

Mathematical Sciences Division Council  
Agenda, September 22, 2015

1. Faculty Position ID
  - a. Please review the text and numbers (see attached)
  - b. We need to decide how many positions to request
2. Program Plans
  - a. Budget Allocation
    - i. Our Division was funded for classroom sets of calculators and new printers for the workroom
  - b. Program Plans for next year are due in Nov
    - i. Programs/Committees should submit top priorities including those from Program Review
3. Active Enrollment Submission Response
  - a. Paul Yun's Suggestion that Math/Sci propose that there be a verification email when Active Enrollment is submitted
4. Challenge test for Math 73 to Math 80
  - a. A challenge exam is being draft for students who complete/pass Math 73 and change majors to Business or Stem.
5. Section Transfer Agreement Form
6. Class Assignment and Scheduling
  - a. Dean will explain system used for scheduling Spring 2016

## **EL CAMINO COLLEGE**

### **MATHEMATICAL SCIENCES DIVISION COUNCIL**

September 22, 2015

Present: Carl Broderick, Susan Bucher, Diaan Eldanaf, Junko Forbes, Greg Fry, Art Hernandez, Linda Ho, Anna Hockman, Lars Kjeseth, Art Martinez, Bonnie Mercado, Ashod Minasian, Catherine Schult-Roman, Jackie Sims, Susan Taylor, Jared Thilenius (ASO Rep), Lijun Wang, Paul Yun

#### **FACULTY POSITION ID**

Faculty position ID forms are due 9/25/15. Each division looks at their data and compares PT vs. FT ratio to assess the need to hire new full-time instructors.

It is most important to look at the percentage ratio between full-time and part-time instructors. Our current ratio is 53% full-time vs. 47% part-time based on the current course offerings. Recommendation was made to request five full-time math instructors. The campus committee will meet and decide how many instructors we will be approved for.

There will be a CS department meeting on 9/24/15 to review their faculty position ID form. CS is a high growth area. It was recommended that we request two full-time instructors.

Send J. Sims any recommendations on the narrative by 9/23/15.

The Associate Dean hiring committee is currently going on. Initial interviews will be on 10/2/15. Final interviews will be on 10/21/15.

We were not approved to hire a full-time tutoring coordinator. Therefore, we are going to do a hiring for a part-time coordinator, as Larry Schreier is serving as an interim. It should be discussed which direction to go towards for this position: faculty, non-faculty, classified or management route. The person will need minimum qualifications to teach Math 100 once it is reactivated. This should be discussed at the next Division Council.

#### **PROGRAM PLANS - BUDGET ALLOCATION**

The division was funded for \$25,000 worth of classroom calculator sets and two new printers for the workroom. The division supply budget will also be augmented.

The plan builder items are recommendations that come from program reviews.

One person from each committee should be appointed to work with Junko Forbes on which items to enter into TracDat and in the order to list them.

Art Hernandez informed the committee that the TRIO grant was not renewed this year.

### **ACTIVE ENROLLMENT SUBMISSION RESPONSE**

Paul Yun suggested that the department propose that a confirmation email should be sent to faculty when they submit Active Enrollment. Division Council unanimously supports this. The recommendation will be sent to Zach Marks, our Academic Senate representative, to present to the Academic Senate.

### **CHALLENGE TEST FOR MATH 73 TO MATH 80**

A challenge exam has been drafted for students who passed Math 73 but have changed majors to Business or STEM and would like to opt out of taking Math 80.

Currently, students must retake the placement test.

Junko Forbes created the challenge exam by comparing the two outlines for Math 73 and 80 and looked at what Math 73 did not include.

It has been reviewed by Committee D and the Placement/Prerequisites/Testing Committee.

A recommendation was made that all of the challenge exams should be normed. A sample of Math 80 students should take the challenge test to determine the passing score.

Another recommendation was made to offer more Math 80 classes. J. Sims will review this.

Contact J. Forbes with topics that you think should be added to the challenge exam.

