Math 210: Prealgebra - Winter 2015

| COURSE210-63 (32917) | $\begin{aligned} & \text { DAY } \\ & \text { TTH } \end{aligned}$ | TIME6:30-8:45 pm | $\begin{gathered} \text { ROOM } \\ \text { E31 } \end{gathered}$ | INSTRUCTOR: Janice Hector |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | OFFICE PHONE: 864-5632 |
|  |  |  |  | OFFICE ROOM: E25A |
|  |  |  |  | email: hectorjanice@deanza.edu |

OFFICE HOURS: T/ TH: 1:00-1:20 PM, 3:45-4:00 PM, 6:15-6:30 PM, 8:45-9:35 PM
Website: http://www.deanza.edu/faculty/hectorjanice/
NOTE: If you send the instructor an email, please identify your class section and time so that I can best respond to you: ( 210.63 at 6:30 pm).

YOU MUST READ THROUGH THIS ENTIRE SYLLABUS TO BE FAMILIAR
WITH THE CLASS. You are expected to keep a copy of this syllabus and the course calendar with the materials you bring to class each day. For questions about the course/class policies, refer to the syllabus. If the syllabus does not answer your question, ask the instructor. If your question is answered in this syllabus, you will be asked to review it again for your answer.

Course outline: required topics: http://ecms.deanza.edu/outlineprogresspublic.html?catalogID=2465

## Student Commitment:

- This is a demanding but rewarding class. This class expects students to attend all classes and have a minimum of $\mathbf{1 0}$ hours of study each week outside of class.
- Math 210 covers a lot of material and moves at a rapid pace. At De Anza College (and all colleges) each at least 2 hours of study outside of class are expected for each hour in class, for a total of 15 hours weekly. If you don't have time for studying outside of class or can't commit to attending each class, then you should plan to take this class in a quarter when you can commit the necessary time to succeed.
- This is also a collaborative class. You will be expected to work in cooperation with your classmates (No exceptions). You will be expected to discuss ideas, questions and strategies with your group. Share your thoughts as often one idea will spark another and so on. Working in groups means that students will be asked to chat and have discussions with each other! Working in groups does not mean that students sit together quietly working alone, not talking with each other!
- Although Prealgebra is a Mathematics course, English reading COMPREHENSION AND ENGLISH WRITING PLAY A VERY IMPORTANT ROLE IN THIS COURSE. COMMUNICATION IS CRITICAL IN LIFE, BOTH GIVING AND RECEIVING INFORMATION. STUDENTS WILL BE ASKED TO CAREFULLY EXPLAIN THEIR THINKING AND PROBLEM-SOLVING STRATEGIES BOTH VERBALLY AND IN WRITING. GRADING WILL ASSUME COLLEGE LEVEL STANDARDS - PROPER SENTENCE STRUCTURE, CAPITALS AND PERIODS!


## Student Learning Outcomes:

- Demonstrate and apply a systematic and logical approach to solving arithmetic and geometric problems.
- Demonstrate and apply the knowledge and skills required to select the correct introductory formulas, procedures, and concepts from algebra and geometry and use them to solve problems.


## Text: Aufmann, Prealgebra, 6th edition:

- You are not required to purchase the text. However, you will need to purchase an access code for the required online homework system, WebAssign.
- If desired, you can purchase the text at the De Anza bookstore. The bookstore carries custom texts which include an access code for the required online homework system, WebAssign. However, it will generally be less expensive to just pay for WebAssign online, which gives you access to the ebook version of the text.
- If you already have a text, you can purchase just the access code for WebAssign online, which is generally cheaper than buying an access code from the bookstore.
- There are several copies of the text on reserve in the library media center which you can review.
- You are not required to bring the text to class.


## Required: Math 210 Worksheet Binder:

- Purchase at the bookstore with Instructor: Janice Hector on the cover.
- If the bookstore runs out of binders on the shelves, ask a manager, not a student employee, for assistance to find a copy. Student employees are not in charge of overall bookstore stocking, and may not know whether there are actually more copies elsewhere in the store
- You must bring the binder every day starting with the first day of class. You will be taking extensive notes with worksheets on the FIRST DAY of class! You will not be able to keep up without the worksheet packet.
- All worksheets must be finished with PENCIL ONLY. WORK DONE IN INK WILL NOT BE GRADED.
- Any worksheet material not finished in class may be assigned as homework that you should be ready to turn in THE NEXT DAY. Do not finish these sheets during class. Returning to the worksheets after class will help reinforce concepts to see what you understood and what you may still have questions on. At the begin of or during class, the instructor may collect worksheets for participation points.


