

# El Camino College

## Assessment Test Results

### New Students from High School, Fall 2009 to Fall 2013

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This report displays course placement rates and numbers for new high school graduate-aged students entering El Camino College (ECC) over 5 years. Because graduation date information is not complete and new students to El Camino College can be of any age, the “direct from high school” cohort is approximated as students aged 17 or 18 with a recent test score. The report includes results for these fall-enrolled students, who represent a little over half of all examinees who enrolled in fall semester.

Assessment tests are offered in 5 subjects at ECC: Reading, Writing, Mathematics, Chemistry and English as a Second Language (ESL). The Math test consists of 3 different levels: Arithmetic, Elementary Algebra, and College-Level Math. To determine a student’s math placement, students are first asked pre-test questions to assess the student’s math background and select an initial level of math difficulty. Using this information, students complete an Accuplacer assessment, which uses a computer-adaptive model to vary the difficulty of questions based on the student’s responses to previous test questions. Scores from the Accuplacer test are used to determine the student’s math placement. The Chemistry Test (California Chemistry Diagnostic Test) is a paper and pencil test that is used to place students into the appropriate transfer-level chemistry course, provided they also meet a math prerequisite. The ESL assessment places students into listening/speaking, reading, and writing courses.

Table 1 highlights the number of students, regardless of age, taking each test between the opening of the application window and the September census date of each year listed. Students repeating the same test are counted only once in the unduplicated counts. These test counts typically mirror fluctuations in college enrollment. The number of students tested continued to decrease in 2013, in contrast to the slight enrollment increase in fall. Table 1 includes all tests administered at both ECC and Compton Center, but “tested students enrolled” (last row) represents only those enrolled at ECC. Although there was a decrease in “students tested” in 2013, the number of “tested students enrolled” increased slightly. This means that despite an overall decrease in the number of students who took an assessment test, a higher percentage continued to enroll at ECC (43% vs. 48%).

**Table 1: Number of Students Taking Placement Tests by Subject, Fall Application and Enrollment Window**

Test	Subject	Number of Students Taking Each Test or Level				
		2009*	2010	2011	2012	2013
Reading Comprehension	Reading	12,081	11,599	10,710	10,207	9,697
Sentence Skills	Writing	12,081	11,601	10,707	10,200	9,699
Arithmetic	Math	8,940	8,638	8,045	7,385	6,951
Algebra	Math	12,063	11,727	10,801	10,425	9,861
College-level Math	Math	2,705	2,705	2,386	2,578	2,357
Chemistry	Chemistry	134	121	111	100	112
English as a Second Language	ESL	811	761	672	606	541
Total Tests (duplicated)		48,815	47,152	43,432	41,501	39,218
Students Tested (unduplicated)		14,735	14,043	12,819	12,113	11,423
Tested Students Enrolled at ECC in Fall		6,575	5,704	5,368	5,222	5,499

## RESULTS

The following sections focus on only students considered “new students from high school,” as defined above. The Reading, Writing, and Mathematics tests place students in a variety of levels depending on test performance. For this report, placements are grouped into categories of similarly-leveled courses. These groups are 1) transfer-level—courses that are equivalent to courses at a 4-year institution, 2) college-preparatory—courses that immediately precede transfer-level courses, and 3) basic skills—courses defined by ECC as basic skills courses (in most cases, more than one level below transfer). The specific ECC courses within each group and their levels below transfer-level are listed in the Appendix of this report.

Placement results for the 5 years in this study are summarized below in Table 2 by number and percentage in each subject and course group. Charts tracking the placement percentages for each subject begin on the following page.

As a whole, the 2013 percentage of transfer-level placements in Reading, Writing and Math were consistent with the previous four years. Despite a continued decrease in the total number of students assessed at ECC, the overall number of students placed into courses was at its highest since 2010.

