

Palomar College – Institutional Review and Planning Instructional Programs

Purpose of Institutional 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

Instructional Discipline Reviewed

2007-08

1. 3-year trend of quantitative data

| | Fall 2004 | Fall 2005 | Fall 2006 | Definitions |
|---------------------------------|-----------|-----------|-----------|--|
| Enrollment at Census | 143 | 190 | 167 | <i>Self Explanatory</i> |
| Census Enrollment Load % | 32.65% | 41.67% | 38.13% | Enrollment at Census Divided By Sum of Caps (aka "Seats") |
| WSCH | 389 | 494 | 470 | Weekly Student Contact Hours |
| FTEs | 12.95 | 16.45 | 15.68 | One Full-Time Equivalent Student = 30 WSCH |
| Total FTEF | 1.60 | 1.60 | 1.60 | Total Full-Time Equivalent Faculty |
| WSCH/FTEF | 243 | 309 | 294 | WSCH Generated per Full-Time Equivalent Faculty Member |
| Full-time FTEF | 1.00 | 1.00 | 1.00 | FTEF from Contract Faculty |
| Hourly FTEF | 0.60 | 0.60 | 0.60 | FTEF from Hourly Faculty |
| Overload FTEF | - | - | - | FTEF from Contract Faculty Overload |
| Part-Time FTEF | 0.60 | 0.60 | 0.60 | Hourly FTEF + Overload FTEF |
| Part-Time FTEF % | 37.50% | 37.50% | 37.50% | Percent of Total FTEF Taught By Part-Time Faculty |
| Retention Rate | 92.62% | 95.68% | 90.54% | Non-W Grades (A,B,C,CR,D,F,FW,NC) Divided By A,B,C,CR,D,F,FW,NC,W Grades |
| Success Rate | 68.03% | 72.84% | 68.92% | A,B,C,CR Grades Divided By A,B,C,CR,D,F,FW,NC,W Grades |
| Degrees Awarded | 3 | 4 | 2 | Total number of Degrees awarded for the Full Academic Year |
| Certificates Awarded: | 1 | 4 | 3 | Total number of Certificates awarded for the Full Academic Year |
| - Under 18 Units | - | - | - | Total number of Certificates awarded for the Full Academic Year |
| - 18 or More Units | 1 | 4 | 3 | Total number of Certificates awarded for the Full Academic Year |

2. Reflect upon and analyze the above 3-year trend data. Briefly discuss overall observations and any areas of concern or noteworthy trends.

The number of students in this program has historically varied with the economy and the number of pilots needed by the airlines. The financial condition of many of the "legacy" airlines became dismal shortly after September 11, 2001. These airlines "furloughed" pilots and asked those that were still employed to take significant pay cuts until the airlines could return to profitability. This has had a significant impact among students who were considering piloting as a career. Only recently have the "legacy" airlines returned to making a profit and, consequently, returned to the hiring of additional pilots. With this "turnaround" of the airline industry, we are seeing considerably more interest in our courses and program. We expect that enrollments will increase over the next couple of years (2008-2010). Our Aviation Sciences advisory committee is in general agreement with our conclusions regarding student interest in the aviation industry.

The relocation of the Southern Illinois University bachelor of science program in Aviation Management to the Palomar College campus should, over the next year or two, benefit our aviation program.

The Aviation Sciences program needs to be more aggressively marketed. Many students in our district aren't aware that we offer aviation related courses. There are an even larger number of students in the nearby Mira Costa district who aren't aware of our program or of the association with Southern Illinois University.

The move to the new science building delayed our plan to offer, in conjunction with Southern Illinois University, a "pilot career seminar" during this past summer. We feel that such a seminar, if properly promoted by press releases to the local newspapers, would be a good way of making more potential students aware of the Palomar College and Southern Illinois University aviation programs.

3. Reflecting on the 3-year trend data, describe/discuss discipline planning related to the following:

| PLAN – 2007-08 | Progress – 2008-09 |
|--|--------------------|
| <p>a. Curriculum, programs, certificates and degrees (consider changes due to CSU/UC transfer language updates, articulation, workforce and labor market projections, certificate or degree completions, etc.)</p> <p>The Aviation Sciences advisory committee recommended that we offer a course in Glass Cockpits and GPS Navigation. That course (AVIA 145) has been developed and approved by the curriculum committee. We plan to offer it as soon as we can obtain the software, load it on our computers in the computer lab, and find an instructor to teach the course.</p> | |
| <p>b. Class scheduling (consider enrollment trends, growth, course rotation, comprehensiveness, etc.)</p> <p>With the exception of the new course recently developed (AVIA 145) we are offering an adequate number of aviation courses/sections at this time. We rotate the more advanced courses from one term to another to maximize the enrollment while still offering the course often enough for student convenience. We presently have room in our classes for a significant increase in the number of aviation students; therefore, no new class sections (other than AVIA 145) are planned for the next 2 years.</p> | |

