** <u>first</u>, *as these are mainly review topics that you should have mastered before starting into the first chapter's homework. Aleks has artificial intelligence built into it and will give you a customized set of problems to work based upon your personal needs. It will only allow you to do problems that you are ready for. If there are prerequisite skills needed before learning a new problem type, it will make you learn those skills first. As you are ready to study additional topics, they will appear in your pie.*

<u>*After*</u> *you have filled in as much of the light blue review PIE slice, you have a choice...*

You may opt to skip all of the optional homework exercises and work only on your PIE topics, or... You may choose to work on the homework in an attempt to earn extra points on your next test (see explanation in the Homework area below).

The only deadline for completion of your PIE is the end of the semester, and it is worth 260 points! The dotted lines in the PIE will act as a guide through the course, suggesting how to pace yourself, but they do not denote specific deadline by which you have to complete the PIE topics.

BOOK ACCESS:

Your e-book may be accessed by clicking on the e-book icon at the top of the Aleks screen. You can highlight and type notes to yourself.

GRADING

Your final grade will be determined as follows:

Aleks Test Ch 1 _____/100
Aleks Test Ch 2 _____/100
Aleks Test Ch 3 _____/100
Aleks Test Ch 4 _____/100
Aleks Test Ch 5&6 _____/100
Aleks Test Ch 7 _____/100
Aleks Test Ch 8 _____/100

Written Final _____/100
Written Final _____/100

Aleks Pie _____/260

Grade Scale:

A: [88,100)
B: [78,88)
C: [70,78)
D: [65,70)
F: [0, 65)

CHAPTER TESTS

No notes may be used on any test. Any test not taken will be regarded as a zero. Chapters 5 & 6 will be tested together and count as a single test. Your lowest test score (or half your final exam) will be dropped prior to computing your semester grade. If you miss two tests on one exam day, your final exam score will replace the second missing test; subsequent missed tests will be regarded as a zero.

HOMEWORK

Practice is essential. You will also be responsible for filling in the appropriate pieces of your ALEKS pie. Chapter "deadline suggestions" denoted by dotted lines on your ALEKS pie will be posted to mark your progress through the course. At the end of the semester, the percentage of your pie which you have completed will count 260 points toward your grade. Do not fall too far behind in your ALEKS pie work, as ALEKS will assign you material sequentially.

In addition to the Aleks Pie work, you may **choose** to work homework exercises which correspond to sections in your text. For each chapter of optional homework you complete, any points beyond 85% will be added to the test covering those particular chapters. (For example, if you have an overall average of 90% on the homework in chapter 4, 5% will be added to the exam covering that chapter. If your average were to be 95%, 10% would be added.)

ALEKS PIE COMPLETION

After completing the homework for each chapter, start working on the PIE to get extra practice. The dotted lines within the PIE will help you pace yourself through the material and let you know when you have completed the PIE topics which correspond to each chapter.

Every time you complete 20 topics or spend 10 hours working, ALEKS will reassess your progress on material you have recently worked on in order to verify whether you have mastered the material or not (unless it is within 24 hours of a scheduled exam). You may find that it will skip you forward or drop you backward based on the answers you enter.

If you get stuck on a particular problem while working in your ALEKS pie, hitting the explain button may increase the number of exercises you need to get right to complete each topic. Instead, hitting the explain button while you are in the *homework* section of the course will not penalize you. This will also bring up the option to access and save your textbook for further help.

Taking good notes while working through your ALEKS pie will give you valuable examples to look at when you are given periodic assessments *(BUT YOU MAY NOT USE YOUR NOTES DURING AN EXAM!)*.

CALCULATORS

Non-graphing, non-programmable calculators may be used in this class. Aleks will make a graphing calculator available to you on problems which will require that technology.

POLICIES

SCHOLASTIC DISHONESTY

While students may work together on the researching of any assignment, it is expected that each of their writing assignments reflect substantial individual effort. Any student who commits plagiarism or is found to have cheated on a scheduled exam is subject to a zero score for that specific exam which may result in a term grade of "F" for this course. Students should be aware that cases of cheating and/or plagiarism will be forwarded to the appropriate college administrator promptly. The college administration has a range of sanctions that may be imposed including, but not limited to, academic suspension or expulsion from the college.

ATTENDANCE

You are required to attend class every day. After 4 hours of absence, you may be dropped from this class. It is your responsibility to keep your enrollment status current. You risk an "F" if you stop attending without officially withdrawing. Do not bring friends or children to class. Please turn any cell phones or pagers to silent mode during class time. No cell phones will be allowed on your desk during exams. We are here to learn; please refrain from texting during class.

