**Palomar College – Program Review and Planning**

**Instructional Programs**

**YEAR 1**

**Academic Year** **2012-13**

**Purpose of Program Review and Planning:** The institution assesses progress toward achieving stated goals and makes decisions regarding the improvement of institutional effectiveness in an on-going and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation. Evaluation is based on analyses of both quantitative and qualitative data (ACCJC/WASC, Standard I, B.3.)

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| **Discipline: Math** | **05/17/2012** |
| **Instructional Discipline Reviewed (Each discipline is required to complete a Program Review)** | **Please Add Date (00/00/2012)** |

**STEP I. ANALYSIS**

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|  |  |  |  |  | **<<Prelim>>** | ◄▬ Preliminary Fall 2011 data are as of 1/31/2012 |  |
|  |  | **Fall 2008** | **Fall 2009** | **Fall 2010** | **Fall 2011** | **Definitions** | |
| **Enrollment at Census** | | 7,814 | 8,088 | 7,957 | 8,086 | *Self Explanatory* | |
| **Census Enrollment Load %** | | 99.07% | 103.67% | 105.56% | 102.77% | Enrollment at Census Divided By Sum of Caps (aka "Seats") | |
| **WSCH** | | 29,490 | 30,394 | 29,944 | 30,520 | Weekly Student Contact Hours | |
| **FTES** | | 982.98 | 1,013.13 | 998.14 | 1,017.34 | One Full-Time Equivalent Student = 30 WSCH | |
| **Total FTEF** | | 48.32 | 47.92 | 47.58 | 49.64 | Total Full-Time Equivalent Faculty | |
| **WSCH/FTEF** | | 610 | 634 | 629 | 615 | WSCH Generated per Full-Time Equivalent Faculty Member | |
| **Full-time FTEF** | | 20.07 | 20.60 | 21.70 | 21.66 | FTEF from Contract Faculty | |
| **Hourly FTEF** | | 24.20 | 23.62 | 21.38 | 24.50 | FTEF from Hourly Faculty | |
| **Overload FTEF** | | 4.05 | 3.70 | 4.50 | 3.47 | FTEF from Contract Faculty Overload | |
| **Part-Time FTEF** | | 28.25 | 27.32 | 25.88 | 27.97 | Hourly FTEF + Overload FTEF | |
| **Part-Time/(Total FTEF) %** | | 58.46% | 57.01% | 54.39% | 56.36% | Percent of Total FTEF Taught By Part-Time Faculty | |
| Student Achievement: **Non Distance Education Courses** | | | |  |  | Those NOT taught via Distance Ed (see below) methods of instruction | |
| **● Retention Rate** | | 91.32% | 91.97% | 91.82% | 92.50% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | 56.94% | 57.97% | 57.74% | 58.70% | A,B,C,CR/P Grades Divided By A,B,C,CR/P,D,F,FW,NC/NP,W Grades | |
| Student Achievement: **Distance Education Courses** | | | |  |  | Those taught via Internet, TV or non line-of-sight interactive methods | |
| **● Retention Rate** | | 83.33% | 80.37% | 81.41% | 82.81% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | 43.59% | 38.08% | 43.06% | 47.70% | A,B,C,CR/P Grades Divided By A,B,C,CR/P,D,F,FW,NC/NP,W Grades | |
| **Degrees Awarded** | | 2 | 8 | 10 | N/A\* | Degree Counts Are for the Full Academic Year (thus, \*N/A for 2011-12) | |
| **Certificates Awarded:** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2011-12) | |
| **- Under 18 Units** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2011-12) | |
| **- 18 or More Units** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2011-12) | |

| **I. A. Reflect upon and provide an analysis of the four years of data above (for a sample analysis see** <http://www.palomar.edu/irp/11PRYear1/sampleforIA.pdf>) |
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| **-The department sees that there is an increase in student success rate.**  **- Retention rate has increased.**  **-Part time FTE is too high and doesn’t follow the legal guidelines set forth by the state (and hasn’t for the last 3 years). We believe that student success is directly related to the percent of Full time faculty and the instructor availability that comes from it. We will ask Research and Planning to provide the data, regarding this belief.**  **-We are now looking at an Census Enrollment Load that reached 105.56% (2010). Our classrooms are bulging at the seams with students falling out the door.** |

| **I. B. Please summarize the findings of Course AND Program SLO assessments conducted by your discipline. (For examples, see** <http://www.palomar.edu/irp/11PRYear1/PRPsloExamples.pdf>) |
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| **I.B.1 Summarize Course SLO assessment results beginning on the next line. Couse assessment is moving along nicely. Results are not always what would like to see, especially in the basic skills classes, but they are sparking discussion and revisions. Results in the transfer level classes have been good.**  **I.B.2 Summarize Program SLO assessment results beginning on the next line. Program assessment has been stymied by our repeated calls for input from the SLOAC Office being dropped. We are going to procede with our assessment without the input of the SLOAC Office. Although our informal assessment has been good.** |

