

# COLLEGE ALGEBRA

## Math 1414

### Spring 2010 term II

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**TEXT:** College Algebra, Central Texas college edition, College Algebra taken from College algebra, fifth edition by Robert Blitzer and Intermediate algebra, fifth edition by Elayn Martin-Gay.

**CALCULATOR:** Any type of TI-83, TI-83 Plus or TI-84 Plus (required!) this is the calculator we use for lecture demonstrations.

**ATTENDING CLASSES:** Each student is required to attend at least 24 hours out of 32 hours total time of the course. A sign up sheet will be available in the class room. Exams problems will be based on examples given in lecture as well as on the homework.

**GRADING:** You may earn 650 points in this course: 50 points for attending the class, midterm exam, 150 points, 200 points on the comprehensive final exam, 100 points on the bi-weekly homework, 150 points on class work. Not doing homework or lack of attendance during recitation will lower your final letter grade.

**EXAM DATES:** Saturday May 01, 2010: Midterm Exam, 4:00 pm -5:30 pm.

Saturday May 29 2010: Final Exam, 3:30 pm -5:30 pm.

Place: Bldg 217 room 202.

**Missed Examinations:** If you miss or expect to miss any exam for a legitimate reason (for example, a serious illness), then notify the instructor as early as possible prior to the examination.

**STUDY ADVICE:** Students are expected to attend all classes. Missing class can seriously affect your course grade. It is essential that you attempt the homework problems **before** going to recitation. **Solve lots of problems**, this the best way to solidify your understanding of mathematics and to prepare for exams. If you find you can't do something **ask for help**. All the exam problems will be based on lecture examples and the homework, so it is important that you attend the lectures and take good notes. Do all of the homework and do not throw away the returned homework! Your old homework and lecture notes will help you prepare for exams.

### Spring 2010 term II College Algebra Assignments and Due Dates, Part 1(Tentative)

Date	Section	Topic	Textbook Practice problems	Homework problems	Due Date
Apr 03	5.1	Exponents, Polynomials, and polynomial functions	6, 10, 24, 27, <b>48</b> , 72, <b>75</b> , 98, <b>93</b> , <b>140</b>	5.1:62,96	Apr.17
	5.2	Polynomials, and polynomial functions	13, <b>21</b> , 24, 46, <b>47,82</b> , 107	5.2:55,22, 45	
Apr 10	5.3	Polynomials	13, 21, <b>30</b> , 32, 39, 42, 81, <b>82</b> , <b>99</b>	5.3:33, 100	
	5.4	Multiplying polynomials	6, 8, 10, <b>13</b> , 94, <b>105</b> , 106	5.4: 44, 80, 114	
Apr 10	5.5	GCF and Factoring by grouping	21, 26, 50, 58, <b>60</b> , 68, <b>93</b>	5.5:56, 77	
	5.6	Factoring trinomials	2, 6, 20, 22, 39, <b>48</b>	5.6:50,93	
Apr. 17	5.7	Factoring by special products	1, 3, <b>20</b> , 22, 32, 40, 48	5.7:45,40, 66.Apr 24	

### Spring 2010 term II College Algebra Assignments and Due Dates, Part 1(Tentative)

Date	Section	Topic	Textbook Practice problems	Homework problems	Due Date
Apr 17	5.8	Solving equations	3, <u>22</u> , 27, 79, 101, <u>102</u>	5.8:106,	Apr. 24
Apr 17	6.1	Rational functions and ...	<u>57, 70, 74, 75, 76</u>	<u>6.1:</u> <b>59, 83</b>	
	6.2	Adding and subtracting rational expressions	<u>48, 56, 58, 78, 91</u>	<b>6.2:92, 93,</b>	
Apr 24	6.4	Long division	18, <u>20</u> ,37, 39, <u>67</u> ,	6.4: 38, 84	May 1
Apr. 24	7.2	Rational exponent	7.2:36, 64, <u>72</u> , 78 BONUS -- Page 435: 66, 72	7.2:38,48,90	May 1
Apr. 24		Complex numbers			
May 1		<u>Mid-Term Review</u>			
		<u>Mid-Term Exam</u>	7.7:27, <u>103</u>	7.7:36,102	

### Spring 2010 term II College Algebra Assignments and Due Dates, Part 2

Date	Section	Topic	Textbook Practice problems	Homework problems	Due Date
May. 08	2.1	Basic Functions and graphs	24, 27, 48, 72, <u>79</u> ,98, <u>92</u>	2.1:62,96	May 15
	2.2	More Functions	13, <u>21</u> , 24, 46, 108	2.2:11,39, 45	
May. 08	2.3	Linear functions and slope	13, 21, <u>30</u> , 32, 39, 42, 81, <u>82, 83</u>	2..3:33,84	
	2.6	Combination of functions	6, 31, <u>33</u> , 94,83, <u>89</u>	2.6: 44, 80	
May. 15	3.1	Quadratic functions	21, 26	3.1:36,	May 22
	3.2	Polynomial functions and their graphs	2, <u>6</u> , 20, <u>22</u> , 29, <u>30</u>	3.2:26,30,	May 29
May. 22	3.3	Dividing polynomials	3.3:1, 3, 20, <u>22</u> , 39, <u>40</u> , 48	3.3:25,41, 49.	
	3.4	Zeros of polynomials	3.4:2, <u>3</u> , 9, <u>10</u> ,50, <u>51</u>	3.4:5, 11, 49	
May. 22	3.6	Polynomial and rational equations	3, <u>22</u> , 29, 53, <u>54</u> , 58, <u>59</u>	3.6:10,43, 60,	
May. 22	4.1	Exponential functions	17, <u>18</u> , 24, 40, <u>46</u>	<u>4.1:</u> 19, 47	May 29
May. 22	5.2	System of Linear equations in three	8, <u>10</u> , 17	5.1:16, 12.	May 29

## Spring 2010 term II College Algebra Assignments and Due Dates, Part 2

Date	Section	Topic	Textbook Practice problems	Homework problems	Due Date
		variables			
May. 22	6.1	Matrix solutions to linear system Complex numbers Advanced Calculator lesson	6.1:3, <u>6</u> , <u>13</u> , <u>14</u> , 21, 23, <u>27</u>	6.1:38,48,90	May 29
May. 29		<u><b>Final Exam Review</b></u>  <u><b>Final Exam</b></u>			May 29