Jared Thilenius suggested that we offer a crash course, similar to Summer Math Academy, to cover the topics not covered in Math 73 but in Math 80.

### **SECTION TRANSFER AGREEMENT FORM**

If a section transfer is going to be done, the Math Division office must know what agreement has been made between the two instructors regarding transferring test scores and assignment grades. Send recommendations for this form to J. Sims and M. Maaza.

EL CAMINO COLLEGE  
FACULTY POSITION IDENTIFICATION FORM  
2015-2016

Department Requesting Position: Mathematics

Number of Positions Requested:

Division: Mathematical Sciences

Division Ranking:

**A. Program Profile (Academic Affairs and Student Services)**

**1. Impact of position on program quality and integrity, as well as on student needs**

If requesting a vocational program teaching position, discuss labor market trends in the field and why this position is important. Information concerning additional expenses, start-up and on-going, must be provided if request has program requirements such as new equipment, facilities modifications, or classified support. Was the position recommended in the annual plan or recent program review?

Recent innovations in the mathematics department, with the goal of improving student learning and student success, are ongoing and their successful development requires the leadership of full-time faculty. Major recent and continuing innovations include:

• Increase in Online-hybrid courses.

Increase in high demand transfer courses including Statistics.

- The Basic Skills Initiative, a major statewide and college priority; activities have included collaboration with Human Development and Counseling faculty.
- Expansion of accelerated course in basic skills, including required computer laboratories.
- Expansion of accelerated courses to prepare students for transfer-level non STEM courses.
- HSI STEM grant to focus on preparing future engineers.
- Moreover, the high proportion of part-time instructors concentrates more responsibilities among the full-time instructors for evaluation, mentoring, maintenance of program consistency and quality, and assessment of student learning outcomes.

## 2. Why does the program and College need this position?

In recent years, the new full-time positions have compensated for retirements and resignations. Moreover, like the faculty at large, a significant number of senior instructors are nearing retirement.

The percentage of full-time instruction in mathematics is currently at 59%. This is significantly lower than the college's percentage and lower than in other large departments. With nearly half of the teaching done by part-time instructors, continuity and consistency is more difficult to maintain.

Update

Every student completing an associate degree or preparing to transfer needs mathematics. Beginning in Fall 2009, the mathematics requirement for associate degree has been increased (per Title 5 changes) by one course level. Fill rate in mathematics courses has been over 100% for three years; Now that the budget crisis is nearing an end, there is strong enrollment in mathematics and the college needs to be ready with the leadership and innovation that can only be provided by full-time instructors.

## 3. Availability of Part-Time Instructors/Counselors/Librarians

Potential part-time instructors, who have the master's degrees in mathematics, may have other professional opportunities, so there is significant turnover. Now that the economic downturn is fading, there are significant alternate opportunities for those holding the minimum qualifications for mathematics instructor. Over the summer, we lost 5 adjunct instructors due to them receiving fulltime jobs at other campus. This lead to having to hire several emergency hires.

Furthermore, as many community colleges increased their course offerings, it was quite a challenge to compete for part time instructors as they were being sought by surrounding colleges as well.

Developments in the delivery of mathematics instruction, particularly using online tools and an increased focus on applications, require fresh faculty and continued faculty development. It is difficult to provide incentives for part-time faculty to participate in faculty development; leadership by full-time instructors is essential.

#### 4. Proposed Funding Source

- General fund:
- Categorical fund (please identify):
- Grant fund (please identify):

#### 5. Hiring History of Department Requesting Position (Full-time Only)

Fall 2015	Fall 2014	Fall 2013
<u>                    </u>	<u>          3          </u>	<u>                    2                    </u>