Class attendance is not a measure of performance or proficiency. Whether a student is just physically present in the class is not a valid basis for grading. Reference Title 5 Section 55002 of the California Code of Regulations: (A) Grading Policy. The course provides for measurement of student performance in terms of stated course objectives and culminates in a formal, permanently recorded grade based upon uniform standards in accordance with section 55758 of this Division. The grade is based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of written expression that may include essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.

STUDENT ACCESS

Students with special needs are encouraged to meet with instructors to discuss the opportunity for academic accommodation and be referred to disabled student program and services per Administrative Procedure (AP 3440).

If you have a learning disability or physical need that requires special accommodation, please advise me prior to 02-20-12 (the start of the second week of class).

MISCELLANY

ACADEMIC SUPPORT

You are strongly encouraged to get tutoring or go to the Math Lab, study in groups, and see me for help outside of class. All of these are free! Students that get help outside of class are typically much more successful than those that do not.

Regular Math Lab hours are:

Monday-Thursday   12:45 PM – 9:00 PM

The Math Lab is located in room 21-157 (in the Advanced Technology Center). Outside of those hours, please go to the information booth at the east end of the Tech building to sign in for tutoring help.

My office hours are listed at the start of this syllabus. Appointments are also available if you are unable to meet me at those times.
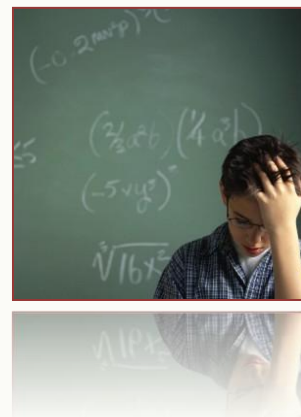
STUDENT LEARNING OUTCOMES

Upon completion of the course the student can:
1. Recognize, graph and compute zeros for polynomial, rational, radical, logarithmic and exponential equations.
2. Apply matrix algebra to determine the solution of a system of equations and inequalities
3. Apply concepts of analytic geometry to the conic sections.
4. Manipulate geometric and arithmetic sequences.

EXTRA CREDIT

No extra credit will be granted beyond the established grading scale. Note that the lowest-scoring chapter of both the chapter tests and homework will be dropped prior to computing the term grade. Also note that the homework and PIE completion portions of your grade are fully within your control, based upon your effort.

VVC SPRING CALENDAR

SPRING Term Begins	Feb 13
Lincoln Day Holiday (college closed)	Feb 17
College Closed (no classes)	Feb 18
Washington Day Holiday (college closed)	Feb 20
Last Day to Drop and still receive a "W"	March 30
Spring Break Holiday (college closed)	April 6
College Closed (no classes)	April 7
Spring Break (no classes - offices open)	April 9-13
College Closed (no classes)	April 14
Memorial Day Holiday (college closed)	May 28
Commencement	June 8
Spring Semester Ends	June 9

CLASS SCHEDULE

An effort will be made to adhere as closely as possible to this schedule. If we can ever "get ahead" of the pace, we will take the opportunity to do so, just in case we need extra time on other material, later in the course. Test dates are fixed, however. They will not change, regardless of our progress through the course.

		Sections to be Covered In Class			Sections to be Covered In Class
T	02.14	Aleks, Intro, 1.1	T	04.17	Review, 5.1
Th	02.16	1.2, 1.3, 1.4	Th	04.19	Test Chapters 3-4
T	02.21	1.5, 1.6a	T	04.24	5.2, 5.3
Th	02.23	1.6b, 2.1	Th	04.26	5.4, 6.1, 6.2
T	02.28	2.2, 2.3, 2.4	T	05.01	6.3, 6.4
Th	03.01	2.5, 2.6	Th	05.03	Review
T	03.06	2.7, 2.8	T	05.08	Test Chapters 5-6
Th	03.08	Review	Th	05.10	7.2
T	03.13	Test Chapters 1-2	T	05.15	7.3
Th	03.15	3.1	Th	05.17	7.4
T	03.20	3.2, 3.3	T	05.22	8.1, 8.2
Th	03.22	3.4, 3.5	Th	05.24	8.3, 8.4, 8.7
T	03.27	3.6. 3.7, 3.8	T	05.29	Review
Th	03.29	Review / Flex	Th	05.31	Test Chapters 7-8
T	04.03	4.1, 4.2, 4.3, 4.4a	T	06.05	Review
Th	04.05	4.4b, 4.5	Th	06.07	Final Exam (Aleks grade computed)

DEADLINES

Aleks Chapter	Dotted Lines Move	Homework Due Date	Approx. # of Topics Completed
1	02.29	03.13 at 8 am	50
2	03.21	03.13 at 8 am	113
3	04.04	04.19 at 8 am	160
4	04.25	04.19 at 8 am	198
5	05.01	05.08 at 8 am	218
6	05.11	05.08 at 8 am	231
7	05.23	05.31 at 8 am	251
8	05.31	05.31 at 8 am	260
Final		06.07 at 8 am	