## Other Required Materials:

- Bring every day: CALCULATOR (must have square root and $\pi$ keys), RULER, SMALL STAPLER.
- The library has a small number of TI-83 calculators for limited loans; you need a DASB card to borrow one. Borrow a graphing calculator from the library resource center before class if you do not have a calculator with you. Students may NOT share calculators for quizzes or exams.
- Cell phones, laptops, Ipads, and all other electronic devices may not be used in class any time.
- PENCILS ONLY must be used for all work in this class. (worksheets, homework, quizzes, and exams). Student work written with pen will not be graded and will receive "0" points.
- 1 Scantrons (final exam) - thin green (\#882-E) or brown (\#2052). Your scantron must be flat with no bent corners, no wrinkling, no tears or other damage or points may be lost as the scantron machine may be unable to read your answers. This scantrons is included in the Math 210 Worksheet Binder. Check that you have the scantron when you purchase the Worksheet Binder!
- You will not be able to borrow ANY materials from the instructor.


## Course Description:

- The goal of this course is to think logically and orderly like a mathematician. You will be organize information, look for patterns, make decisions, master basic skills and communicate your results in writing. We will cover properties of the number system, basic algebraic equations, geometric applications, graphing and functions.
- Word problems and practical applications will be stressed heavily throughout the course.


## Homework:

- Homework is collected and graded via the online system, WebAssign, http://www.webassign.net.
- 19 assignments at 7 points each; lowest 4 assignment grades dropped (This takes into account any technical difficulties you may have.), 105 points total.
- Two attempts allowed for each problem.
- All homework assignments are available at the beginning of the quarter.
- Each assignment has a specific due date and due time (1 hour before the start of class) after which you will not be able to change your answers.
- You can work on any homework assignment, save/submit your work, stop, and come back and add to it or change it later. WebAssign will keep track of your progress. But, you must submit your assignment by the due date/time for credit. NO EXTENSIONS WILL BE GRANTED.
- When you submit your assignment, your score will be available automatically you and to the instructor.
- You can check your current score for any homework assignment by clicking on the My Assignments tab and then clicking on the All Assignments tab. Assignments already due can be found by scrolling down to Past assignments. Scores listed on the right will show you how many points your assignment has earned out of the number of points possible for each assignment.
- YOU CAN RETURN TO ANY ASSIGNMENT AND CHECK THE SOLUTION KEY after the due date/time for the assignment: click My Assignments and click Past Assignments.
- Getting started with WebAssign:
- Log in: http://www.webassign.net/
- Click on: IHAVE A CLASS KEY *
- Fill in the three boxes according to your class section below:
- For Math 210-63 (6:30 pm class) fill in: deanza 37328470
- First and last name -USE your OFFICIAL STUDENT REGISTRATION NAME.


## No nicknames or abbreviations.

- Pay the required fee using a credit card or debit card or buy the access codes separately at the De Anza College Bookstore.
- Starting with the first day of the quarter, there is a 2 week grace period in which you can use WebAssign for free. After the first 2 weeks of the quarter you will no longer be able to $\log$ in or use Webassign until you pay the fee. The work you've saved will remain in WebAssign. After you pay the fee, you will have access to your previous work even if you do not pay until after the 2 week grace period has passed.
- Need help logging into Webassign or other technical questions?

Contact Webassign Tech Help: (800) 955-8275 http://www.webassign.net/info/contact us.html http://www.webassign.net/user support/student/index.html

## Quizzes:

- 6 quizzes at 20 points each, lowest quiz grade dropped, best 5 scores count, 100 points total.
- Tentative days on class calendar. Any changes will be announced in class.
- NO MAKE-UP QUIZZES. If you are absent for a quiz for ANY reason, you receive a grade of 0; one such grade of 0 for a quiz absence would then be dropped as your lowest quiz grade.
- Quizzes are based closely on homework, worksheets and classwork.

Do homework thoroughly and completely and work attentively in class to prepare for quizzes.