**Table 2: Assessment Test Results by Test and Course Group\* for “New Freshmen”**

Test	2009 (n=3,166)		2010 (n=2,723)		2011 (n=2,545)		2012 (n=2,642)		2013 (n=2,716)	
	N	%	N	%	N	%	N	%	N	%
<b>Reading **</b>										
Transfer-level	1,383	45.9	1,269	49.3	1,138	46.8	1,203	47.8	1,163	44.5
College-prep	686	22.7	565	22.0	561	23.0	511	20.3	564	21.6
Basic Skills	947	31.4	740	28.7	735	30.2	805	32.0	885	33.9
<b>Total</b>	<b>3,016</b>		<b>2,574</b>		<b>2,434</b>		<b>2,519</b>		<b>2,612</b>	
<b>Writing **</b>										
Transfer-level	1,149	38.1	1,033	40.1	994	40.9	1,016	40.4	1,033	39.5
College-prep	1,469	48.7	1,243	48.3	1,152	47.3	1,222	48.6	1,248	47.8
Basic Skills	398	13.2	300	11.6	287	11.8	278	11.0	332	12.7
<b>Total</b>	<b>3,016</b>		<b>2,576</b>		<b>2,433</b>		<b>2,516</b>		<b>2,613</b>	
<b>Math</b>										
Transfer-level	313	10.3	268	10.3	246	10.0	278	10.8	269	10.2
College-prep	1,729	56.7	1,535	58.8	1,417	57.5	1,495	58.1	1,532	58.1
Basic Skills	1,005	33.0	807	30.9	800	32.5	800	31.1	837	31.7
<b>Total</b>	<b>3,047</b>		<b>2,610</b>		<b>2,463</b>		<b>2,573</b>		<b>2,638</b>	

Note: The “N” figures at the top represent the total number of students aged 17 or 18 who took assessment tests between the opening of the application window (first week of January for this report) and the September census date in the year noted.

\* Specific courses under each “Course Group” are listed in the Appendix of this report.

\*\* Transfer-level placements for Reading and Writing reflect only that portion of the test, and thus, general *preparation* in reading and writing only. To qualify for *enrollment* in Transfer-level English, examinees must achieve a qualifying score on both the Reading and Writing portions of the assessment test (see Appendix).

## READING

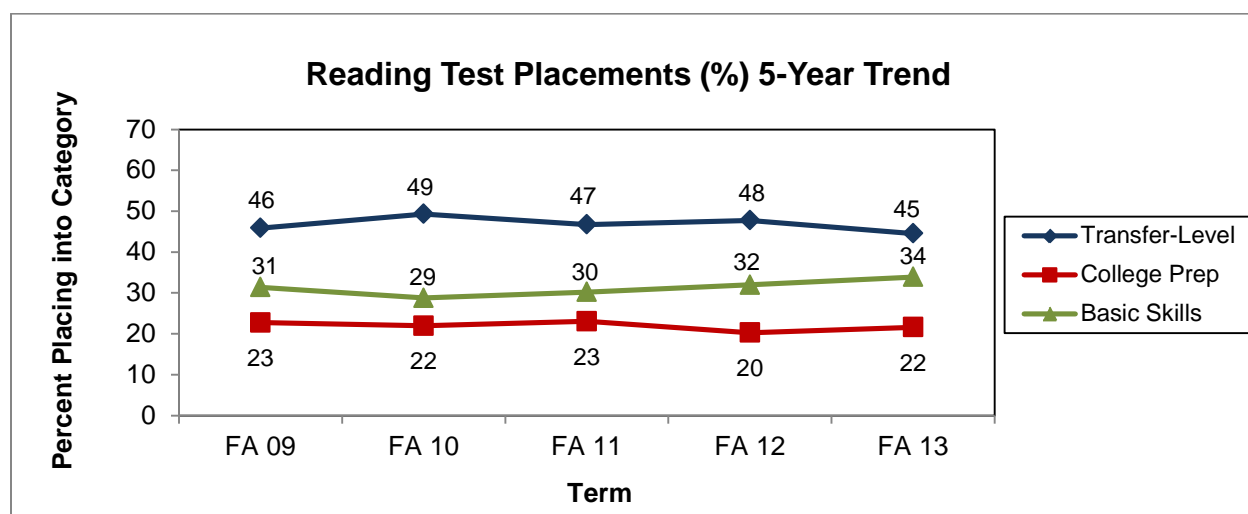
### Placement Rates

Placements into reading courses were variable over the past 5 years. Placements into the transfer-level (English 1A) fell slightly in 2013, to 45% (Figure 1). Despite this, the most common placement for students remained transfer-level Reading. The 5-year average transfer-level placement rate for the period was 47%.

