Math 73
Intermediate Algebra for General Education

Course Syllabus

Mission Statement: El Camino College offers quality, comprehensive educational programs and services to ensure the educational success of students from our diverse community.

Course Information:

<table>
<thead>
<tr>
<th>Term</th>
<th>Spring</th>
<th>Year: 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course</td>
<td>Math 73: Intermediate Algebra for General Education</td>
<td>Course Section: 9761</td>
</tr>
<tr>
<td>Units:</td>
<td>5.00</td>
<td>Room: MS 208</td>
</tr>
<tr>
<td>Lecture Days</td>
<td>Monday, Wednesday, &amp; Friday</td>
<td>Class Time: 8:00AM-9:35AM</td>
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Contact Information:

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Mr. Jose M. Martinez</th>
<th>Office: MS 213</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>(310) 900-1600 Ext. 2433</td>
<td>Office Hours: M 12:00PM-12:30PM, T &amp; Th 8:30AM-10:00AM, F 12:00PM-1:00PM</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:jmmartinez@elcamino.edu">jmmartinez@elcamino.edu</a></td>
<td>Faculty Webpage: <a href="http://www.compton.edu/facultystaff/jmmartinez/index.html">http://www.compton.edu/facultystaff/jmmartinez/index.html</a></td>
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Required Text:

<table>
<thead>
<tr>
<th>Title</th>
<th>Edition</th>
<th>Authors</th>
<th>ISBN</th>
</tr>
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<tbody>
<tr>
<td>Intermediate Algebra</td>
<td>9th</td>
<td>McKeague</td>
<td>ISNB 13:9780840064202</td>
</tr>
</tbody>
</table>

Required Materials:
- Scientific Calculator (cell phones will NOT be allowed on exams)
- Ti-83 or Ti-84 are highly recommended but not required.
- One subject 70 sheet college ruled notebook for homework

Prerequisite: Mathematics 40 or Mathematics 43 with a minimum grade of C.

Course Description: This intermediate algebra course is designed for students who are not considering further study in the sciences, technology, engineering or mathematics. In the context of studying basic functions and their graphs, students strengthen and expand their algebra skills. Functions studied include linear, quadratic, polynomial, rational, and radical functions, as well as the absolute value function. Particular emphasis is placed on the operations on functions, solving equations and inequalities, as well as using functions to model real life situations. Other topics include solving systems of equations and applications.

Note: If you do not plan to take College Algebra (Math 130) or Trigonometry (Math 170) or any of the Calculus courses (Math 180, 190, 191, 220), then Math 73 is the option for you. Math 73 is a prerequisite for courses including Math 110, 115, 120, 140, and 150.

SLO Statements: Upon successful completion of the course, students will be able to:

- **SLO #1 Application Problems:** Students will be able to recognize and apply appropriate mathematical concepts and models involving a variety of functions to contextualized problems (authentic, real-world applications).
- **SLO #2 Solving Equations and Manipulating Expressions:** Students will be able to symbolically (algebraically) solve a variety of equations, inequalities and linear systems and manipulate symbolic (algebraic) expressions that arise in contextualized problems.
- **SLO #3 Visual and Graphical Methods:** Students will use visual and graphical methods to represent, analyze and solve contextualized problems.
- **SLO #4 Articulating Mathematical Reasoning:** Students will be able to articulate the mathematical reasoning used in solving a variety of contextualized problems, both orally and in writing.

Course Objective:
1. Carry out numerical operations and manipulate algebraic expressions, including expressions with rational and negative exponents.
2. Recognize functional relationships in the form of graphs, data or symbolic equations.
3. Solve problems involving a variety of function types, including linear, quadratic, polynomial, rational and radical functions, as well as the absolute value function.
4. Graph a variety of functions and relations and draw connections between these graphs and solutions to problems.
5. Solve a variety of equations and inequalities, as well as systems of equations and inequalities, using algebraic and graphical methods. Types of equations include linear, quadratic, polynomial, rational and radical equations, as well as absolute value equations.
6. Using numerical, symbolic and graphical methods, model application problems, solve them and interpret the results in the context of the problem.