#### B. FTEF Data for Fall 2015

##### Notes:

1. All faculty on pre-retirement should be counted as 1.0 FTEF. If the faculty member is teaching 0% in fall, add 1.0 to leave and subtract 1.0 from part-time FTEF. Same for faculty on medical leave.
2. A full-time *temporary* instructor who is *not* covering classes for a permanent faculty member on sabbatical, paid or unpaid leave, or reassigned time should be counted as part-time FTEF.
3. Faculty coordinators, on reassigned time or funded through grants, should be counted as full-time FTEF. A 100% RT faculty coordinator, for example, would count as 1.0 FTEF. The 50% RT faculty coordinator for the Writing Center would count as .5 FTEF.
4. A full-time faculty member's overload FTEF should be counted as part-time FTEF.
5. FTEF taught by a full-time faculty member in an area outside the individual's regular assignment should be counted as full-time FTEF if it is part of the individual's regular load.
6. Do *not* count any current faculty member as retired unless the dean has received a letter of retirement or resignation.

##### *Full-Time Faculty FTEF*

- |  |   |
|--|---|
| 1. Instructional FTEF (from Teacher Load Summaries):                   | <u>          73.83          </u>  |
| 2. Full-time Faculty FTEF (Instructional/Counseling/Library):          | <u>                          36.83                          </u>                                |
| FTEF for counselors or librarians must be based on a 40-hour workweek. |   |
| 3. Total FTEF Reassigned Time (Please identify RT assignments below):  | <u>  1.10  </u> |

• Faculty member	<u>Junko Forbes (Fac Coord)</u>	%RT	<u>40.00</u>
• Faculty member	<u>Arturo Martinez (BSI/STEM)</u>	%RT	<u>70.000</u>
• Faculty member	_____	%RT	_____
• Faculty member	_____	%RT	_____
4. Total FTEF on sabbatical, pre-retirement, and/or leaves of absence: (Identify faculty members and their FTEF.) Susie Tummers - Sabbatical)			<u>1.00</u>
5. TOTAL FULL-TIME FACULTY FTEF (items 2 plus 3 plus 4):			<u>38.93</u>

*Part-time faculty FTEF*

6. Part-Time Faculty FTEF (Instructional/Counseling/Library): FTEF for part-time counselors or librarians must be based on a 40-hour workweek. An adjunct counselor assigned to 24 hours a week, therefore, should be counted as .60 FTEF.			<u>34.83</u>
7. Full-Time Overload FTEF (to be counted as part-time):	<u>1.76</u>		
8. FTEF Reassigned Time Replacements:	<u>1.10</u>		
9. FTEF Sabbatical/Pre-retirement/Leave of Absence Replacements:			<u>1.00</u>
10. TOTAL PART-TIME FACULTY FTEF (item 6 plus 7 minus 8 minus 9):			<u>34.49</u>
11. PERCENTAGE OF PROGRAM PART-TIME FTEF: Calculate by dividing line 10 by sum of lines 5 and 10.			<u>47%</u> <u>0.469763007</u>

**C. Additional Full-time/Part-time and FTEF Data for Department Requesting Position**

Academic areas, counseling, and the library should use faculty rosters and data from past contracts and faculty requests. Include FTEF for on-line courses. Counseling and library should base FTEF on a 40-hour workweek.

	Fall 2015	Fall 2014	Fall 2013
Number of Full-time Faculty (head count)	<u>40</u>	<u>39</u>	<u>40</u>
Number of Part-time Faculty (head count)	<u>75</u>	<u>76</u>	<u>67</u>
Total Faculty	<u>115</u>	<u>115</u>	<u>107</u>
Full-Time FTEF	<u>38.93</u>	<u>38.54</u>	<u>40.00</u>
Part-Time FTEF	<u>34.49</u>	<u>31.27</u>	<u>24.65</u>

Total FTEF	73.42	69.81	64.65
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Percentage Ratio FT to PT FTEF	53% /	55% /	62% /
	47%	45%	38%

Percentage Ratio FT to PT FTEF if position request is approved	54%	/	46%
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(Provide percentage ratio of FT to PT FTEF for any additional positions requested)

