Section Number: 33870
Class Meeting Information: Monday/Wednesday from 10:30 am until 1:00 pm in room U96
Instructor: Jane Francis
Office: SC 121
Office Hours: Monday: 7:00 – 8:00 am, 1:00 – 1:45 pm
           Tuesday: 3:40 – 4:25 pm
           Wednesday: 7:00 – 8:00 am, 1:00 – 1:45 pm
           Thursday: 3:40 – 4:25 pm
Phone: 714-628-4957 (leave voice mail message if no answer)
E-mail: francis_jane@sccollege.edu

Required Course Materials:
Scientific Calculator (or approved graphing calculator)
Graph Paper (required for all graphs on a rectangular coordinate system)

Course Description and Purpose:
The purpose of this course is to strengthen the algebra skills needed for success in future mathematics courses or courses requiring an algebra background, with emphasis placed on problem-solving and development of critical thinking skills. Topics covered include functions, systems of equations, inequalities, exponents and radicals, quadratic functions and equations, complex numbers, and exponential and logarithmic functions, with applications in almost every topic.

Math Department Student Learning Outcomes:
Upon completion of any course in Mathematics the student will be able to:
1. Create mathematical models of real world phenomena, apply those models to make predictions about the behavior of the phenomena, apply appropriate problem solving techniques, and critically evaluate the veracity of the obtained results.
2. Clearly communicate their mathematical reasoning and problem solving skills using a variety of formats, diverse technologies, and appropriate mathematical vocabulary and notation.
3. Integrate into educational and professional conduct a calm, confident, and ethical approach to mathematical reasoning and problem solving while taking personal responsibility for mathematical successes

Math 081 Student Learning Outcomes:
As a result of completing Mathematics 081, the student will be able to:
1. Read, define and apply algebraic and functional vocabulary and symbols
2. Evaluate and perform algebraic operations on rational, radical, exponential and logarithmic expressions
3. Set up and solve word problems involving quadratic, rational, absolute value, radical, exponential and logarithmic expressions
4. Graph linear, quadratic, absolute value and power functions, apply graphing transformations and find the equation of linear functions given appropriate information
**Prerequisite:**
Successful completion of Math 060 or Math 061 or equivalent skills as measured by a satisfactory score on the Math Level 2 Exam in combination with a course equivalent to Math 060 or Math 061 or above.

**Homework:**
In any math class, it is essential to get “hands on” experience with the concepts. One important way to accomplish this is by doing your homework. Homework is assigned at the end of each class meeting, and homework problems are due for discussion at the next class meeting. Since very little class time is available to discuss homework problems, it is strongly suggested that you get names, phone numbers, and e-mail addresses of other students in the class so that you can discuss homework among yourselves outside of class. It is also recommended that you go the Math Study Hall (U 80) to get help with homework questions.

Homework is to be done in **pencil or erasable pen** on full-size (either 8" by 10" or 8.5" by 11.5") **non-spiral** paper. Paper can be lined, unlined, or graph paper. The homework assignment number is to be written at the top of the first page for that assignment. All problems must be attempted and all work must be shown logically and neatly. You may write on both sides of the paper, if you wish, but **each new assignment must be started on a new sheet of paper**. Have your class notes and text in front of you when doing your homework and use them to help with similar homework problems. Particularly difficult problems may be worked out at the board during the next class after they are assigned.

Homework will be collected on the dates indicated on the attached time line. One section from those previously assigned will be chosen at random to be handed in. Each complete, properly done (see directions above) collected assignment is worth 5 points. At the end of the semester, the two collected assignments with the lowest points will be dropped. Late (any time after it has been called to be handed in on the due date) is not accepted.

**Tests and Final Exam:**
There will be four 100-point tests given on the dates indicated on the attached time line (instructor may change test dates and/or test content if needed). Twenty of the 100 points possible on Tests #2 through #4 will cover previously tested material. All tests must be taken in **pencil or erasable pen**. Tests must be taken on the indicated dates because **make-up tests are not given except for EXTREME emergency (must be officially documented)**. If you miss a test and instructor approves a make-up test, the make-up will be given at an arranged time determined by the instructor during the week of November 29th.

A week before each test, the instructor will provide students with a practice test review to be done outside of class. It is strongly recommended that students do the problems on the reviews multiple times in preparation for tests since there is no class time available for this. Practice test reviews will not be collected.

****If you have special test-taking needs, be sure to speak with instructor outside of class about this early in the semester. Students with verifiable disabilities who want to request academic accommodations are responsible for notifying instructor and Disabled Students Programs and Services (DSPS) as early as possible in the semester. To arrange for accommodations, contact DSPS by phone at 714-628-4860 or 714-639-9742 (TTY) or stop by the DSPS Center in E-105.

A comprehensive, departmental final exam will be given during class on Wednesday, December 8, 2010. **The final exam will not be given early to any students.** You will need a Scantron form #882 for part of the final exam.

Electronic dictionaries and cell phone calculators are not permitted during test time. Calculators cannot be shared during tests.
**Math Study Hall (MaSH):**

The MaSH is a service provided by SCC that gives you a chance to supplement learning done in the classroom. There will always be a math faculty member, instructional aides and student workers on duty to assist you when needed. There are also computers where you can access mathematical software to help with concepts. Attendance is tracked through the sign-in computer. When you enter MaSH, you will slide your student ID card or type in your ID number at the sign-in computer (no SSN). When you leave, you will sign out the same way. Signing out is very important. You may lose hours you put in if you do not sign in and out appropriately.