College-preparatory placements have remained level over the last 5 years. The average placement rate into college-prep courses (English 84 or 7) is 22%.

The percentage of basic skills placements continued to steadily increase in the last several years, reaching 34% in 2013. This category consists of 2 basic skills courses (English 80 and English 82). About 3% of students placed at the English 80 level, down from 4% in 2009. This means that the majority of students placed into basic skills reading begin two levels below transfer. The 5-year average placement rate into basic skills reading courses is approximately 31%.

**Figure 1: Reading Assessment Test Placement Rates**



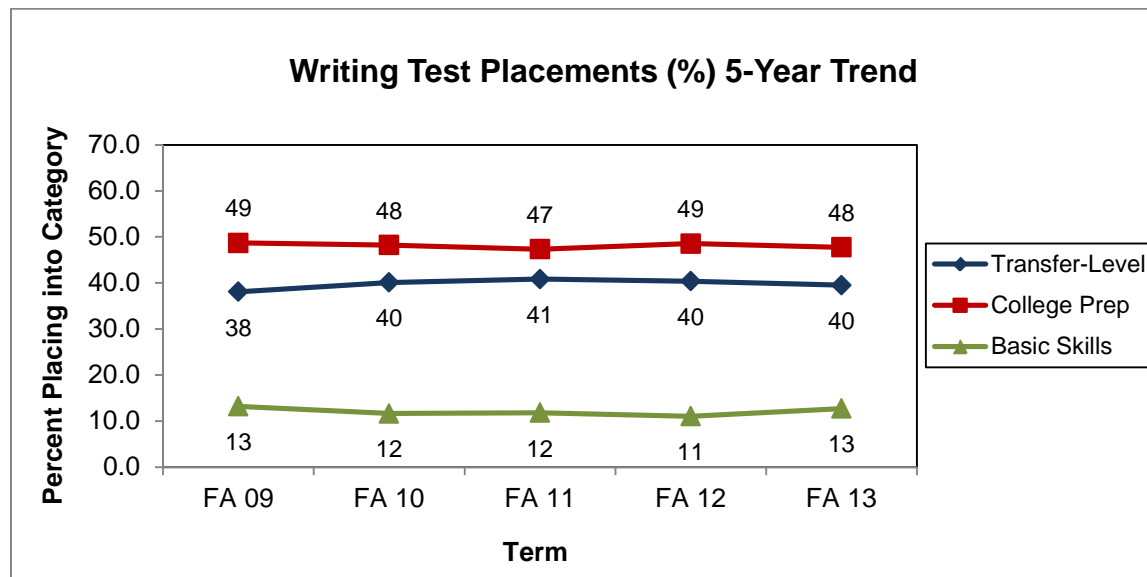
## WRITING

### Placement Rates

In contrast to the Reading placements, the most common writing placement was at the college preparatory level. During the last 4 years, transfer-level (English 1A) course placements remained steady, yielding a placement rate of around 40% over the last 3 years (Figure 2). Placements into college prep (English A) and basic skills (English B) have also stabilized between 47-49%, and 11-13%, respectively.

Five-year average placements into transfer-level, college-prep and basic skills writing courses were 40%, 48% and 12%, respectively.