Class Policies & Student Responsibilities:

- **Adding or Dropping:** Students are responsible for adding and dropping the class within the deadlines published in the El Camino College class schedule. Students who stop attending but do not drop may receive a failing grade. Students may view their registration status using the college's website: [https://myecc.elcamino.edu](https://myecc.elcamino.edu)

- **Attendance:** Students are expected to attend their classes regularly. Students who miss the first class meeting or who are not in regular attendance during the add period for the class may be dropped by the instructor. *Students whose absences from the class exceed 10% of the schedule class meeting times may be drop by the instructor. Students are responsible for the material that was covered in class even if they are absent.*

- **No Late Assignments:** The instructor will not accept any late assignments. Students are responsible for completing and handing in all assignments on the due dates.

- **No Make-Up Exams:** As a general rule make up exams will not be offered. Since students know the tentative dates of the exams and quizzes for the semester, all appointments and activities the students need to attend should be made at times other than exam days. *The instructor will drop the lowest exam score. Students will not be permitted to drop the final exam.* However, make up exams will be offered for the following documented reasons: (1) Illness and/or medical care. (2) Death in the family. (3) Legal reasons. (4) Religious Holidays/Observances. (5) Pre-arrange absences approved by the instructor at least two weeks in advance of absences.

- **Children in the Classroom:** Children will not be permitted in the classroom while class is in session. Attendance in class is limited to officially enrolled students and authorized visitors and guest only.

- **Policy regarding electronic devices:** Students are responsible for remaining quiet and on task during lectures so as not to disrupt the learning of other students. Please silence all cell phones, and electronic devices that may disrupt the class. Texting during class is not permitted. The instructor will ask any disruptive students to leave class. Laptops are permitted only for the purpose of taking notes.

- **Academic Dishonesty Consequences:** El Camino College Compton Center is dedicated to maintain an optimal learning environment and insists upon academic honesty. Examples of academic dishonesty include but are not limited to: (1) Copying from another student or former student or allowing another student to copy from one’s work. (2) Giving or receiving information during an examination or test by any means such as hand signals or through the use of any electronic device. (3) Using aids such as notes, calculators, or electronic devices in an exam unless specifically authorize by the instructor. (4) Any other action which is not an honest reflection of a student’s own academic work. *Academic dishonesty will not be tolerated under any circumstances.* When there is evidence or knowledge of academic dishonesty occurring, following actions may be imposed: (1) The instructor may assign a failing grade to the examination or assignment. (2) The instructor may dismiss the student from the class or activity for the present or following classes. (3) The instructor may notify the department chair and dean of academic affairs.

- **Policy regarding audio recording of lectures:** The audio-visual recording, transmission, or distribution of classroom lectures and discussions is prohibited unless expressed written permission from the class instructor has been obtained and all students in the class have been informed that audio/video recording may occur. Any audio/video recording of class lectures or activities may not be reproduced or uploaded to publicly accessible websites.

- **Communication with the Teacher:** Students are responsible for communicating any concerns to the instructor. The instructor is available during office hours, via email (jmmartinez@elcamino.edu) or by phone (310) 900-1600 X 2433
Assessment Activities & Grading Scale: Students will be evaluated on their understanding and correct use of mathematical concepts covered in class. The following is the list of the assessment activities along with grading scale that will be used to determine the students’ grades.

<table>
<thead>
<tr>
<th>Assessment Activities</th>
<th>Points</th>
<th>Percent</th>
<th>Letter Grade</th>
<th>Percent Interpretation</th>
</tr>
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<tbody>
<tr>
<td>Homework</td>
<td>50</td>
<td>10%</td>
<td>A</td>
<td>90-100% Superior</td>
</tr>
<tr>
<td>Classwork</td>
<td>50</td>
<td>10%</td>
<td>B</td>
<td>80-89% Above Average</td>
</tr>
<tr>
<td>Exams</td>
<td>300</td>
<td>60%</td>
<td>C</td>
<td>70-79% Average</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100</td>
<td>20%</td>
<td>D</td>
<td>60-69% Below Average</td>
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<tr>
<td>Total</td>
<td>500</td>
<td>100%</td>
<td>F</td>
<td>59% or lower Failure</td>
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Class work: To encourage attendance and class participation, students will often be given class work which will be collected during class. Students who are absent will not be permitted to make up classwork.