4. Discuss/identify the resources necessary to successfully implement the planning described:

| PLAN – 2007-08 | Progress – 2008-09 |
|---|--------------------|
| <p>a. Equipment/Technology – block grant funds, VTEA, other resources, etc. The most immediate need will be for software so that we can offer the newly created AVIA 145 course. We will be seeking sources and costs for this software during the first part of the next academic year.</p> | |
| <p>b. Budget – budget development process, one-time funds, grants, etc. Aviation Science budgets are generally adequate at this time; however, we will need to purchase software in the 2008-2009 budget year so that we can offer the new AVIA 145 course. The cost is estimated to be around \$1000.</p> | |
| <p>c. Facilities – schedule maintenance needs, additional classrooms/labs due to growth, remodeling, etc. Aviation Sciences is in very bad need of screen “adjustments” in the rooms that it presently uses (NS-117 & NS-136). The screen on the right side of NS-117 needs to extend down to within 3 feet of the floor and one screen in the front of NS-136 needs to also extend to the bottom of the white board. Additionally, the noise created by the HVAC system in NS-117 makes it difficult for students to hear the instructor and for the instructor to hear students asking questions. The HVAC system temperature control is also inadequate and students are quite tired of being intermittently so cold that they have to bring and wear sweaters and jackets in the classroom. These items have made the learning environment far less than comfortable and desirable.</p> | |
| <p>d. Faculty position(s) – faculty priority process and projected full-time needs for 1 – 3 years Aviation Sciences will not be requesting any additional full-time faculty members during the next 1-3 years.</p> | |

| | |
|--|--|
| <p>e. Staff position(s) – changes in instructional or support needs due to program growth, new technology, etc.</p> <p>When the time arrives to install the new software in our computer lab so that we can offer AVIA 145, we will need assistance from the computer lab tech (Russ Thomas).</p> | |
| <p>f. Other</p> <p>Aviation Sciences could benefit greatly by having our programs promoted within our district as well as, to the extent possible, in the neighboring Mira Costa district (they do not offer any AVIA related courses).</p> | |

5. Discuss one discipline goal linked to Palomar’s Strategic Plan 2009 and how it will support the success of students.

“Provide up-to-date technology and related technical and equipment support for instructional purposes”

The lead Aviation Sciences faculty member will be on sabbatical leave during the spring 2008 term. A portion of the approved sabbatical leave project is to put many of the items that were on overhead transparencies and slides into a series of PowerPoint presentations. These presentations will be made available to all faculty members in the Aviation Sciences discipline who teach courses appropriate to the specific PowerPoint presentation. This will enable us to utilize the new, better quality data projectors that are now installed in the new science building.

6. Student Learning Outcome progress:

a. Describe a learning outcome at the course or program level and the assessment used to measure student learning of that outcome.

Our AVIA 105, 106, 107, and 108 courses prepare a student to take the appropriate Federal Aviation Administration’s (FAA) written/knowledge test. At the end of each of those courses, we provide the students with a post card and ask them to report back to us their score on the FAA test as well as make any comments that they feel would have improved their learning experience. By tracking the average scores earned by our students on the FAA test as well as taking into account their comments and suggestions, we hope to improve the average FAA score of future students.

b. Discuss a learning outcome that is observable yet difficult to measure.

The link between student participation and degree of learning is difficult to measure. Student participation in class is an observable, it is difficult to measure. The impact of student participation on how well they are learning the particular concept or topic being presented is difficult to measure.

7. Describe a discipline accomplishment that you want to share with the college community.

Aviation Sciences is proud that it has been able to negotiate an agreement with Southern Illinois University (SIU) by which SIU will offer their bachelor of science degree in Aviation Management on the Palomar College San Marcos campus. The SIU program will allow Palomar College students with a 2 year degree in Aviation Science to complete two additional years of study and earn a 4 year degree in Aviation Management. The SIU program is also open to military students as well as students from other 2 year colleges in the San Diego area.

8. Are there other resources (including data) that you need to complete your discipline review and planning?

No, not at this time.

9. For programs with an external accreditation, indicate the date of the last accreditation visit and discuss recommendations and progress made on the recommendations.

N/A

10. Other comments, recommendations:

As mentioned previously, the Aviation Science program is in need of promotion within our district and, to the extent possible, in the neighboring Mira Costa district.

The rooms that this program uses in the new science building are in great need of improvements. NS-117 has significant HVAC issues and is in need of a "side" screen that will come down to a lower level (about 3 feet off of the floor). NS-136 is in need of a screen extension that will allow at least one of the screens in the front of the room to extend down to the level of the bottom of the white board.

Please identify faculty and staff who participated in the development of the reviewer's planning:

Jerry Houser

Department Chair/Designee Discipline Review and Signature

Date

Division Dean Review and Signature

Date