**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: Geography** | **08/28/2012** |
| **Instructional Discipline Reviewed (Each discipline is required to complete a Program Review)** | **Please Add Date (00/00/2012)** |

**STEP I. ANALYSIS**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **<<Prelim>>** | ◄▬ Preliminary Fall 2011 data are as of 1/31/2012 |  |
|  |  | **Fall 2008** | **Fall 2009** | **Fall 2010** | **Fall 2011** | **Definitions** | |
| **Enrollment at Census** | | 817 | 801 | 849 | 775 | *Self Explanatory* | |
| **Census Enrollment Load %** | | 96.80% | 99.38% | 102.29% | 96.88% | Enrollment at Census Divided By Sum of Caps (aka "Seats") | |
| **WSCH** | | 2,549 | 2,453 | 2,592 | 2,310 | Weekly Student Contact Hours | |
| **FTES** | | 84.97 | 81.77 | 86.40 | 77.00 | One Full-Time Equivalent Student = 30 WSCH | |
| **Total FTEF** | | 4.57 | 4.17 | 4.16 | 4.01 | Total Full-Time Equivalent Faculty | |
| **WSCH/FTEF** | | 558 | 589 | 623 | 576 | WSCH Generated per Full-Time Equivalent Faculty Member | |
| **Full-time FTEF** | | 2.80 | 2.00 | 3.00 | 2.40 | FTEF from Contract Faculty | |
| **Hourly FTEF** | | 1.67 | 2.17 | 1.07 | 1.33 | FTEF from Hourly Faculty | |
| **Overload FTEF** | | 0.10 | - | 0.09 | 0.28 | FTEF from Contract Faculty Overload | |
| **Part-Time FTEF** | | 1.77 | 2.17 | 1.16 | 1.61 | Hourly FTEF + Overload FTEF | |
| **Part-Time/(Total FTEF) %** | | 38.69% | 52.00% | 27.86% | 40.12% | 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** | | 95.58% | 96.71% | 93.89% | 95.56% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | 74.36% | 73.53% | 69.20% | 72.90% | 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** | | 95.83% | - | 72.92% | 79.55% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades | |
| **● Success Rate** | | 81.25% | - | 45.83% | 56.82% | A,B,C,CR/P Grades Divided By A,B,C,CR/P,D,F,FW,NC/NP,W Grades | |
| **Degrees Awarded** | | - | - | 1 | N/A\* | Degree Counts Are for the Full Academic Year (thus, \*N/A for 2011-12) | |
| **Certificates Awarded:** | | 9 | 7 | 16 | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2011-12) | |
| **- Under 18 Units** | | 9 | 7 | 9 | N/A\* | Certificate Counts Are for the Full Academic Year (\*N/A for 2011-12) | |
| **- 18 or More Units** | | - | - | 7 | 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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| **Enrollment in the Geography program has increased dramaticaly (20% increase) over the past 4 years. Consequently, enrollment in the Geography program is nearly at 100% capacity. Approximately 60% of the load is currently carried by full time faculty members, and 40% is taught by Part-time Faculty.**  **Non distance education courses have a high retention rate. Retention rates are lower for distance education Geography courses. Success rates are also higher for non distance education versus distance education courses.** |

| **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.**  **Program SLO assessments has been completed for the GIS and Advanced GIS Certificate programs, the success rate for both programs is 100%. Specifically, 100% of the internship supervisors strongly agreed that students of the GIS and Advanced GIS Certificate programs are technically prepared for their internships. We have also assessed SLOs for all of the courses in the Geography program. The "projection on the fly" SLO that was assessed for Geography 120 had a success rate of 86.9%, which exceeded our goal of 70%. This shows that the curriculum and class exercises in the Geography program are of high quality, and provide students with the theoretical knowledge and technical competencies that are stated in the course outline of record. GEOG100 classes were also successful in answering an exam embedded question. 85% in 6 class sections correctly answered an embedded question about biomes. In GEOG100L, 97.4% of students in two class sections correctly interpreted a weather map to answer a question.**  **I.B.2 Summarize Program SLO assessment results beginning on the next line.**  **With the recent completion and submission for approval of the Geography Transfer Degree, program SLOs will be developed.** |