| **I. C. Reflect upon the SLO assessment findings in Box B above. Discuss overall observations and any areas of concern or noteworthy trends.**  **(For examples of such analysis, see** <http://www.palomar.edu/irp/11PRYear1/PRPsloExamples.pdf>) |
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| **I.C.1 Please reflect upon the Course SLO findings in Box B (above) beginning on the next line. We do see a need for more full-time instructors. Most of our basic skills courses are taught by adjunct, while most of our transfer level classes are taught by full-time faculty. We have not done a statistical comparison of the full-time SLO assessment results versus the part-time SLO assessment results, nor will we, due to the sensitive nature of SLO assement results and instructor evaluations, so we only speculate that this corelation is not a coincidental. In addition, we plan on working with ALEKS in our remedial and Precalculus classes, in hopes of improving results. Furthermore, discussion has started regarding implementing departmental final exams.**  **I.C.2 And, please reflect upon the Program SLO findings in Box B beginning on the next line. We have heard from many transfer student who state the they were adequately prepared for the next level.** |

| **I. D. For Career Technical disciplines only, please provide a brief summary of the labor market outlook. This data can be found at <http://www.labormarketinfo.edd.ca.gov/> Please include job projections and trends that may influence major curriculum revisions.** |
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| **STEP II. PLANNING**  **Reflecting on the 4-year trend data, the SLO assessment results, and the college’s** [**Strategic Plan 2013**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**, describe/discuss the discipline planning related to the following: (For sample reflections, see** <http://www.palomar.edu/irp/11PRYear1/samplesforII.pdf>) |

| **II. A. Curriculum, programs, certificates and degrees (consider changes due to Title 5 or other regulations, CSU/UC transfer language updates, articulation updates, student retention or success rates, workforce and labor market projections, certificate or degree completions, etc.)** |
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| **We have implemented our Transfer degree. We would like to see better success rates, though our rates seemed to be in line with similar schools. The number of students who complete a degree, through our program, is increasing. We would like to see this trend continue (see below).** |

| **II. B. Class scheduling (consider enrollment trends, growth, course rotation, sequencing, Center/Site offerings, comprehensiveness, etc.)** |
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| **One of the needs that we see, that will allow more students to complete degrees, is the need for some more summer classes. In particular, we are getting many requests for Math 206 and 200 during the summer. With our summer program falling disporportionately, as compared to fall and spring, to the budget ax, offering these classes is not feasible at this time.** |

| **II. C. Faculty (Briefly discuss the faculty hiring needs for this discipline. This discussion does not replace the requirement to submit a Rationale Form for Faculty Hiring to IPC.)** |
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| **As mentioned above, we need more full-time faculty to teach basic skills courses (and others). Furthermore, 56.36% of our FTEF is taught by adjunct. We feel we would have a better program, as surmized from our SLO assessment, if this number was lower. It is a long way from the desired 25%. Also, this number is going up, which means we are headed in the wrong direction.** |

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| **STEP III. RESOURCE REQUESTS FOR DISCIPLINE:** |
| **III. A. Describe the resources necessary to successfully implement the planning described above. Provide a detailed rationale for each request by referring to the analyses of data and SLO assessment results in Step I and/or to any other evidence not apparent in the data or SLO Assessment** results.  NOTE: Do **NOT** include Resource Requests that duplicate requests from other disciplines In your department. Place requests common to two or more disciplines on the form: ACADEMIC DEPARTMENT RESOURCE REQUESTS. |

| **a. Equipment (per unit cost is >$500) *Enter requests on lines below.*** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | **Prioritize these requests**  **1,2,3, etc.** | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | **Estimated Amount of Funding Requested** | **Will this be one-time or on-going funding?** | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** |
| **a1.** |  |  |  |  |  |  |  |
| **a2.** |  |  |  |  |  |  |  |
| **a3.** |  |  |  |  |  |  |  |
| **a4.** |  |  |  |  |  |  |  |
| **a5.** |  |  |  |  |  |  |  |

