Palomar College
Mathematics Department

Math 110
College Algebra
Class #: 30313
Room E-9
Tuesday & Thursday 12:00 a.m. – 1:50 p.m.
Spring 2007

Professor: Fari Towfiq
Phone: 744-1150, Ext. 2716
E-mail: ftowfiq@palomar.edu or fariheh@mailhost2.csusm.edu
Office: E11-M

Office Hours:

Monday 9:30 a.m. – 10:00 a.m.
3:30 p.m. – 4:00 p.m.
Tuesday 11:00 a.m. – 12:00 noon
Wednesday 10:00 a.m. – 11:00 a.m.
Thursday 9:00 a.m. – 9:30 a.m.
11:00 a.m. – 12:00 noon
Friday 10:30 a.m. – 11:00 a.m.

Math Center:

Monday 10:00 a.m. – 11:00 a.m.
4:00 p.m. – 5:00 p.m.
Tuesday 2:00 p.m. – 5:00 p.m.

Prerequisite: A minimum grade of “C” in Math 56 or math 60 or a passing score on the appropriate Placement Test

Textbook: College Algebra, 5th Ed.
David Cohen

Note: The textbook is mandatory for the course. Two copies of the textbook are available for Students’ use at the Math Center. If for some compelling reason you cannot buy the book right away, you should use the textbook at the Math Center. Otherwise you will fall behind in the class.
**Course Description:**
Study of the behavior and characteristics of functions from graphic, numeric, analytic and applied perspectives, including General polynomial functions, rational functions, exponential and logarithmic functions and sequences. Systems of equations in several variables with an emphasis in matrix solutions.

**Resources:**
1) Tutoring is available through the Mathematics Center (Room E2) and the Tutorial Center (the first floor of Library).
2) Student’s Solution Manual and Textbook are available for student use at the Mathematics Center.

**Expectations:**
- Attend class on a regular bases
- Participate in class discussion and activities.
- Take notes during class.
- Ask questions in class.
- Spend at least 2 hours outside of class in preparation for each hour in class.
- Read the textbook.
- Complete all homework assignments.
- Make sure you understand how to solve homework problems.
- Seek for help in a timely manner.
- Take all exams.

**Classroom Conduct:**
Class time is valuable.
Disruptive behavior such as talking, arriving late, leaving early, working on unrelated material, showing negative attitudes or facial expressions is not acceptable. Also, at all the times a student’s conduct and language is expected to be respectful to other students’ and the professor. If a student participate in any of these activities the student may be suspended or expelled from the class for the day or the semester.

**Grading Procedures:**
The course grade will be based on the following.

<table>
<thead>
<tr>
<th>Test</th>
<th>Chapter</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Test 1</td>
<td>Chapter 1, 2</td>
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<td>Test 2</td>
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<td>Assignments</td>
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<td>Final</td>
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**Calculator:** You need to have a graphing calculator (TI83, TI84 or equivalent).

**Make-up Test Policy:**
Make-up test is given on emergency bases.
If for some compelling reason you cannot take a test on the test day, you need to make an arrangement with me in advance.
If you do not take a test, you will receive a grade of “0” zero for that test.
**Note:** Your lowest test score will not be dropped.

**Academic Integrity:**
If a student is found cheating on an exam, he/she will receive a grade of “F” for that exam. If the student cheats for a second time, he/she will be dropped from the course and will receive a grade of “F” for the course.

**Cell Phones / pagers:**
Please turn off all cell phones and pagers before coming into class.

**Drop Policy:** Students may be dropped for excessive absences or failure to take examinations.

**Drop Dates:**
January 16 – February 14 without “W”
February 15 – March 10 with “W”

**Final Exam:** Thursday, May 17 from 12:00 a.m. to 1:50 a.m.
The final examination is comprehensive. Also, it is mandatory for all students in this class.
Fundamentals
Chapter 1, pages 1 – 74
Assignments:
Sec 1.1  13, 17, 21, 23, 31, 35, 39, 41, 45, 53, 57, 59
Sec 1.2  7, 11, 15, 17, 21, 25, 29, 33, 37, 39, 41, 45, 51, 55, 61
Sec 1.3  11, 13, 15, 19, 23, 31, 35, 39, 45, 49, 55, 59, 63, 67, 69, 71, 75
Sec 1.4  5, 11a, 12a, 14a, 17, 19, 29, 33
Sec 1.5  1, 3, 7, 9, 11, 17, 19, 21, 25, 27
Sec 1.6  1, 5, 11, 13, 15, 17a, 17b, 19, 23, 25a, 25c, 25d, 25e, 29, 31a, 33, 35, 49
Sec 1.7  1, 5, 7, 11, 17, 23, 39, 45, 49, 53, 55, 59