| **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>) |
| --- |
| **I.C.1 Please reflect upon the Course SLO findings in Box B (above) beginning on the next line.**  **For SLOs that have been assessed in Geography courses, the percent of students correctly answering embedded questions has met or exceeded the target of 70%. While the SLO for some courses have yet to be assessed (mainly because those courses have not been offered since the implementation of SLO assessment), we are optimistic that the SLOs assessment results for those courses will meet or exceed the target of 70%.**  **I.C.2 And, please reflect upon the Program SLO findings in Box B beginning on the next line.** |

| **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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| **The Bureau of Labor Statistics (http://www.bls.gov/oco/ocos040.htm#projections\_data) projects that the number of job openings for surveyors, cartographers, photogrammetrists, and surveying and mapping technicians will increase by 19% between 2008 and 2018, thereby confirming the availability of high-skilled, high-pay careers for graduates of the GIS program at Palomar College.** |

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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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| **An Associate of Science Transfer (AS-T) degree hase been proposed for Geography discipline, and includes at least 7 courses currently offered by the Palomar Geography discipline. The AA GIS degree has been converted to an AS degree. Such a change should have minimal impacts on the currciulum of the degree program.**  **The GIS coordinator will continue to hold semi-annual GIS advisory committee meetings with educators and administrators, industry professionals, and service learning partners in order to reaffirm and secure new articulation agreements as well as evaluate the existing GIS curriculum.** |

| **II. B. Class scheduling (consider enrollment trends, growth, course rotation, sequencing, Center/Site offerings, comprehensiveness, etc.)** |
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| **Given our enrollment load, it is likely that class sections will need to be added for GEOG 100. Due to the exapansion of the GIS program within the Geography discipline, the current arrangement of offering only one of the required 1-unit elective courses per semester (GEOG 140, 141, 142, 143) may not be ideal. Under the current rotational arrangement, a student who missed GEOG 140 (for example) will need to wait 1.5 years before the course is offered again.** |

| **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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| **Since Doug Key became the department chair in the Fall 2011 semester, additional instructors have been hired in order to teach GEOG 100. Furthermore, given 1) the census enrollment load in the Geography program, 2) the possibility that Doug Key may retire in Fall 2014, 3) the growing student interest in the GIS degree program, and 4) Wing Cheung became the division's STEM Center Coordinator, we will need to hire a new full-time faculty member with backgrounds in Physical Geography, World Regional Geography, and GIS. In the Spring, 2013 semester, Cathy Jain will be on sabbatical leave and we will need to increase the number of part-time instructors to cover 5 additional sections. In the 2013-2014 school year, Wing Cheung will potentially be on sabbatical leave, and we will need part-time instructors to coordinate the GIS program, as well as offer instruction in GIS and Human Geography.** |