| **b. Technology (computers, data projectors, document readers, etc.) *Enter requests on lines below.*** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | **Prioritize these requests**  **1,2,3, etc.** | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | **Estimated Amount of Funding Requested** | **Will this be one-time or on-going funding?** | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** |
| **b1.** | **45 Laptop computers - classroom set with carts** | **1** | **Goal 2 - Objectives 2 and 4** | **With the legislated changes to the way mathematics has to be taught, we need more and more instructional lab use. Since the use of instructional labs is so tight, in the district, we feel that we need a classroom set of laptops to make our lab anywhere.** | **$65,000** | **one-time (every 5 years)** | **no** |
| **b2.** | **10 data projectors** | **2** | **Goal 2 - Objectives 2 and 4** | **Our department uses data projectors extensively. In NS-259, NS-358, and NS-359, we need to add an additional data projector. These rooms are very wide and need to run two projectors, simultaneously, to be seen from all seats in the room. In addition, our other seven classrooms have very old data projectors that need to be updated.** | **$9000** | **one-time (every 5 years)** | **no** |
| **b3.** | **5 faculty computers** | **3** | **Goal 2 - Objectives 2 and 4** | **Our computers are to be replaced every 5 years** | **$8500** | **one-time (every 5 years)** | **no** |
| **b4.** | **3 Document Camera, with carts** | **4** | **Goal 2 - Objectives 2 and 4** | **We feel this will increase student accessibility, retention rate and success rate. We presently have 3 cameras that are portable. We feel that we need 3 more to help eliminate scheduling conflicts.** | **$5400** | **one-time** | **no** |
| **b5.** | **Smartboard SB640, with Mobile Floor Stand** | **5** | **Goal 2 - Objectives 2 and 4** | **We feel this will increase student accessibility, retention rate and success rate. Some of our faculty have been to conferences, where these have been used, and find them to be best method for teaching their classes.** | **$1500** | **one-time** | **no** |

| **c. Budget for 4000s (per unit cost is <$500 supplies) *Enter requests on lines below.*** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | | **Prioritize these requests**  **1,2,3, etc.** | | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | | **Estimated Amount of Funding Requested** | | **Will this be one-time or on-going funding?** | | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** |
| **c1.** | **Whiteboard pens** | **1** | | **Goal 2 - Objectives 2 and 4** | | **We feel this will increase student accessibility, retention rate and success rate.** | | **$1500** | | **on-going** | | **We have been paying for this out of annual budget, which is contiually reduced.** | |
| **c2.** | **Whiteboard erasers** | **2** | | **Goal 2 - Objectives 2 and 4** | | **We feel this will increase student accessibility, retention rate and success rate.** | | **$500** | | **on-going** | | **We have been paying for this out of annual budget, which is contiually reduced.** | |
| **c3.** | **Graphing Calculator batteries** | **3** | | **Goal 2 - Objectives 2 and 4** | | **We feel this will increase student accessibility, retention rate and success rate.** | | **$50** | | **on-going** | | **We have been paying for this out of annual budget, which is contiually reduced.** | |
| **c4** |  |  | |  | |  | |  | |  | |  | |
| **c5.** |  |  | |  | |  | |  | |  | |  | |

| **d. Budget for 5000s (printing, maintenance agreements, software license etc.) *Enter requests on lines below.*** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | | **Prioritize these requests**  **1,2,3, etc.** | | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | | **Estimated Amount of Funding Requested** | | **Will this be one-time or on-going funding?** | | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** | |
| **d1.** |  |  | |  | |  | |  | |  | |  | |
| **d2.** | **Printing** | **1** | | **Goal 2 - Objectives 2 and 4** | | **We feel this will increase student accessibility, retention rate and success rate. Furthermore, our new district copier will cost more per copy.** | | **$5000** | | **on-going** | | **We have been paying for this out of annual budget, which is contiually reduced. Every year we go over our budget by about $1500. Furthermore, we estimate that our new copier will cost us about $3400 per year more than our old copier, in per copy fees.** | |
| **d3.** | **Annual fee for Lab Alarm System** | **2** | | **Goal 2 - Objectives 2 and 4** | | **We feel this will increase student accessibility, retention rate and success rate.** | | **$352** | | **on-going** | | **We have been paying for this out of annual budget, which is contiually reduced.** | |
| **d4.** |  |  | |  | |  | |  | |  | |  | |
| **d5.** |  |  | |  | |  | |  | |  | |  | |