	FT	/	PT
If two	56%	/	44%
If three	57%	/	43%

**D. Growth History and Productivity Data for academic areas, from Teacher Load Summaries**  
(Does not apply to Library and Counselors)

Weekly Census Classes	Fall 2015	Fall 2014	Fall 2013
Students	8,177	8,256	7,709
WSCH	42,470.00	42,563.00	39,358.00
FTEF	68.43	68.15	63.41
FTES	1258.00	1251.00	1206.00
% Seats Taken	100.25%	102.00%	99.00%
# Sections	226	225	217
Adjusted WSCH/FTEF	551.67	555.15	551.73
<b>FTES/FTEF</b>	18.38	18.36	18.65

Daily Census Classes - Short-Term Classes	Fall 2015	Fall 2014	Fall 2013
Students		19	
DSCH		2,565.00	
FTEF		0.27	



FTES		4.88	
% Seats Taken		63.00%	
# Sections		1	
Adjusted WSCH/FTEF			
<b>FTES/FTEF</b>		18.07	

<b>On-Line Classes</b>	Fall 2015	Fall 2014	Fall 2013
Students	442	106	210
WSCH	1,984.00	482.00	674.00
FTEF	5.40	1.20	1.73
FTES	59.00	14.00	21.00
% Seats Taken	70.16%	76.00%	75.00%
# Sections	18	4	6
Adjusted WSCH/FTEF	326.58	357.04	346.31
<b>FTES/FTEF</b>	10.93	11.67	12.14

<b>Positive Attendance/ CreditClasses</b>	Fall 2015	Fall 2014	Fall 2013
Students			
PSCH			
FTEF			
FTES			
% Seats Taken			
# Sections			
Adjusted WSCH/FTEF			
<b>FTES/FTEF</b>			

<b>Overall FTES for Department</b>	<u>1317.00</u>	<u>1269.88</u>	<u>1227.00</u>
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<b>Overall FTES/FTEF</b>	<u>17.84</u>	<u>18.24</u>	<u>18.84</u>
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Total FTES from Weekly, Daily, On-Line, and P.A., then divide by total FTEF for all four categories.

**E. Student Services Program Data**

**1. Three-year trend history for Counseling and support services**

	Fall 2015	Fall 2014	Fall 2013
# of students served	_____	_____	_____
# of educational plans completed (abbreviated and comprehensive)	_____	_____	_____
# of probation students served	_____	_____	_____
# of undecided students served	_____	_____	_____

**2. Three-year trend history for Library Services**

	Fall 2015	Fall 2014	Fall 2013
# of students served	_____	_____	_____
Ratio of librarians to FTES compared to Title 5 minimum standards for libraries	_____	_____	_____

**3. State of federal mandates/required services to special populations, as applicable.**

**F. Validation of Data**

Signature of Vice President \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Vice President \_\_\_\_\_ Date: \_\_\_\_\_

## H. Definition of terms

### 1. FTEF

"Full Time Equivalent Faculty" (load); faculty's teaching obligation, presented as a ratio that assumes a 20 lecture hour/100% load ratio

### 2. FTES

"Full Time Equivalent Student;" derived according to the following calculations

**Weekly Census:**  $(WSCH \times 16.4) / 525$

**Daily Census:**  $(DSCH \times \text{Number of Class Meetings}) / 525$

**Positive Attendance:**  $(\text{Total Number of Student Contact Hours}) / 525$

**Distance Education:**  $(\text{Number of Students} \times \text{Course Units} \times 16.4) / 525$

### 3. Types of Attendance

**WSCH:** "Weekly Student Contact Hours;" calculated by multiplying a WEEKLY CENSUS section's number of WEEKLY contact hours by the number of students enrolled

**DSCH:** "Daily Student Contact Hours;" calculated by multiplying a DAILY CENSUS section's number of DAILY contact hours by the number of students enrolled

**PSCH:** "Positive Attendance Student Contact Hours;" actual number of student hours as recorded on positive attendance rosters

### 4. FTES/FTEF

The ratio of Full Time Equivalent Students (apportionment funding) to the number of Full Time Equivalent Faculty; used for comparison and analysis of program reliability, sustainability and potential for growth.