- Required: pencils, erasers, ruler, and calculator.
- Most quiz questions will require you to write out your answers and show all mini-steps of your work.
- Quizzes must be worked out NEATLY or points will be lost.
- Quizzes WORKED OUT with PEN will not be graded.
- Full credit for questions answered with sentences will require correct responses as well as proper sentence structure, including capitals and periods. College standards for grammar and punctuation apply.
- Midterms:
> 3 MIDTERM exams at 100 points each, 300 points total. The lowest midterm grade will be replaced by your grade on the Final Exam, if better. Tentative testing days on class calendar. Any changes will be announced in class.
> NO MAKE-UP MIDTERMS. If absent for a midterm for ANY reason, you receive a grade of 0; one such grade of 0 for a midterm absence would then be replaced by your Final Exam grade.
> Required: pencils, erasers, ruler, calculator
> Permitted: one 2 -sided $81 / 2^{\prime \prime} \times 11$ " page of hand-written notes allowed. If English is a second language, a print (not electronic) English translation dictionary is also allowed.


## - Final Exam:

$>100$ points total; $\mathbf{5 0}$ multiple-choice questions; $\mathbf{2}$ hours; mandatory \& comprehensive: includes all material and chapters covered during the quarter. The time and date for the final exam can be found on the class calendar or check the final exam schedule on the De Anza College website: http://www.deanza.edu/calendar/.
> Multiple-choice: bring a half-page green scantron (882-E) or brown scantron (\#2052) .
$>$ Required: scantron, pencils, erasers, calculator
> Permitted: two 2 -sided $81 / 2 " \times 11 "$ pages of hand-written notes allowed.

- Come with all supplies (pencil, eraser, ruler, calculator and, for final exam, the proper scantron).
- ESL: If English is a second language, a print (not electronic) English translation dictionary is allowed for exam/quiz.
- If you do not have the necessary materials to take any test, you may ask other classmates for supplies ONLY IF you arrive before the official start time of the exam. After the official start time of the test, even if you are missing supplies, YOU MAY NOT talk to, communicate with, or disturb another classmate. You will need to leave class to obtain the supplies on your own before taking the test. Students who talk to, communicate with, or disturb another classmate may lose their test and receive a "0" exam grade.
- If your cell or any electronic device except calculator is visible, sounds off, or is used during an exam or quiz, you will be asked to stop your work. Your work may be removed and may receive a "0" grade.
- Full credit for questions answered with sentences will require correct responses. College level standards apply. Use proper sentence structure, including capitals and periods.
- Only students approved by Student Services will be allowed extended time for exams.


## Participation/Activities:

- 30-100 points of your grade will be determined from daily activities. These points will be lost and cannot be made up if you are absent from class. By the end of the quarter, these points may be worth as much as one midterm exam! Participation points will be awarded for such things as:
- Individual and group activities/worksheets, finished both in class and outside of class
- Worksheets that you are supposed to finish at home turned at the beginning of the next day's class
- On-time attendance and being present for entire class period
- Coming to class prepared with required materials: (CALCULATOR with $\sqrt{ }$ and $\pi$ keys, RULER,

SMALL STAPLER)

- Other items as announced in class.
- Activities can occur in class anytime and may be unannounced or announced ahead of time.
- No late work accepted.


## Grading:

| Category | Points | Course Grade | Total Percent of Course Points |
| :---: | :---: | :---: | :---: |
| 19 Homework Sets @ 7 pts each, lowest 4 scores dropped Use 15 best homework set scores. | 105 | A | 88\%-100\% |
| 6 Quizzes @ 20 pts each, lowest score dropped Use 5 best quiz scores. | 100 | B | 78\%-87.9\% |
| 3 Midterm Exams @ 100 pts each <br> Lowest Midterm Exam score replaced by Final Exam score, if better. <br> Use 3 best scores from 3 Midterms and Final Exam. | 300 | C | 65\%-77.9\% |
| Final Exam (mandatory) | 100 | D | 55\%-64.9\% |
| Participation/Activities - Number of points will vary in different quarters. | 30-100 | F | 0\%-54.9\% |
| TOTAL POINTS Depends on Number of Participation/Activity Points. | 635-705 |  |  |