Equations and Inequalities
Chapter 2, pages 85 – 148
Assignments:
Sec 2.1  1, 7, 15, 23, 25, 29, 31, 33, 37, 39, 43, 45, 49, 57, 63
Sec 2.2  1, 5, 12, 15, 21, 29, 31, 45, 49, 55, 57, 67, 71, 77
Sec 2.3  1, 3, 5, 9, 11, 15
Sec 2.4  2, 6, 13, 17, 25, 27, 33, 35, 37
Sec 2.5  3, 7, 9, 15, 25, 31
Sec 2.6  1, 3, 9, 13, 19, 27, 29, 39, 43, 47, 49

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Functions
Chapter 3, pages 156 – 234
Assignments:
Sec 3.1  9, 15, 19, 23, 29a, 29f, 29h, 29k, 31, 32c, 32i, 32l, 32n, 33a, 33d, 35a, 35c, 38a, 38c, 51
Sec 3.2  1, 3, 5, 7, 9, 11, 12, 17, 23, 25, 29, 31a
Sec 3.3  3, 4, 5, 9, 11, 13, 16, 23, 25, 27, 33
Sec 3.4  1, 2, 3, 11, 17, 23, 25, 31, 35, 39, 41, 45, 49
Sec 3.5  1, 7, 9, 11a, 11c, 13, 21, 23, 27, 29c, 29d
Sec 3.6  3, 7, 9, 13a, 13b, 17, 25, 27, 29, 33
Sec 3.7  None

Polynomial and Rational Functions,
Applications to Optimization
Chapter 4, pages 251 – 354
Assignments:
Sec 4.1  1, 3, 5, 7, 9, 11, 16
Sec 4.2  5, 9, 13, 17, 21, 23, 27, 29, 37, 43
Sec 4.3  None
Sec 4.4  1, 3, 5, 7a, 7b, 8, 9, 13, 36, 47a
Sec 4.5  1, 3, 4a, 4c, 4d, 5, 7, 9a, 9c, 11, 13, 16, 18, 29, 21
Sec 4.6  5, 7, 11, 15, 25, 27, 31, 35, 37
Sec 4.7  1, 3, 5, 9, 13, 15, 17, 21, 27, 39, 41

----------------------------------------------------------Test 2----------------------------------------------------------
Exponential And Logarithmic Functions
Chapter 5, pages 363 – 456
Assignments:

Sec 5.1  11, 13, 15, 17, 19, 21, 25, 27, 29
Sec 5.2  11, 15, 17, 21, 35, 37, 39
Sec 5.3  9, 11, 17, 19, 21, 25, 27, 29, 53, 57, 61
Sec 5.4  1, 5, 9, 11, 13, 15, 17, 21, 23, 25, 27, 41, 43, 44, 45, 46, 49, 51, 53
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Systems of Equations
Chapter 6, pages 463 – 543
Assignments:

Sec 6.1  1, 7, 11, 21, 23, 29, 33, 36, 37, 51, 53
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Roots of Polynomial Equations
Chapter 7, pages 561 – 617
Assignments:

Sec 7.1  1, 3, 5, 9, 11, 17, 19, 21, 27, 29, 35, 41, 43, 45, 47, 49, 53, 57
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Sec 7.6  1, 3, 5, 11, 17, 19, 25, 29, 33
Sec 7.7  1, 3, 7, 9, 13, 17, 19
Sec 7.8  None

The Conic Sections
Chapter 8, Pages 636 – 645, 653 – 676
Assignments:

Sec 8.1  1, 5, 7, 11, 13, 15
Sec 8.2  None
Sec 8.3  1, 3, 7, 11, 13, 17, 19
Sec 8.4  1, 5, 9, 11, 15, 18, 20
Sec 8.5  None
# Roots of Polynomial Equations

Chapter 9, pages 700 - 741

Assignments:

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