EL CAMINO COLLEGE  
FACULTY POSITION IDENTIFICATION FORM  
2015-2016

Department Requesting Position: Mathematics — CS  
Number of Positions Requested:  
Division: Mathematical Sciences  
Division Ranking:

A. Program Profile (Academic Affairs and Student Services)

1. Impact of position on program quality and integrity, as well as on student needs

If requesting a vocational program teaching position, discuss labor market trends in the field and why this position is important. Information concerning additional expenses, start-up and on-going, must be provided if request has program requirements such as new equipment, facilities modifications, or classified support. Was the position recommended in the annual plan or recent program review?

— Include # of new courses being offered

Computer Science is a vital field. The new policy brief released on September 22, 2014, by the state's leading Science, Technology, Engineering and Math (STEM) organization, the California STEM Learning Network (CSLNet), states that California majorly lags behind in producing highly trained employees desperately needed within the industry despite a large outcry in the business community for these workers and new statistics recently reported by the Bureau of Labor Statistics showing 1.4 million new computing jobs will be created in the next 10 years alone. In the U.S. News and World Report list of the top 100 jobs in 2013, no less than 5 of the top 13 fields are CS related, with Computer Systems Analyst placing 4<sup>th</sup>, Database Administrator in 6<sup>th</sup>, Software Developer in 7<sup>th</sup>, Web Developer in 9<sup>th</sup>, and Computer Programmer in 13<sup>th</sup>.

The Bureau of Labor Statistics (BLS) projects that employment of software developers is projected to grow 30% from 2010 to 2020, much faster than the average for all occupations. The main reason for the rapid growth is a large increase in the demand for computer software. The BLS website states: "Software developers usually have a bachelor's degree, typically in computer science, software engineering, or a related field. A degree in mathematics is also acceptable. Computer science degree programs are the most common, because they tend to cover a broad range of topics. Students should focus on classes related to building software in order to better prepare themselves for work in the occupation." They further state that "Although writing code is not their first priority, developers must have a strong background in computer programming. They usually gain this experience in school."

In recent years the El Camino College CS Department has been reduced to offering a mere 7 sections per semester (down from over 25 a decade ago). There had been a downturn in the computing job market, but that has long since passed. Over half our course offerings have been in CSCI 1, the introductory course. We haven't offered students much flexibility or variety in follow up courses due to budget restrictions in recent years. However, there is tremendous demand for all levels of CS that we can offer at the community college level. Our course wait lists fill very early in the registration process, faster than most other courses. Students who want to earn an Associate's Degree have been stymied by the lack of available courses. This also affects their ability to transfer — not having a diverse exposure to CS topics is a detriment for the students. A new full-time CS faculty member could help to spearhead the growth of this department and keep it up-to-date with the latest trends in computer science education and the computer science world.

2. Why does the program and College need this position?

A primary goal at ECC is to get students to earn Associate degrees and transfer to 4 year colleges. There likely is no group anywhere on campus that has a greater potential for doing this than students enrolled in computer science. According to the

student survey conducted as part of the CS Program review this year, 98% of students plan to transfer to a 4 year college. They have had trigonometry, which is the prerequisite for CS1, so they have already made huge progress toward transferring before they enroll in a CS class. Seventy-five percent of them are majoring in computer science or computer engineering or gaming. All Computer Science classes are transferable STEM courses. We need another full-time Computer Scientist to help the program grow and meet the challenges of the rapidly changing needs in Computer Science education and the computing world.

### **3. Availability of Part-Time Instructors/Counselors/Librarians**

Potential part-time instructors, who have the master's degrees in computer science, definitely have other professional opportunities, so the pool is quite low. Of those in the possible pool, many do not possess the minimum qualifications, and must therefore apply for equivalencies. Adjuncts in computer science are just unavailable. After searching months for an adjunct, we had to cancel a 100% enrolled CS1 course during the summer session, because we just could not find coverage for teaching the course.

