**Palomar College – Program Review and Planning**

**Instructional Programs**

**YEAR 1**

**Academic Year** **2010-11**

**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: Physical Science** | **03/10/2011** |
| **Instructional Discipline Reviewed (Each discipline is required to complete a Program Review)** | **Please Add Date (00/00/2011)** |

**STEP I. ANALYSIS**

|  |  |  |  |  |  |  |  |
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|  |  |  |  |  | **<<Prelim>>** | ◄▬ Preliminary Fall 2010 data are as of 1/30/2011 |  |
|  |  | **Fall 2007** | **Fall 2008** | **Fall 2009** | **Fall 2010** | **Definitions** | |
| **Enrollment at Census** | | 211 | 195 | 225 | 231 | *Self Explanatory* | |
| **Census Enrollment Load %** | | 67.63% | 90.28% | 93.75% | 96.25% | Enrollment at Census Divided By Sum of Caps (aka "Seats") | |
| **WSCH** | | 660 | 624 | 717 | 737 | Weekly Student Contact Hours | |
| **FTES** | | 21.99 | 20.80 | 23.89 | 24.57 | One Full-Time Equivalent Student = 30 WSCH | |
| **Total FTEF** | | 1.35 | 1.00 | 1.20 | 1.20 | Total Full-Time Equivalent Faculty | |
| **WSCH/FTEF** | | 489 | 624 | 597 | 614 | WSCH Generated per Full-Time Equivalent Faculty Member | |
| **Full-time FTEF** | | - | - | - | - | FTEF from Contract Faculty | |
| **Hourly FTEF** | | 1.35 | 1.00 | 1.20 | 1.20 | FTEF from Hourly Faculty | |
| **Overload FTEF** | | - | - | - | - | FTEF from Contract Faculty Overload | |
| **Part-Time FTEF** | | 1.35 | 1.00 | 1.20 | 1.20 | Hourly FTEF + Overload FTEF | |
| **Part-Time/(Total FTEF) %** | | 100.00% | 100.00% | 100.00% | 100.00% | 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** | | 89.78% | 92.78% | 93.63% | 94.98% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | 63.44% | 51.11% | 67.65% | 57.99% | 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** | | - | - | - | - | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | - | - | - | - | A,B,C,CR/P Grades Divided By A,B,C,CR/P,D,F,FW,NC/NP,W Grades | |
| **Degrees Awarded** | | - | - | - | N/A\* | Degree Counts Are for the Full Academic Year (thus, \*N/A for 2010-11) | |
| **Certificates Awarded:** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2010-11) | |
| **- Under 18 Units** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2010-11) | |
| **- 18 or More Units** | | - | - | - | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2010-11) | |

| **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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| **Analysis shows the enrollment is steady but dramatic increase by almost 25.6% in WSCH/FTEF despite the fact that the total number of class offerings was drastically cut. We believe this is due to the economic depression and our effort to maintain high quality of education. This indicates that our department is able to grow if we offer more classes.** |

| **I. B. Please summarize the findings of a Course or Program SLO assessment conducted by your discipline. (For examples, see** <http://www.palomar.edu/irp/11PRYear1/PRPsloExamples.pdf>) |
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| **N/A** |

| **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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| **N/A** |

| **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/**](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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| **WSCH and student retention rate increasing steadily while success rate is decreasing. We believe these are due to no full time instructor to oversee the discipline, not enough office hours to answer student questions, and keep curriculum current.** |

| **II. B. Class scheduling (consider enrollment trends, growth, course rotation, sequencing, Center/Site offerings, comprehensiveness, etc.)** |
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| **Enrollment load shows more classes need to be added to support the demand.** |

| **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, PHSC descipline has not full time instructor. We definitely need a full time instructor in this growing discipline like PHSC.** |

