**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.)

|  |  |
| --- | --- |
| **Discipline: Aviation Sciences** | **09/04/2012** |
| **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** | 120 | 134 | 154 | 138 | *Self Explanatory* |
| **Census Enrollment Load %** | 43.48% | 52.34% | 52.74% | 75.00% | Enrollment at Census Divided By Sum of Caps (aka "Seats") |
| **WSCH** | 354 | 367 | 424 | 368 | Weekly Student Contact Hours |
| **FTES** | 11.79 | 12.23 | 14.13 | 12.28 | One Full-Time Equivalent Student = 30 WSCH |
| **Total FTEF** | 1.33 | 1.00 | 1.20 | 0.87 | Total Full-Time Equivalent Faculty |
| **WSCH/FTEF** | 265 | 367 | 353 | 425 | WSCH Generated per Full-Time Equivalent Faculty Member |
| **Full-time FTEF** | - | 1.00 | 1.00 | - | FTEF from Contract Faculty |
| **Hourly FTEF** | 1.33 | - | 0.20 | 0.87 | FTEF from Hourly Faculty |
| **Overload FTEF** | - | - | - | - | FTEF from Contract Faculty Overload |
| **Part-Time FTEF** | 1.33 | - | 0.20 | 0.87 | Hourly FTEF + Overload FTEF |
| **Part-Time/(Total FTEF) %** | 100.00% | - | 16.67% | 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** | 96.40% | 97.39% | 96.35% | 95.49% | Non-W Eligible Grades (see next line) Divided by All Eligible Grades |
|  **● Success Rate** | 72.07% | 71.30% | 84.67% | 75.94% | 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** | 2 | 7 | 5 | N/A\* | Degree Counts Are for the Full Academic Year (thus, \*N/A for 2011-12) |
| **Certificates Awarded:** | 1 | 6 | 5 | 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** | 1 | 6 | 5 | 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>) |
| --- |
| **For the past several years, the aviation program has been fairly small with one full-time faculty member and several part-time faculty. The program has recently undergone dramatic changes. These include the retirement of the only full-time faculty member in December 2010. The program is now taught 100% hourly and in 2011 was restructured by reducing the number of courses in the program and by reducing the number of sections offered each semester. The recent budget cuts have impacted the program by reducing even further the number of sections offered each semester. The requirements for the certificates and degrees were also reduced in 2011. Even with these changes, the WSCH remained in the mid 300’s during Fall 2011 and was approximately the same as it was in Fall 2008 and Fall 2009. Since the beginning of the aviation program in the mid 1960’s, hundreds of students have earned their pilot certificates thanks to the program at Palomar College. Many of these former students have gone on to be employed as commercial pilots. While the demand for commercial pilots and aviation operations and management personnel varies from year to year, it is expected that the aviation discipline WSCH will continue in the mid 300’s for the next few years. During this time, it is anticipated that the courses within this program will continue to be taught by part-time faculty.**  |

| **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>) |
| --- |
| **Summarize Course SLO assessment results beginning on the next line.****All Aviation Sciences course SLO’s were met for the 2011-12 academic year. Specific information for each course:****AVIA 100 students scored an average of 92.3% on embedded exam questions covering government agencies and industry organizations.****AVIA 105 students scored an average of 71.7% on Federal Aviation Administration sample test questions.** **AVIA 106 students scored an average of 88.4% on Federal Aviation Administration sample test questions during the spring 2011 class (most recent course offering).** **AVIA 107 students scored an average of 75.6% on Federal Aviation Administration sample test questions.** **AVIA 120 students scored an average of 82.3% on embedded exam questions regarding hazardous weather and flight planning.****AVIA 145 students scored an average of 87% on embedded exam questions covering high-tech navigation devices.****I.B.2 Summarize Program SLO assessment results beginning on the next line.****SLO’s for both of the Aviation Sciences majors were met for the 2011-2012 academic year. Specific information for each major:****Aircraft Commercial Pilot major: 100% of the students who responded to our survey indicated that they were either employed in the aviation industry or were pursuing a 4- year degree in an area of aviation.** **Aviation Operations & Management major: 100% of the students who responded to our survey indicated that they were either employed in the aviation industry or were pursuing a 4-year degree in an area of aviation.**  |

| **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.****While we are pleased that all SLO’s in all courses met the minimums specified for the particular SLO (70% in all courses except for AVIA 145 where it was 75%), it is our goal to prepare students to the highest possible level. Instructors will continue to analyze the student exams to determine weak areas and attempt to develop instructional methods that will improve the overall scores in future classes. Special attention will be given to the SLO’s for AVIA 105, which dropped to an average of 71.7% from 78.5% during spring 2011.**  **I.C.2 And, please reflect upon the Program SLO findings in Box B beginning on the next line.****We are pleased to find that all students who majored in an area of Aviation Sciences who returned their surveys were either currently employed in an aviation related job or pursuing a 4-year degree in aviation.**  |