### **4. Proposed Funding Source**

- **General fund:**
- **Categorical fund (please identify):**
- **Grant fund (please identify):**

### **5. Hiring History of Department Requesting Position (Full-time Only)**

Fall 2015

Fall 2014

Fall 2013

**B. FTEF Data for Fall 2015**

Notes:

1. All faculty on pre-retirement should be counted as 1.0 FTEF. If the faculty member is teaching 0% in fall, add 1.0 to leave and subtract 1.0 from part-time FTEF. Same for faculty on medical leave.
2. A full-time *temporary* instructor who is *not* covering classes for a permanent faculty member on sabbatical, paid or unpaid leave, or reassigned time should be counted as part-time FTEF.
3. Faculty coordinators, on reassigned time or funded through grants, should be counted as full-time FTEF. A 100% RT faculty coordinator, for example, would count as 1.0 FTEF. The 50% RT faculty coordinator for the Writing Center would count as .5 FTEF.
4. A full-time faculty member's overload FTEF should be counted as part-time FTEF.
5. FTEF taught by a full-time faculty member in an area outside the individual's regular assignment should be counted as full-time FTEF if it is part of the individual's regular load.
6. Do *not* count any current faculty member as retired unless the dean has received a letter of retirement or resignation.

*Full-Time Faculty FTEF*

1. **Instructional FTEF (from Teacher Load Summaries):** 6.38
2. **Full-time Faculty FTEF (Instructional/Counseling/Library):** 2.93 Engr load removed  
FTEF for counselors or librarians must be based on a 40-hour workweek.
3. **Total FTEF Reassigned Time (Please identify RT assignments below):** \_\_\_\_\_
  - Faculty member \_\_\_\_\_ %RT \_\_\_\_\_
  - Faculty member \_\_\_\_\_ %RT \_\_\_\_\_
  - Faculty member \_\_\_\_\_ %RT \_\_\_\_\_
  - Faculty member \_\_\_\_\_ %RT \_\_\_\_\_
4. **Total FTEF on sabbatical, pre-retirement, and/or leaves of absence:** \_\_\_\_\_  
(Identify faculty members and their FTEF.)
5. **TOTAL FULL-TIME FACULTY FTEF (items 2 plus 3 plus 4):** 2.93 Engr load removed

*Part-time faculty FTEF*

6. **Part-Time Faculty FTEF (Instructional/Counseling/Library):** 2.75  
 FTEF for part-time counselors or librarians must be based on a 40-hour workweek.  
 An adjunct counselor assigned to 24 hours a week, therefore, should be counted as .60 FTEF.
7. **Full-Time Overload FTEF (to be counted as part-time):** 0.70
8. **FTEF Reassigned Time Replacements:** \_\_\_\_\_
9. **FTEF Sabbatical/Pre-retirement/Leave of Absence Replacements:** \_\_\_\_\_
10. **TOTAL PART-TIME FACULTY FTEF (item 6 plus 7 minus 8 minus 9):** 3.45
11. **PERCENTAGE OF PROGRAM PART-TIME FTEF:** 54%  
 Calculate by dividing line 10 by sum of lines 5 and 10. 0.540752351

**C. Additional Full-time/Part-time and FTEF Data for Department Requesting Position**

Academic areas, counseling, and the library should use faculty rosters and data from past contracts and faculty requests. Include FTEF for on-line courses. Counseling and library should base FTEF on a 40-hour workweek.