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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.** | **Pasco - Physical Science**  **•Physics Lab Bundle with the Xplorer GLX**  **•2.2 m PAScar Expanded Dynamics System**  **•Centripetal Force Pendulum**  **•PASPORT Rotary Motion Sensor**  **•Mini Rotational Accessory**  **•Freefall Adapter**  **•Photogates and Fences -- Dynamics Systems**  **•Photogate Tape Set**    **•Advanced Physics with the Xplorer GLX Lab Manual**  **•DataStudio Software (Site License)**    **•Video Point Physics Fundamentals**  **•Ballistic Cart Accessory**  **SUBTOTAL**  **GRAND TOTAL** | **1** |  | **Modernizing equipment** | **•$21483**  **•$3003**  **• $875**  **•$1393**  **• $1113**  **• $584**  **•$973**  **• $273**  **• $534**  **• $359**  **•$325**  **•$638**  **$31553**  **$37900** | **on-going (regular replacement required)** | **no** |
| **a2.** | **Physical Science Lab**  **• 1-L beaker**  **• 600 mL Beaker**  **• 250 mL beaker**  **• 100 mL beaker**  **• DC Ammeters**  **• DC Voltmeters**  **• multimeters**  **• galvanometer**  **• Current balance**  **• metric fine weight set**  **• e/m tube**  **• DC source - 35 V**  **• DC source - 12 V & 6 V**  **SUBTOTAL**  **GRAND TOTAL** |  |  |  | **$220**  **$1200**  **$540**  **$575**  **$2620**  **$216**  **$6000**  **$2097**  **$2097**  **$15570**    **$18680** | **on-going (regular replacement required)** | **no** |
| **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.** | **Desktop computers:**  **Lab room/support areas** | **1** | **SP Goals**  **2 & 6** | **Instructional Services request to cycle all computers on a 5 year basis** | **$11900** | **on-going** | **IS** |
| **b2.** |  |  |  |  |  |  |  |
| **b3.** |  |  |  |  |  |  |  |
| **b4.** |  |  |  |  |  |  |  |
| **b5.** |  |  |  |  |  |  |  |

| **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.** | **•Large Roman Arch**  **•Collision Balls**  **•Gyroscops**  **•Electric Gyrospinner**  **•Fundamentals of Physics projectile launcher**  **•stand**  **•photogate system**  **•Fundamentals of Physics atomic structure**  **•Archimedes' Ark**  **•Basic Wind Tunnel**  **•Digital scale**  **•Pascal's Law demo**  **•Classroom mini-blimp**  **•Closed case form electroscope**  **•replacement foil**  **•Friction Rod kit**  **•Animal Fur**  **•Electrostatice pompon set**  **•Action Kit lab**  **•Dynamo**  **•Lenz Law apparatus**  **•Demo Electric mini motor**  **•Demo Electric mini motor**  **•Doppler ball**  **•The Mirage**  **•Flourescent Dye set**  **•1m sticks**  **•2m sticks**  **•stopwatches**  **subtotal**  **Total** | **Sets are grouped together. We can't determine priorities because they are all equally important** | | **SP 2 & 6** | | **Demo equipment are becoming old and some are not functional. Our current budget is very low compared to other departments' budgets considering WSCH. We ask for a fair share** | | **37.6**  **254.19**  **443.89**  **144.19**  **122.95**  **82**  **262**  **109.99**  **86.69**  **74.89**  **524**  **29.35**  **106.5**  **33.79**  **11.49**  **31.2**  **14.55**  **31.85**  **46.2**  **67.85**  **96.19**  **51.9**  **38.1**  **150.35**  **54.3**  **53.5**  **40.5**  **239.94**  **307.5**  **3547.45**  **4256.94** | | **on-going** | | **no** | |
| **c2.** |  |  | |  | |  | |  | |  | |  | |
| **c3.** |  |  | |  | |  | |  | |  | |  | |
| **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.** | **Budget increase for printing costs** | **1** | | **SP 2 & 6** | | **Each year we are deficit for incurred printing costs. This printing is used to conduct normal classroom quizzes, exams and activities** | | **additional $500** | | **on-going** | | **No** | |
| **d2.** |  |  | |  | |  | |  | |  | |  | |
| **d3.** |  |  | |  | |  | |  | |  | |  | |
| **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.** | **Instructional Support Assistant II** | **1** | | **SP 2,5, & 6** | | **Currently we have a 50% share of this position with EarthSciences. We need a full time assistant to help labs, to develop labs, to maintain equipment, and to help our very active engineering students' projects.** | |  | | **on-going** | | **no** | |
| **e2.** |  |  | |  | |  | |  | |  | |  | |
| **e3.** |  |  | |  | |  | |  | |  | |  | |
| **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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| **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.** |
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| **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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| **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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| **Please identify faculty and staff who participated in the development of the plan for this department:** | | |
| **Takashi Nakajima *Name*** | **Art Gerwig *Name*** | ***Name*** |

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| --- | --- | --- |
| ***Name*** | ***Name*** | ***Name*** |

**Department Chair/Designee Signature Date**

**Division Dean Signature Date**

* **Provide a hard copy to the Division Dean no later than March 11**
* **Provide a hard copy with the Dean’s sign-off to Instructional Services by March 18**
* **Email an electronic copy to** [**jdecker@palomar.edu**](mailto:jdecker@palomar.edu) **by March 18**