Special Accommodations: El Camino College Compton Center is committed to providing educational accommodations for students with disabilities upon the timely request by the student to the instructor. A student with a disability, who would like to request an academic accommodation, is responsible for identifying herself/himself to the instructor and to the Special Resources Center. To make arrangements for academic accommodations, contact the Special Resources Center.

Tutoring: Tutoring is available at the Student Success Center: (310) 900-1600, Ext. 2535

Disclaimer Statement: Students will be notified ahead of time when and if any changes are made to course requirements, policies or schedule.

Important Dates:
Weekday Classes Begin Tuesday, January 20, 2015
Lincoln’s Day Holiday (Campus Closed) Friday, February 6, 2015
Washington’s Day Holiday (Campus Closed) Monday, February 16, 2015
Spring Recess (Campus Closed) Saturday, March 14 - Friday, March 20, 2015
Last Day to Drop with a "W" Friday, April 17, 2015
Commencement Friday, May 15, 2015
Last Day of Semester Friday, May 15, 2015

<table>
<thead>
<tr>
<th>WEEK</th>
<th>M</th>
<th>W</th>
<th>F</th>
<th>TOPICS</th>
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<tbody>
<tr>
<td>1</td>
<td>2.1</td>
<td>2.3, 2.4</td>
<td>2.5</td>
<td>Linear Equations</td>
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<tr>
<td>2</td>
<td>2.6</td>
<td>3.2</td>
<td>3.3</td>
<td>Linear Inequalities in one variable</td>
</tr>
<tr>
<td>3</td>
<td>3.4</td>
<td>Review</td>
<td>Exam #1</td>
<td>Functions and Composition with Functions</td>
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<tr>
<td>4</td>
<td>3.6</td>
<td>3.7, 4.1</td>
<td>4.3</td>
<td>Systems of Linear Equations &amp; Inequalities</td>
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<tr>
<td>5</td>
<td>4.5</td>
<td>5.1</td>
<td>5.2</td>
<td>Exponents and Polynomials</td>
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<tr>
<td>6</td>
<td>5.3</td>
<td>Review</td>
<td>Exam #2</td>
<td>Factoring Polynomials</td>
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<tr>
<td>7</td>
<td>5.4</td>
<td>5.5</td>
<td>5.6</td>
<td>Rational Expressions</td>
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<tr>
<td>8</td>
<td>5.7</td>
<td>5.8</td>
<td>6.1, 6.2</td>
<td>Complex Numbers &amp; Quadratic Equations</td>
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<tr>
<td>9</td>
<td>6.3</td>
<td>Review</td>
<td>Exam #3</td>
<td>Graphing Quadratic Functions</td>
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<tr>
<td>10</td>
<td>6.4</td>
<td>6.5</td>
<td>6.6</td>
<td>Rational Exponents &amp; Roots</td>
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<tr>
<td>11</td>
<td>6.7</td>
<td>7.1, 7.3</td>
<td>7.4</td>
<td>Review</td>
</tr>
<tr>
<td>12</td>
<td>7.5</td>
<td>7.6</td>
<td>7.7</td>
<td>Final Exam</td>
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<tr>
<td>13</td>
<td>7.8</td>
<td>7.9</td>
<td>Final Exam</td>
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Math 73: Homework Assignments

No late homework will be accepted. Use a one-subject 70 Sheet College Ruled notebook to do your homework. Use both sides of the page whenever possible. Clearly, print your name, the homework number, the problem number and show your work.