	Fall 2015	Fall 2014	Fall 2013
Number of Full-time Faculty (head count)	<u>3</u>	<u>2</u>	<u>1</u>
Number of Part-time Faculty (head count)	<u>10</u>	<u>7</u>	<u>4</u>
Total Faculty	<u>13</u>	<u>9</u>	<u>5</u>
Full-Time FTEF	<u>2.93</u>	<u>2.92</u>	<u>1.00</u>
Part-Time FTEF	<u>3.45</u>	<u>2.32</u>	<u>2.30</u>
Total FTEF	<u>6.38</u>	<u>5.24</u>	<u>3.30</u>
Percentage Ratio FT to PT FTEF	<u>46%</u> / <u>54%</u>	<u>56%</u> / <u>44%</u>	<u>30%</u> / <u>70%</u>

Percentage Ratio FT to PT FTEF if position request is approved  
62% / 38%

(Provide percentage ratio of FT to PT FTEF for any additional positions requested)

	FT		PT
If two	<u>77%</u>	/	<u>23%</u>
If three	<u>93%</u>	/	<u>7%</u>

**D. Growth History and Productivity Data for academic areas, from Teacher Load Summaries**

(Does not apply to Library and Counselors)

<b>Weekly Census Classes</b>	Fall 2015	Fall 2014	Fall 2013
Students	<u>390</u>	<u>330</u>	<u>174</u>
WSCH	<u>2,759.00</u>	<u>2,311.00</u>	<u>1,224.00</u>
FTEF	<u>5.80</u>	<u>4.73</u>	<u>3.30</u>
FTES	<u>80.00</u>	<u>67.00</u>	<u>38.00</u>
% Seats Taken	<u>90.27%</u>	<u>95.00%</u>	<u>88.00%</u>
# Sections	<u>20</u>	<u>16</u>	<u>9</u>
Adjusted WSCH/FTEF	<u>422.84</u>	<u>434.30</u>	<u>329.70</u>
<b>FTES/FTEF</b>	<u>13.79</u>	<u>14.20</u>	<u>11.5</u>
<b>Daily Census Classes - Short-Term Classes</b>	Fall 2015	Fall 2014	Fall 2013
Students	<u>          </u>	<u>          </u>	<u>          </u>
DSCH	<u>          </u>	<u>          </u>	<u>          </u>
FTEF	<u>          </u>	<u>          </u>	<u>          </u>
FTES	<u>          </u>	<u>          </u>	<u>          </u>
% Seats Taken	<u>          </u>	<u>          </u>	<u>          </u>
# Sections	<u>          </u>	<u>          </u>	<u>          </u>
Adjusted WSCH/FTEF	<u>          </u>	<u>          </u>	<u>          </u>
<b>FTES/FTEF</b>	<u>          </u>	<u>          </u>	<u>          </u>
<b>On-Line Classes</b>	Fall 2015	Fall 2014	Fall 2013
Students	<u>18</u>	<u>          </u>	<u>          </u>
WSCH	<u>90.00</u>	<u>          </u>	<u>          </u>
FTEF	<u>0.58</u>	<u>          </u>	<u>          </u>
FTES	<u>6.00</u>	<u>          </u>	<u>          </u>
% Seats Taken	<u>81.82%</u>	<u>          </u>	<u>          </u>



# Sections	<u>1</u>		
Adjusted WSCH/FTEF	<u>137.93</u>		
<b>FTEF/FTEF</b>	<u>10.34</u>		
<b>Positive Attendance/ CreditClasses</b>	Fall 2015	Fall 2014	Fall 2013
Students			
PSCH			
FTEF			
FTES			
% Seats Taken			
# Sections			
Adjusted WSCH/FTEF			
<b>FTEF/FTEF</b>			
<b>Overall FTES for Department</b>	<u>86.00</u>	<u>67.00</u>	<u>38.00</u>
<b>Overall FTES/FTEF</b>	<u>13.48</u>	<u>14.16</u>	<u>11.52</u>
Total FTES from Weekly, Daily, On-Line, and P.A., then divide by total FTEF for all four categories.			