| **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.** |
| --- |
| **In terms of the Aircraft Commercial Pilot major, three sources were examined but had widely differing projections. California Labor Market information indicated that there will be a need for 500 additional pilots (due to growth only) between 2010 and 2020. This is for the state of California only and does not take into account the number of pilots who will need to be replaced because they either retire or quit during that period of time. The U.S. Department of Labor indicates that there were 103,500 pilots employed in the U.S. in 2010. They project that 11.500 more pilots will be employed by 2020 but also fail to take into account the number of pilots who retire or quit during that period of time. The University of North Dakota conducted a research project in which they concluded that there will be a need for 89,500 new pilots between 2010 and 2025 – this considers growth, retirements, and pilots that quit during that period of time.** **In terms of Aviation Operations and Management, no reliable data was found. There are so many different occupations that one may pursue with a degree in aviation that apparently no one has done comprehensive research to arrive at a good estimate.**  |

|  |
| --- |
| **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.)** |
| --- |
| **Major changes to the program have been made during the past two years. We have kept a bare-bones program of an introductory course (AVIA 100) and Basic Ground School (AVIA 105) that are our two highest-enrollment classes and are offered every semester. We now rotate the more advanced courses, AVIA 106, 107 and 120, offering them only once per year. In 2011 we began to offer AVIA 145, which is computer-oriented and represents the future of airplane cockpits and navigation. This course was strongly suggested by the Aviation Sciences Advisory Committee. Most of the other aviation courses were deactivated in 2011. We will carefully track this new slimmed-down program for a few years and judge the results but initial enrollments indicate that the courses still being offered are in considerable demand by our students. Since the program is highly dependent on the economy, we may have to increase or decrease offerings as enrollment pressures ebb or flow. Since Southern Illinois University (SIU) has relocated their BS degree in Aviation Management to our campus, we have seen increased interest in our program. The mutual relationship between these two programs should continue to thrive. With this relationship now in place, students can earn a 2-year degree through Palomar College and continue to the BS degree right here on campus through SIU. Marketing our program at local airports and in regional aviation publications should increase our program enrollment. It is felt that our two current aviation majors will be adequate for the foreseeable future.**  |

| **II. B. Class scheduling (consider enrollment trends, growth, course rotation, sequencing, Center/Site offerings, comprehensiveness, etc.)** |
| --- |
| **Due to the current college financial concerns, the recent enrollments in the aviation classes, and the current state of the aviation industry, it is felt that the current level of class offerings is adequate at this time. When the general economy and the aviation industry improve, consideration will need to be given to increasing our class offerings.**  |

| **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.)** |
| --- |
| **We intend to offer the aviation program strictly on an hourly (part-time faculty) basis for the next few years. After that, we will analyze the program and see where we need to go in terms of staffing for the future.**  |

|  |
| --- |
| **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.**  | **III.A.****We have no additional discipline specific needs at this time.** **(Do we need to list current budget amounts so that we can get them again next year?)** |  |  |  |  |  |  |
| **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.**  |  |  |  |  |  |  |  |
| **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.**  |  |  |  |  |  |  |  |
| **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.**  |  |  |  |  |  |  |  |
| **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.**  |  |  |  |  |  |  |  |
| **f2.**  |  |  |  |  |  |  |  |
| **f3.**  |  |  |  |  |  |  |  |
| **f4.**  |  |  |  |  |  |  |  |
| **f5.**  |  |  |  |  |  |  |  |

| **III. B. Are there other resources (including data) that you need to complete your discipline review and planning?** |
| --- |
|  |

|  |
| --- |
| **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 are pleased that the arrangement with Southern Illinois University (SIU) is working so well. Each year many of our graduates are enrolling and earning a 4-year degree in aviation management from the SIU satellite campus located at Palomar College.**  |

| **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.** |
| --- |
|  |

| **STEP VI. COMMENTS Other comments, recommendations: (Please use this space for additional comments or recommendations that don’t fit in any category above.)** |
| --- |
| **We anticipate continuing the aviation program using part-time faculty for the next few years during which time we will track the demand for pilots and aviation management personnel while continuing to monitor enrollment trends and other data in order to make decisions on future changes to the program.** |

|  |
| --- |
| **Please identify faculty and staff who participated in the development of the plan for this department:** |
| **Jerry Houser*Name*** | **Brenda Morris*Name*** | ***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** **by September 28, 2012**