- Keep all work that has been graded during the quarter.
- You are expected to keep a tally of points for this quarter so that you will know how many points you need on the final exam to earn a specific grade for the course. A sample tally sheet can be found at the end of this syllabus. YOU MUST BRING THIS TALLY OF POINTS WITH YOU IF YOU WISH TO CHECK YOUR CURRENT POINT TOTAL WITH THE INSTRUCTOR.
- To access final course grades, log into the De Anza website after the Friday of Finals week (Week 12), http://www.deanza.edu/registration/myinfo.html, with your student ID number.
- DUE TO PRIVACY ISSUES, NO INFORMATION ON GRADES CAN BE GIVEN BY EMAIL OR PHONE AND I CANNOT RESPOND TO SUCH REQUESTS.
- Class attendance EVERY DAY is essential to student success in math. You are expected to attend all classes, arrive on time and stay for the entire class.
- If you miss even one day of class, no matter which day, you will definitely miss several concepts, strategies, etc., critical to keeping up. Ask a classmate for notes. Go to the tutor center for help.
- Note: You are responsible for keeping up with class assignments and for being aware of schedule changes even when absent. Remember, the class calendar is ONLY A TENTATIVE schedule. Schedule changes will be announced in class.
- Students are responsible for learning any course information missed due to absence. I will not repeat lectures for students who have been absent. Please do not expect me to email you individually with the day's topic or assignment if you are absent. Obtain phone numbers or email addresses of other students to contact to get notes, etc. If you are absent you should read the text and go to the tutorial center first; then come to me if you still have specific questions.
- Arrive on time. No work may be handed in late after it has already been collected.


## Academic Integrity/Cheating:

- All students are expected to exercise academic integrity throughout the quarter.
- Cheating and academic dishonesty are not tolerated. Students involved in cheating - either receiving or providing information - on any quiz or exam will be reported to the dean and may be expelled from the course for the first offense. At minimum, the score for that quiz/exam/assignment/lab will be " 0 ". Any grade of " 0 " or $F$ due to cheating or academic dishonesty will not be dropped or replaced.
- Cheating includes, but is not limited to, copying from other students or permitting other students to copy from you, plagiarism, submitting work that is not your own, and using notes on exams that do not meet permitted specifications, continuing to write/erase on exams or quizzes after the time for the exam/quiz has ended, and sharing a calculator with another student during an exam or quiz. Using any electronic device other than your approved graphing calculator on a quiz or exam may be considered cheating
- During testing, your eyes must always be focused on your own paper, not looking around the room.


## Class Rules, Conduct, Cell Phones etc:

- You will often work in pairs or small groups. Please be respectful of each other's ideas.
- Respect other students' right to learn in a classroom environment that supports learning. No private conversations or disruptive behavior in class.
- All electronic devices (cell phones, ipads, ipods, ear pieces, etc.) except your calculator must be turned off and put away out of sight during class. Absolutely no noise from them!
- CELL PHONES: In particular, turn off all cell phones COMPLETELY (not just set to vibrate) and put away before class. If your cell phone is visible or used or goes off during class, you may be asked to leave class for that day.
- DURING GRADED ACTIVITIES/QUIZZES/EXAMS, if your cell phone or any other electronic device is used, or is visible or goes off during an exam or quiz, your paper may be taken away from you and may have points deducted or receive a " 0 " grade.
- If you have SPECIAL CIRCUMSTANCES WHERE YOU NEED TO LEAVE YOUR CELL PHONE ON VIBRATE, you need to contact the instructor at the beginning of class, before your cell phone goes off.


## Standards of Work:

- College level work is expected in this class.
- Work is graded for both accuracy and quality of work.
- Work must be NEAT, LEGIBLE, WELL-ORGANIZED, AND ORDERLY.
- Sentences must include capitals and periods and proper grammar and punctuation.
- When steps or an explanation is requested, correct answers must be supported by correct work to receive credit. You may lose credit, even if the final answer is correct, if the instructor can't easily read or understand your work, if necessary details, work, or interpretations are missing, if work is not logically presented in an easily understandable manner, or if work is shown but is incorrect and/or not consistent with your answer.
- ON ANY WORK TURNED IN, you must write your full name: LAST NAME, FIRST NAME.


## Guidelines for PresentingWork (PoInts will be deducted if guidelines are not followed.):

- ON ANY WORK TURNED IN, you must write your full name: LAST NAME, FIRST NAME;
- If there's more than one page of work, you must staple all pages together, otherwise, only the first page of your work will be graded. Only work completed with PENCIL will be graded.
- Several mathematical reminders/cautions follow. We will cover all of these in class when needed.
- Work calculation steps DOWN the page, not across. Always work full lines down. Do not work separate parts of a problem and combine them later in the problem. See below:

YES: Easier to track steps down the page:

$$
\begin{aligned}
& -3^{2}-(4-2) \\
= & -9-2 \\
= & -11
\end{aligned}
$$

NO: Harder to track steps across the page:

$$
-3^{2}-(4-2)=-9-2=-11
$$

- When simplifying expressions, equal signs must connect all equivalent expressions, one under another. See below:

YES: Equal signs show connected expressions look different, but still have the same value:

```
\[
\begin{aligned}
& -3^{2}-(4-2) \\
& =-9-2
\end{aligned}
\]
\[
=-11
\]
```

NO: Without equal signs, expressions appear unrelated:

- When evaluating expressions or checking solutions, in this class a variable must always be replaced with the number inside parentheses, whether needed or not. See below:

YES: With parentheses operations are preserved:
Evaluate $\boldsymbol{A}^{2}+(\boldsymbol{B}-\boldsymbol{C}) \boldsymbol{A}$ for $\boldsymbol{A}=-2, \boldsymbol{B}=5, \boldsymbol{C}=-4$
$=(-2)^{2}+((5)-(-4))(-2)$
$=4+(5+4)(-2)$
$=4+(9)(-2)$
$=4-18$
$=-14$

NO: Without parentheses, operations may change:
Evaluate: $A^{2}+(B-C) A \quad$ for $A=-2, \quad B=5, \quad C=-4$
Without parentheses, this would be written incorrectly as : $-2^{2}+(5-4)-2$
and would become -5 , a wrong answer.

- When solving equations, ONLY one column of equal signs, centered for each equation should be used. Do not add a second column of equal signs in the front of each equation. The second set of equal signs in front would incorrectly imply that all expressions in the entire problem were equal.

YES: this shows that the solution to one equation is the same solution for all other equations:

| $3 \boldsymbol{M}+2=4 \boldsymbol{M}$ |
| :---: |
| $\frac{-3 \boldsymbol{M}}{2}=\frac{-3 \boldsymbol{M}}{\boldsymbol{M}}$ |

NO: the equal signs in the front are incorrect.
They state incorrectly that $3 \mathrm{M}+2=2=\mathrm{M}$ :
$=-3 M=-3 M$

- All graphs must have axes labeled and scaled. A ruler must be used to draw axes and lines.
- All word problems in worksheets, quizzes and midterms must be worked out with 5 steps unless otherwise instructed:
Step 1) DIAGRAM or chart or illustration which includes all relevant information, including the variable,
Step 2) UNKNOWN VARIABLE listed with a complete definition that includes proper units
(for example $\mathrm{d}=$ the diameter (inches) of the soccer ball),
Step 3) EQUATION which includes the variable symbol,
Step 4) STEPS leading to the solution of your equation,
Step 5) EXECUTIVE SUMMARY SENTENCE to explain the result you found. College standards will be used to grade your work. Points will be deducted for sloppy writing or sentences with incorrect sentence structure or sentences that do not include capitals and periods.

Warning: KNOW THESE FIVE STEPS! Many problems on worksheets, quizzes and midterms require showing all 5 -steps for full credit. Very little credit, if any, will be given for any answers without presenting all 5 steps.
IF YOU NEED HELP IN THIS CLASS:

- CHECK THE MATH TUTORIAL CENTER (S-43) for FREE INDIVIDUAL, DROP-IN or GROUP TUTORING. For current hours and information: http://www.deanza.edu/studentsuccess/mstrc/
- Free online tutoring 7 days a week, 24 hours a day: Just login to MyPortal, go to the Students tab, and find the Smarthinking link. For more information, go to deanza.edu/studentsuccess/onlinetutoring/
- SEE THE INSTRUCTOR DURING OFFICE HOURS.
- FIND A STUDY PARTNER OR GROUP EARLY in the quarter and work together consistently throughout the quarter. Working with someone else helps both students understand the material better.
- DON'T WAIT UNTIL YOU ARE DROWNING TO GET HELP. Get help as soon as you have difficulty, while there is still enough time to catch up and improve. If you wait until you are behind, you will have a great deal of difficulty catching up. Classes taken on the quarter system move quickly.


## Final Exam, Deadlines and Other Important Dates:

- Final Exam:
- Tuesday 3/24, 6:15-8:15 PM
- Last Day to Add: Saturday, January 17
- Last Day to Drop for a refund: Sunday, January 18
- Last Day to Drop a class with no record of grade: Monday, January 19
- Last Day to Request a Pass/No Pass grade: Friday, January 30
- Last Day to Drop with a "W": Friday, Friday, February 27
- College closed - No Class - Monday January 18 (Observance of Martin Luther King’s Birthday)
- Friday February 13 (Observance of Abraham Lincoln's Birthday)
- Monday February 16 (Observance of George Washington's Birthday)

Tally Sheet For Calculating Course Points For Math 210