**E. Student Services Program Data**

**1. Three-year trend history for Counseling and support services**

	Fall 2015	Fall 2014	Fall 2013
# of students served			
# of educational plans completed (abbreviated and comprehensive)			
# of probation students served			
# of undecided students served			

**2. Three-year trend history for Library Services**

	Fall 2015	Fall 2014	Fall 2013
# of students served	_____	_____	_____
Ratio of librarians to FTES compared to Title 5 minimum standards for libraries	_____	_____	_____

3. State of federal mandates/required services to special populations, as applicable.

F. Validation of Data

Signature of Vice President \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Vice President \_\_\_\_\_ Date: \_\_\_\_\_

H. Definition of terms

1. FTEF

"Full Time Equivalent Faculty" (load); faculty's teaching obligation, presented as a ratio that assumes a 20 lecture hour/100% load ratio

2. FTES

"Full Time Equivalent Student;" derived according to the following calculations

**Weekly Census:** (WSCH x 16.4)/525

**Daily Census:** (DSCH x Number of Class Meetings)/525

**Positive Attendance:** (Total Number of Student Contact Hours)/525

**Distance Education:** (Number of Students x Course Units x 16.4)/525

3. Types of Attendance

**WSCH:** "Weekly Student Contact Hours;" calculated by multiplying a WEEKLY CENSUS section's number of WEEKLY contact hours by the number of students enrolled

**DSCH:** "Daily Student Contact Hours;" calculated by multiplying a DAILY CENSUS section's number of DAILY contact hours by the number of students enrolled

**PSCH:** "Positive Attendance Student Contact Hours;" actual number of student hours as recorded on positive attendance rosters

4. FTES/FTEF

The ratio of Full Time Equivalent Students (apportionment funding) to the number of Full Time Equivalent Faculty; used for comparison and analysis of program reliability, sustainability and potential for growth.

Strat. Init.	Description	Fund	Amount Req'std	Goal
A.2	Classroom sets of calculators : 200 at \$125/each. While we do currently have a calculator loan program, it gets exhausted usually within the first 3 weeks of the semester. Many instructors are incorporating technology into the curriculum, and are requiring students to use calculators. These calculators are very expensive and many students cannot afford them. When an instructor wants to work on a project during class, there is a need to have a class set of calculators so that all students may participate. CMII Program Review, 2014. CMI Program Review, 2012	BG	25,000	3
F	Printers for Division: BSS: 3 HP 4050N network printers for the Division Office, Social Science mailroom and Behavioral Science (ArtB) third floor faculty workroom. LRU: 3 Network laser printers (B&W, duplex) to replace the ones in reference, public access and acquisitions. Math: 2 printers for faculty workroom [Network copy machines]		15,500	3

Math 80 Challenge Exam Review Suggested Topics

1. Solving Systems of Linear Equations in three variables
2. Inverse functions
3. Composite functions
4. Operations on complex numbers
5. Solving exponential and logarithmic equations
6. Graphing: exponential and logarithmic functions
7. Domains of logarithmic functions
8. Properties of Logarithms
9. Exponential growth and decay problems
10. Conic sections (circle, ellipse, parabola, and hyperbola)

Topics that are not in the COR Math 73 that are in the COR for Math 80

1. Systems of Linear Equations in three variables
2. Complex Numbers
3. Inverse Functions and Composition
4. Exponential Functions
5. Logarithmic Functions
6. Conic Sections

Follow-up

El Camino College  
Mathematics Sciences Division  
Section Transfer Agreement

Please complete this plan in addition to the Section Transfer Form. The agreement should be completed by both instructors and must be signed by both instructors and the Dean of Mathematical Sciences.

Please thoroughly state the agreement that has been made between the two instructors? **Be specific.** Example: *Instructor 1 will provide the grades from Exam I, and Instructor 2 will include this score in the overall grade of the student.*

FROM:

\_\_\_\_\_  
SECTION NUMBER                  INSTRUCTOR'S SIGNATURE

TO:

\_\_\_\_\_  
SECTION NUMBER                  INSTRUCTOR'S SIGNATURE

\_\_\_\_\_  
STUDENT'S SIGNATURE

\_\_\_\_\_  
DEAN'S SIGNATURE

September 21, 2015