Figure 2: Writing Assessment Test Placement Rates



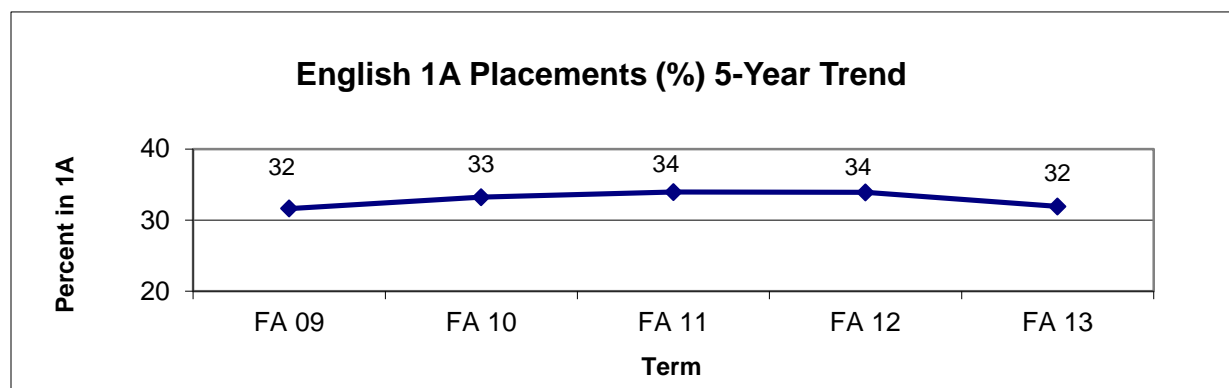
## ENGLISH 1A

### Placement Rates

To qualify for English 1A (transfer-level reading and writing), examinees must place into the transfer-level in both the Reading and the Writing portions of the assessment test. Figures 1 and 2 above reflected placement rates into the transfer-level course (English 1A) based only on one of these two criteria in order to show academic preparation by subject. Figure 3 below reflects actual course placement rates using both the reading and writing qualifying test scores.

Placement rates have remained relatively steady during the last 5 years, ranging between 32-34%, with a 5-year average of 33%.

Figure 3: English 1A Placement Rates

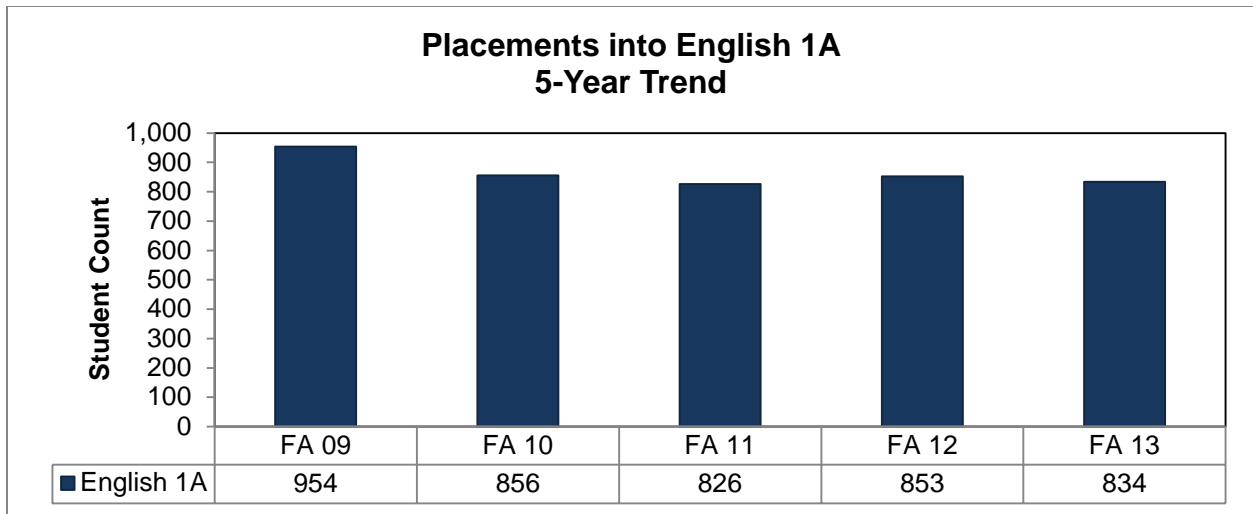


### Placement Numbers

As a whole, the number of students who place into English 1A for reading and writing has decreased over the past five years, falling from 954 to 834 (Figure 4). Despite the slight

decrease in the overall count of students placed into English 1A, the percentage of students has remained relatively stable.