| **e. Classified staff position (permanent/contract position requests unique to this discipline) *Enter requests on lines below.*** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | | **Prioritize these requests**  **1,2,3, etc.** | | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | | **Estimated Amount of Funding Requested** | | **Will this be one-time or on-going funding?** | | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** |
| **e1.** |  |  | |  | |  | |  | |  | |  | |
| **e2.** | **Institutionalize Title III/STEM Tutorial Specialist position by fall 2016, Grade 22, Salary + Benefits** | **1** | | **Goal 2 - Objectives 2 and 4** | | **The Tutorial Specialist helps with all aspects of tutoring in the Mathematics Learning Center, from scheduling tutors; tutoring students; assisting with payroll and hiring forms; coordinating tutoring services provided by the Math Center in math classes (embedded tutoring), the Escondido TLC, the Math Center, and other district locations; participating in selecting and training of tutors, and monitoring program compliance and expenditures, among other activities. This position will help to continue to meet the Math Center SAO of providing effective tutoring support for mathematics students, provide continuity to the program, and help meet the Math Department's paln or providing supplemental instruction. The Tutorial Specialist will also assist in coordinating workshop for mathematics students. This position will increase the effectiveness of all services provided by the Math Cetner.** | | **The total cost of this position (as of May 2012) is $45,092 (salary) plus $34,790 (benefits) = $79,882.** | | **On-going after September 30, 2016.** | | **This position is currently funded in full by the Title III/STEM grant, which ends September 30, 2016. This source of funding will not exist after September 30, 2016.** | |
| **e3.** | **Institutionalize Title III/STEM Instructional Support Assistant I position by fall 2016, Grade 16, Salary + Benefits** | **2** | | **Goal 2 - Objectives 2 and 4** | | **The Instructional Support Assistant helps with preparing materials for the Math Center; provides tutoring to mathematics students; reviews the work of the self-taught students and monitors their progress; adminsters tests to students; creates test keys for self-taught students; corrects exams for self-taught students, thereby increasing student feedback; and assists at the front counter in the Math Center. This position will help meet the Math Center SAO of providing effective tutoring support for mathematics students, provides continuity to the program, and helps meet the Math Department's plan of providing supplemental instruction. Due to increased grading turnaround and student feedback, this position can help increase the retention and success of self-taught students.** | | **The total cost of this position (as of May 2012) is $38,964.05 (salary) plus 33,428.18 (benefits) = $72.392.23.** | | **On-going after September 30, 2016.** | | **This position is currently funded in full by the Title III/STEM grant, which ends September 30, 2016. This source of funding will not exist after September 30, 2016.** | |
| **e4.** |  |  | |  | |  | |  | |  | |  | |
| **e5.** |  |  | |  | |  | |  | |  | |  | |

| **f. Classified staff position (temporary and student workers position requests unique to this discipline) *Enter requests on lines below.*** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Resource** | **Describe Resource Requested** | | **Prioritize these requests**  **1,2,3, etc.** | | **Strategic Plan 2013 Goal/**  **Objective Addressed by This Resource**  **(**[**Link**](http://www.palomar.edu/strategicplanning/STRATEGICPLAN2013.pdf)**)** | | **Provide a detailed rationale for the requested resource. The rationale should refer to your discipline’s plan, analysis of data, SLO assessments, and/or the College’s Strategic Plan** | | **Estimated Amount of Funding Requested** | | **Will this be one-time or on-going funding?** | | **Is resource already funded (in part or in full)? If so, name source. Why is that source not sufficient for future funding?** |
| **f1.** |  |  | |  | |  | |  | |  | |  | |
| **f2.** |  |  | |  | |  | |  | |  | |  | |
| **f3.** |  |  | |  | |  | |  | |  | |  | |
| **f4.** |  |  | |  | |  | |  | |  | |  | |
| **f5.** |  |  | |  | |  | |  | |  | |  | |

| **III. B. Are there other resources (including data) that you need to complete your discipline review and planning?** |
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| **no** |

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| **STEP IV. SHARE YOUR ACCOMPLISHMENTS (AKA Brag, Toot your horn) Please include at least one discipline accomplishment that you’d like to share with the college community.** |
| **We continue to have the best Mathematics Learning Center in the world. It is an invaluable tool for our students. Fari Towfiq should be given credit for running the center and providing the mathematics tutor for the TLC in Escondido. In addition, Cindy Anfinson should be recognized for her contributions to the running of the MLC.**  **Last fall, piloted the use of ALEKS in some of our classes. We were hoping the program will get the students "up to speed" quicker and make them better prepared for taking our classes. The results have been encouraging, especially in the college-level courses. We are going to continue this experiment and incorporate other programs, as well.**  **Due to our STEM II grant we are finally able to up grade our MLC. This not only includes physical up grades, but the addition of two new permanent employees. The changes were quite needed, long over due, and the end results are very good.** |

| **STEP V. ACCREDITATION For programs with an external accreditation, indicate the date of the last accreditation visit and discuss recommendations and progress made on the recommendations.** |
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| **n/a** |

| **STEP VI. COMMENTS Other comments, recommendations: (Please use this space for additional comments or recommendations that don’t fit in any category above.)** |
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| **n/a** |

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| **Please identify faculty and staff who participated in the development of the plan for this department:** | | |
| **Jay Wiestling *Name*** | **Fari Towfiq *Name*** | **Cindy Anfinson *Name*** |

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| --- | --- | --- |
| **Mona Smith *Name*** | ***Name*** | ***Name*** |

**Department Chair/Designee Signature Date**

**Division Dean Signature Date**

* **Provide a hard copy to the Division Dean no later than September 14, 2012**
* **Provide a hard copy with the Dean’s sign-off to Instructional Services by September 28, 2012**
* **Email an electronic copy to** [**jdecker@palomar.edu**](mailto:jdecker@palomar.edu) **by September 28, 2012**