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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.** | **None** |  |  |  |  |  |  |
| **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.** | **GIS server for remote access** | **4** | **G 6/ O 6.1** | **The acquisition of a new GIS Server will allow students to access the GIS application and GIS data remotely, thereby making distance offering of GIS education feasible, while increasing student access to the GIS resources at Palomar College.** | **$50,000** | **one time (software licenses maintenance may be required)** | **no** |
| **b2.** | **Lab computers** | **1** | **G 6/ O 6.1** | **The aging and increasingly less reliable computers in the GIS lab are not be able to keep up with the everchanging GIS technologies and software. Thus, to ensure that students are able to access the latest GIS software in an optimal learning environment, we need to update our lab computers to ones that are capable of running the GIS software.** | **$60,000** | **one time** | **No. (IS holds the responsibility for replacing the lab computers on a regular basis or as needed.)** |
| **b3.** | **Dedicated GIS servers for application and data** | **2** | **G 6/ O 6.1** | **The aging GIS servers which are nearly 4 years old, and will need to be replaced in order to support the new curriculum and software that have been developed for classroom use.** | **$50,000** | **one time (software licenses maintenance may be required)** | **No. (IS holds the responsibility for replacing the server on a regular basis or as needed.)** |
| **b4.** | **Tablet Computers for teaching Mobile GIS and Field Data Collection, quantity 30** | **3** | **G 6/ O 6.1** | **As mobile devices (e.g. ipad, iphone) become increasingly popular and powerful, many GIS tasks (e.g. editing, GPS data collection) can now be accomplished using one's mobile devices. Thus, the GIS program need to acquire mobile devices in order to teach students about the usage and development of GIS applications in the mobile environment.** | **$16,000** | **one time** | **no** |
| **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.** | **Printer ink for color laser printer in NS127** | **1** | | **G 6 / O 6.1** | | **Printer ink is necessary in order for students to print lecture and laboratory materials.** | | **$1,000** | | **on-going** | | **no** | |
| **c2.** | **Plotter ink and paper for color plotter** | **2** | | **G 6 / O 6.1** | | **Plotter ink and paper are necessary for students who wish to print their semester projects.** | | **$1,000** | | **on-going** | | **no** | |
| **c3.** |  |  | |  | |  | |  | |  | | **Please note that these requests are in addition to the $2,200 currently funded for other Geography supplies.** | |
| **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.** | **Software maintenance agreement supporting GIS classroom instruction** | **1** | | **G 6 / O 6.1** | | **The GIS software and remote sensing software currently installed in the GIS labs requires annual maintenance. Annual maintenance ensures that the software are up to industry-standard, which in turn ensures that students are acquiring the skills that are needed to pursue advanced education in GIS and geography, or a fulfilling career in GIS.** | | **$3,000** | | **on-going** | | **No This amount is in addition to the currently budgeted $3,535 which currently is adequate for printing, travel and postage. Thus we are requesting to increase this budget line to $6,535. Grant funding is ending this year.** | |
| **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.** |  |  | |  | |  | |  | |  | |  | |
| **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.** | **Internship assistant** | **1** | | **G 2 / O 2.5**  **G 4 / O 4.2** | | **The instructor of the GIS internship currently assists student with technical issues in their internships, research internship and employment opportunities for students, interacts with internship agencies, evaluates students' internship progress, and resolves issues between students and internship agencies as necessary. Thus, given the value of internhips for GIS students, it will be ideal to have a part-time classified staff to assist the instructor in day-to-day tasks, such as ensuring that internship students are paid, confirming that internship students are properly insured, and strengthening ties with existing GIS internship agencies.** | | **$10,000** | | **on-going** | | **no** | |
| **f2.** |  |  | |  | |  | |  | |  | |  | |
| **f3.** |  |  | |  | |  | |  | |  | |  | |
| **f4.** |  |  | |  | |  | |  | |  | |  | |
| **f5.** |  |  | |  | |  | |  | |  | |  | |

| **III. B. Are there other resources (including data) that you need to complete your discipline review and planning?** |
| --- |
| **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.** |
| **Cathy Jain has just completed work on the Model Transfer Curriculum for Geography. We will be offering this degree for the first time in Fall 2013. Wing Cheung secured an Advanced Technological Education Grant from the National Science Foundation in the amount of $413,000 that will be expiring in 2013. We also received a Carl D. Perkins Grant in the amount of $10,200 for the 2012-2013 school year. Cathy Jain and Doug Key also completed updates to our custom published lab manual "Laboratory and Field Exercises in Physical Geography". The new edition for Fall 2011 included an updated GPS lab exercise and the new Torrey Pines field trip exercise. We have continued to refine and improve the on-line meteorology class and the Natural Disasters/Environmental Hazards class. Each of these classes fills very early and could easily expand to additional sections. A new lab has been added to the manual for the Geography 120: Introduction to GIS course in Fall 2012, it requires students to compare the accuracy of mobile phone GPS (iphone, android), recreational GPS units, and mapping grade GPS units, as well as publish their observations to the interenet by creating a webmap. The Geography program was awarded a Google nonprofit grant, which enabled the GIS program and the Planetarium to promote their services on Google.com with a $10,000 per month in in-kind AdWords™ allowance.** |

| **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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| **Geography has no formal accrediting agency.** |

| **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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| **We will like to resume our GEOG 195 (field courses) courses in order to encourage students to pursue higher education in the field of Geography. With the completion of the Model Transfer Curriculum for Geography, this will become a reality. A significant number of students who have taken our field courses have gone on to major in geography or earth science related disciplines. Some of these students have mentioned that field courses had a direct impact on their decisions.** |

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| **Please identify faculty and staff who participated in the development of the plan for this department:** | | |
| **Wing Cheung *Name*** | **Cathy Jain *Name*** | **Doug Key *Name*** |

|  |  |  |
| --- | --- | --- |
| ***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**