**Figure 4: English 1A Placement Numbers**

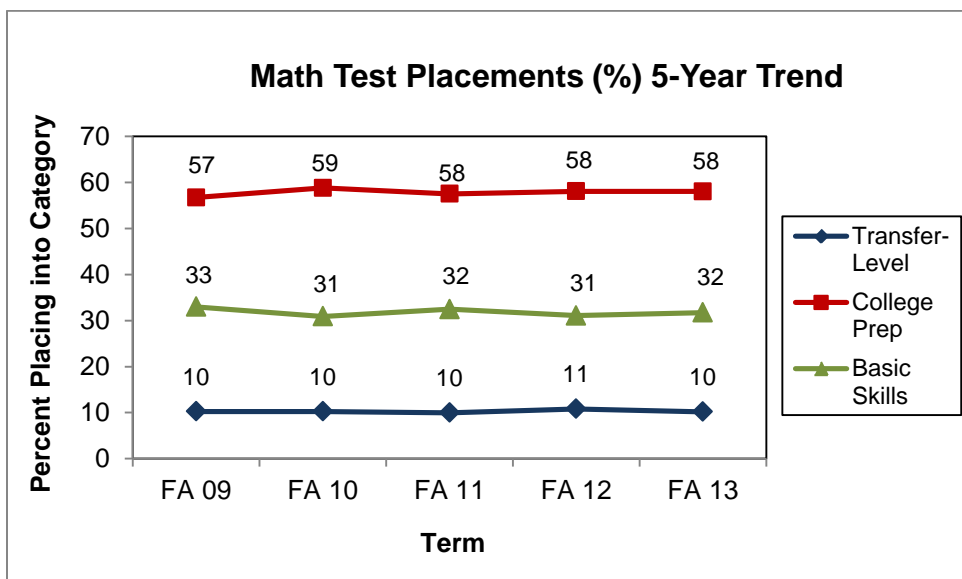


## MATHEMATICS

### Placement Rates

In contrast to the reading and writing assessments, only a small minority of students who took the math placement exam qualified for transfer-level mathematics. Placement rates have remained relatively stable over the past 5 years for transfer-level, college preparatory, and basic skills mathematics courses. Average placement rates into transfer-level, college-prep, and basic skills math courses were 10%, 58% and 32%, respectively.

**Figure 5: Math Assessment Test Placement Rates**



## CHEMISTRY

The Chemistry placement test is a paper and pencil test offered only one time to students. In other words, students cannot retake this test as with other placement tests. The test measures students' knowledge of basic chemistry, laboratory skills, and mathematics. Not all students are required to take this placement test. Only students interested in enrolling in Chemistry 1A (General Chemistry I) must take the Chemistry placement test, unless they successfully completed Chemistry 4 (Beginning Chemistry) in the past.

Results for the Chemistry placement tests are outlined in Table 3. With the exception of 2011, more students continue to place into the higher course, Chemistry 1A. In 2013, placements into Chemistry 4 increased slightly relative to 2012 (38.5% vs. 34.5%). Average placement rates during this timeframe for Chemistry 4 and Chemistry 1A were 40% and 60%, respectively. Given that students who plan to enroll in Beginning Chemistry (Chemistry 4) do not need to take a placement exam, it is likely that students taking the Chemistry placement exam were attempting to place into Chemistry 1A. Any student who planned to enroll in Chemistry 4 may have bypassed the testing process and simply enrolled. Therefore, the placement rates presented here may not be an adequate representation of how prepared all ECC new students from high school are for General Chemistry.