You will be required to spend 16 hours and complete 9 lab assignments while in MaSH as part of the lab requirement for Math 081. Instructions for the lab assignments will follow on a separate handout. Completion of the 16-hour requirement is worth 20 points (no partial points if you attend less than 16 hours), and completion of the 9 lab assignments is worth 20 points (no partial points if you complete less than 9 lab assignments). All lab hours and assignments must be completed by December 1, 2010.

MaSH is located in room U78 through U80 (entrance in U80) and is open Monday and Wednesday from 9 am until 8 pm, Tuesday and Thursday from 8:30 am until 8 pm, and on Saturday from 9 am until 3 pm.

**Grades:**

Here is the breakdown of the points that make up your grade:
- Homework 40 (this is the total after the two lowest homework scores are dropped)
- MaSH/lab 40
- Tests 400
- Final Exam 200
- TOTAL 680

You need 90% (612 points) for an A, 80% (544 points) for a B, 70% (476 points) for a C, and 60% (408 points) for a D. If you take the class for Pass/No Pass, you must earn at least 70% of the total points to receive a “Pass” grade. Pass/No Pass petitions are available in the Admissions Office. You must earn a C or a “Pass” to go on to the next level math course.

**Attendance:**

Please attend class always! Attendance will be taken at each class meeting. The attendance policy outlined in the college catalogue will be followed, so if you miss class more than four times, you may be dropped by the instructor.

Please arrive to class on time and plan to stay for the entire class meeting.

If you must miss class, make arrangements to get class notes and the assignment from another student in the class. Makeup lectures are not given outside of class. You are responsible for all announcements made in class, even if you are absent.

If you decide to drop the course and stop attending, it is your responsibility to officially withdraw from the course.

**Calculators:**

You will need a scientific calculator (or approved graphing calculator) for use in this course. You may use your scientific or graphing calculator for all homework and tests. There is no sharing of calculators on tests. Cell phone calculators are not allowed in class or on tests.

**Student Honesty:**

You are expected to do your own work on tests. If it appears to the instructor that you are looking at another student’s test or that you are helping someone during a test or if it appears to the instructor that you possess some type of cheating device, you will receive a test score of 0 and a
letter will be sent to the Dean of Students indicating that you were caught cheating. Cheating on a second test will result in an F for the course. Please see the college catalogue for more details.

**Student Conduct:**

Appropriate conduct is expected in the classroom. Based upon the RSCCD Standards of Student Conduct (also known as the Code of Conduct) you, the student, will be in violation of the code should you become disruptive in any way, such that you disrupt the teaching of this class. This includes (but is not limited to) excessive talking with your peers and cell phone usage, which is inclusive of text messaging. Penalties that may be invoked include Warnings, Probation and Suspension from all classes and activities within the district. Please refer to the Student Code of Conduct in the college catalogue for details.

**Cell Phone/Electronic Devices Guidelines:**

Speaking on your cell phone, sending/receiving text messages, and using the internet are not allowed in the classroom. Cell phones should be turned off and put away (out of sight) during class. If you must be able to be reached by phone while on campus, please explain your circumstances to instructor on the first day of class. Students are not permitted to wear any type of headphones or earphones (except hearing aids if you are hearing impaired) during class, and all electronic devices must be put away out of sight. Laptop computers cannot be used during class unless you get permission from the instructor.

**Important Dates:**

- September 5th is the last date to drop online and owe no fees
- September 5th is last date to drop online and not receive a W
- September 24th is the last date to file a pass/no pass petition
- November 14th is the last date to drop with a W

**TIPS FOR SUCCESS IN THIS COURSE:**

**KEEP A POSITIVE ATTITUDE!!!!!!**

**READ ALL SECTIONS** in the text to supplement the lecture because it is impossible to cover all the material in class.

**DO EVERY HOMEWORK ASSIGNMENT!!!!!!** Go back over old homework problems daily as a way to stay current on all the course material.

**Use the Math Study Hall (U80)** for doing homework and for getting help. If asking a tutor for help on a problem, show your class notes to the tutor so he or she can show you the same method as was done in our class. If you would prefer more extensive tutoring, you can use the Plato system on the computers in MaSH to get help with concept questions and for more practice.

**GIVE YOURSELF PLENTY OF TIME OUTSIDE OF CLASS** (a MINIMUM of 10 hours per week) to review your notes, read the text, work homework problems, and study. If possible, find at least one other person in the class with whom you can study. Even better, try to find 3 to 5 other students with whom you can form a study group. It really helps!

**NEVER GET BEHIND!!!!!!**

**ASK FOR HELP!!!!!!**
<table>
<thead>
<tr>
<th>Week of</th>
<th>Dates</th>
<th>Topics</th>
<th>Assignments</th>
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<tr>
<td>8/23</td>
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<td>Introduction, Sections 1.1, 1.3, 1.4, 1.5</td>
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<tr>
<td>8/30</td>
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<td>Sections 1.6, 1.7, 2.1, 2.2</td>
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<td>Monday, September 6th is a holiday – no class</td>
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<tr>
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<td><strong>Test #3 (Ch 1 through 6)</strong> on 11/8</td>
<td>Homework due on 11/8</td>
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<td>Section 8.3, start 8.4</td>
<td>Finish section 8.4, 8.5, 7.1</td>
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<td>Sections 7.3, 7.6, 5.5</td>
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<td><strong>Test #4 (Ch 1 through 8)</strong> on 12/6</td>
<td><strong>Comprehensive Final Exam</strong> on 12/8</td>
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<td>Note: Scantron #882 is needed for final exam.</td>
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