Homework #1:
- Problem Set 2.1 #5-90 Multiples of 5 (5, 10, 15, 20, 25...)
- Problem Set 2.3 #1-9, 11, 27, 28, 29, 30, 50
- Problem Set 2.4 #5-55 multiples of 5.
- Problem Set 2.5 #3-57 Multiples of 3 (3, 6, 9, 12, 15...)
- Problem Set 2.6 #5-50 Multiples of 5
- Problem Set 3.2 #5-35 Multiples of 5.
- Problem Set 3.3 #1, 3, 5, 9, 13, 15, 17, 19, 21, 25, 29, 31, 35, 39, 41, 43
- Problem Set 3.4 #4-44 Multiples of 4 (4, 8, 12, 16...)

Homework #2:
- Problem Set 3.6 #3-39 Multiples of 3 and 53
- Problem Set 3.7 #1, 3, 5, 9, 11, 15, 19, 21, 23, 29, 31, 33, 37, 39, 41, 43, 45, 47, 49, 51
- Problem Set 4.1 #5-50 Multiples of 5
- Problem Set 4.3: #1, 2, 3, 4, 7, 8, 9, 10, 17, 18, 23, 24
- Problem Set 4.5 # 5, 10, 15, 20
- Problem Set 5.1 #1, 7, 13, 15, 23, 25, 27, 31, 39, 41
- Problem Set 5.2 #1, 5, 9, 13, 17, 21, 25, 29, 41, 35, 39, 43, 47
- Problem Set 5.3 #1, 5, 7, 11, 15, 19, 25, 29, 21, 37, 43, 53, 59

Homework #3:
- Problem Set 5.4 #1, 5, 9, 13, 17, 21, 25, 27, 31, 37, 43, 45
- Problem Set 5.5 #1, 7, 11, 15, 19, 23, 27, 33, 39, 43, 49, 53, 59, 63, 69, 73, 77
- Problem Set 5.6 #1, 9, 15, 21, 27, 31, 37, 41, 45, 49, 55, 59, 65, 69, 73, 79, 83
- Problem Set 5.7 #1, 5, 9, 13, 19, 25, 29, 33, 39, 45, 49, 53, 57, 63, 69, 71, 77, 83
- Problem Set 5.8 #1, 2, 11, 15, 19, 23, 27, 31, 37, 41, 45, 63, 65, 67, 68, 69, 71, 72, 73
- Problem Set 6.1 #5, 9, 17, 21, 29, 33, 37, 39
- Problem Set 6.2 #1, 7, 11, 13, 17, 21, 25, 31, 39, 43, 49
- Problem Set 6.3 #7, 11, 15, 17, 21, 25, 31, 35, 39

Homework #4:
- Problem Set 6.4 #11, 17, 19, 27, 29, 37, 43, 45, 49
- Problem Set 6.5# 1, 2, 3, 5, 7, 11, 12
- Problem Set 6.6 #1, 7, 11, 15, 33, 37, 41, 43, 47, 55
- Problem Set 6.7 #1, 3, 5, 7, 9, 11, 13, 15, 17, 19
- Problem Set 7.1 # 1, 3, 5, 7, 9, 25, 27, 33, 35, 37, 41, 45, 49, 51, 61, 63, 65
- Problem Set 7.3 #1, 3, 5, 7, 9, 11, 15, 17, 19, 21, 27, 41, 43, 45, 43, 45, 48
- Problem Set 7.4 #1, 3, 5, 7, 11, 12, 13, 14, 21, 23, 29, 31
- Problem Set 7.5 #1, 3, 5, 7, 9, 19, 20, 21, 23, 25, 35, 37, 49, 51, 53, 55, 67, 69, 77
- Problem Set 7.6 # 1, 5, 9, 13, 19, 21, 25, 32

Homework #5:
- Problem Set 7.7 # 1, 3, 5, 7, 9, 11, 25, 28, 30, 33, 35, 41, 43, 47, 55, 67, 71
- Problem Set 8.1 # 1, 3, 9, 13, 17, 19, 21, 31, 32, 33, 33, 40
- Problem Set 8.2 # 1, 5, 15, 61, 65
- Problem Set 8.5 # 1, 3, 5, 7, 9, 13, 41, 43