**Table 3: Assessment Test Results by Chemistry Course**

Placements	2009 (n=3,166)		2010 (n=2,723)		2011 (n=2,545)		2012 (n=2,642)		2013 (n=2,716)	
	N	%	N	%	N	%	N	%	N	%
Chemistry 1A	24	63.2	20	62.5	14	48.3	19	65.5	16	61.5
Chemistry 4	14	36.8	12	37.5	15	51.7	10	34.5	10	38.5
<b>Total</b>	<b>38</b>		<b>32</b>		<b>29</b>		<b>29</b>		<b>26</b>	

## ENGLISH AS A SECOND LANGUAGE

The English as a Second Language (ESL) assessment consists of a computerized reading skills test, a questionnaire, an English writing sample, an oral interview, and an orientation to the College. The comprehensive ESL assessment places students into Listening/Speaking (Oral), Reading, and Writing courses. These courses are listed by level in the Appendix. A 5-year trend of placement results is found in Table 4 below.

Similar to previous years, a very small percentage of students aged 17-18 ( $\leq 3\%$ ) took the ESL test in 2013. After a brief drop in 2012, college preparatory oral ESL course placements returned to the more typical rate in the low 90's. For Reading placement, the opposite held true. Compared to 2012, 10% fewer students were placed into the college preparatory ESL reading course. No students were placed into transfer-level writing ESL in 2013. During the 5-year period, younger students placing into basic skills ESL courses ranged from 5%-14% for oral, 15%-27% for reading and 12-21% for writing.

**Table 4: Assessment Test Results by ESL Test Category and Course Group**

Placements	2009 (n=3,166)		2010 (n=2,723)		2011 (n=2,545)		2012 (n=2,642)		2013 (n=2,716)	
	N	%	N	%	N	%	N	%	N	%
<b>Oral</b>										
College-prep	65	94.2	79	92.9	56	94.9	54	85.7	35	92.1
Basic Skills	4	5.8	6	7.1	3	5.1	9	14.3	3	7.9
<b>Total</b>	<b>69</b>		<b>85</b>		<b>59</b>		<b>63</b>		<b>38</b>	
<b>Reading</b>										
College-prep	59	83.1	76	85.4	52	82.5	54	83.1	27	73.0
Basic Skills	12	16.9	13	14.6	11	17.5	11	16.9	10	27.0
<b>Total</b>	<b>71</b>		<b>89</b>		<b>63</b>		<b>65</b>		<b>37</b>	
<b>Writing</b>										
Transfer-level	4	5.5	4	4.4	5	7.8	1	1.5	0	0.0
College-prep	57	78.1	68	74.7	51	79.7	56	86.2	35	85.4
Basic Skills	12	16.4	19	20.9	8	12.5	8	12.3	6	14.6
<b>Total</b>	<b>73</b>		<b>91</b>		<b>64</b>		<b>65</b>		<b>41</b>	

\*To place into transfer-level Reading and Writing, examinees must achieve a qualifying score on both the Reading and Writing portions of the assessment test (see Appendix).

## CONCLUSION

This study provided a general analysis of El Camino College students coming directly from high school (or shortly thereafter). This group tends to perform the best, on average, than any other age group; older students tend to be less prepared for college compared to students with a recent high school experience. For example, the average placement rates for all assessed students into basic skills reading, writing, and math were 37%, 17% and 42%, respectively. In comparison, recent high school graduates placed into the same categories of basic skills at 34%, 13% and 32%, respectively.

There are several interesting findings from this report. First, despite a decrease in the number of students taking placement tests, there was an increase in the number of students who took a placement test and subsequently enrolled at ECC. Second, this report illustrates the disparate levels of college preparation that incoming students possess. Over the last five years, transfer-level placement rates remained relatively stable within assessment, but vary widely between Reading (45%), Writing (40%), and Math (10%). This further emphasizes that ECC serves a student body with varied levels of college preparation.

## APPENDIX – COURSES BY GROUP

### READING & WRITING

Course Group	Levels Below Transfer	Reading	Writing
Transfer-level	--	<ul style="list-style-type: none"> <li>English 1A – Reading &amp; Composition</li> </ul>	<ul style="list-style-type: none"> <li>English 1A – Reading &amp; Composition</li> </ul>
College-preparatory	1	<ul style="list-style-type: none"> <li>English 84 (formerly Engl-2R) – Developmental Reading &amp; Writing</li> <li>English 7 – Speed &amp; Power Reading</li> </ul>	<ul style="list-style-type: none"> <li>English A – Writing the College Essay</li> </ul>
Basic Skills	2	<ul style="list-style-type: none"> <li>English 82 (formerly Engl-R) – Introduction to Reading Skills</li> </ul>	<ul style="list-style-type: none"> <li>English B – Introduction to the Composing Process</li> </ul>
	3	<ul style="list-style-type: none"> <li>English 80 – Basic Language Skills</li> </ul>	

### MATHEMATICS

Course Group	Levels Below Transfer	Course
Transfer-level	--	<ul style="list-style-type: none"> <li>Math 190 – Calculus</li> <li>Math 160 – Business Calculus</li> <li>Math 180 – Pre-Calculus</li> <li>Math 170 – Trigonometry</li> <li>Math 150 – Elem. Probability &amp; Statistics</li> <li>Math 140 – Finite Math</li> <li>Math 130 – College Algebra</li> <li>Math 120 – Nature of Math</li> <li>Math 115 – Prob. &amp; Stats for Elementary Teachers</li> <li>Math 110 &amp; 111 – Math for Elem. Teachers</li> <li>Computer Science 1, 5, 10</li> </ul>
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College-preparatory	1	<ul style="list-style-type: none"> <li>Math 80* – Intermediate Algebra for Science, Technology, Engineering, and Mathematics</li> <li>Math 73* – Intermediate Algebra for General Education</li> <li>Math 60 – Elementary Geometry</li> </ul>
	2	<ul style="list-style-type: none"> <li>Math 40 or 41B/43* – Elementary Algebra</li> </ul>
Basic Skills	3	<ul style="list-style-type: none"> <li>Math 41A – Elementary Algebra, Part I</li> <li>Math 33* – Extended Elementary Algebra, Part I</li> <li>Math 25 – Pre-Algebra Review</li> <li>Math 23 – Pre-Algebra</li> </ul>
	4	<ul style="list-style-type: none"> <li>Math 10A-10B/12 – Basic Arithmetic Skills</li> </ul>

\* Math 80 replaced Math 70 (Intermediate Algebra) in fall 2009. It is a Calculus-track algebra course.

\* Math 73 was inaugurated in fall 2009. It is a non-Calculus track algebra course.

\* Math 33 and 43 (Extended Elementary Algebra, Parts I and II) replaced Math 41A and 41B (Elementary Algebra, Parts I and II) in fall 2009.



## ENGLISH AS A SECOND LANGUAGE (ESL)

Course Group	Levels Below Transfer	Oral (Listening/Speaking) *	Reading	Writing
Transfer-level	--			<ul style="list-style-type: none"> <li>English 1AX** - Reading &amp; Composition for Foreign Students</li> </ul>
College-preparatory	1	<ul style="list-style-type: none"> <li>ESL 51C – (Advanced)</li> <li>ESL 51B – (Intermediate)</li> </ul>	<ul style="list-style-type: none"> <li>ESL 52C – (Advanced)</li> <li>ESL 52B – (Intermediate)</li> </ul>	<ul style="list-style-type: none"> <li>English A-X – Writing the College Essay</li> <li>ESL 53B – (Intermediate)</li> </ul>
Basic Skills	2	<ul style="list-style-type: none"> <li>ESL 51A – Intro to English Conversation</li> </ul>	<ul style="list-style-type: none"> <li>ESL 52A – Intro to Reading and Vocab. Building</li> </ul>	<ul style="list-style-type: none"> <li>ESL 53A – Elementary Grammar/Writing</li> </ul>

\* Although Listening/Speaking courses indicate “levels below transfer,” they do not directly lead to a transfer-level course such as English 1A.

\*\* To place into transfer-level Reading and Writing (English 1AX), students must achieve a qualifying score on both the Reading and Writing portions of the assessment test. For ESL, students must place into ESL 52C for Reading, and English 1AX for Writing.