## 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.)

| <u>Discipline: Physical Science</u> |         |
|-------------------------------------|---------|
| Instructional Discipline Reviewed   | 2007-08 |

1. 3-year trend of quantitative data

|                          | Fall 2004 | Fall 2005 | Fall 2006 | Definitions  |
|--------------------------|-----------|-----------|-----------|--|
| Enrollment at Census     | 258       | 206       | 228       | Self Explanatory   |
| Census Enrollment Load % | 76.79%    | 61.31%    | 67.86%    | Enrollment at Census Divided By Sum of Caps (aka "Seats")                |
| WSCH                     | 791       | 641       | 700       | Weekly Student Contact Hours   |
| FTES                     | 26.37     | 21.36     | 23.34     | One Full-Time Equivalent Student = 30 WSCH                               |
| Total FTEF               | 1.60      | 1.60      | 1.60      | Total Full-Time Equivalent Faculty                                       |
| WSCH/FTEF                | 494       | 401       | 438       | WSCH Generated per Full-Time Equivalent Faculty Member                   |
| Full-time FTEF           | 1         | 1         | 1         | FTEF from Contract Faculty   |
| Hourly FTEF              | 1.60      | 1.60      | 1.60      | FTEF from Hourly Faculty   |
| Overload FTEF            | 1         | 1         | 1         | FTEF from Contract Faculty Overload                                      |
| Part-Time FTEF           | 1.60      | 1.60      | 1.60      | Hourly FTEF + Overload FTEF  |
| Part-Time FTEF %         | 100.00%   | 100.00%   | 100.00%   | Percent of Total FTEF Taught By Part-Time Faculty                        |
| Retention Rate           | 88.36%    | 91.67%    | 92.52%    | 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             | 63.79%    | 59.44%    | 60.28%    | A,B,C,CR Grades Divided By A,B,C,CR,D,F,FW,NC,W Grades                   |
| Degrees Awarded          | -         | -         | 1         | Total number of Degrees awarded for the Full Academic Year               |
| Certificates Awarded:    | -         | -         | -         | 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       | -         | -         | -         | 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 3-year trend data show a relative stability in all areas although there is minor decrease in census enrollment, but increase in retention rate. I believe this is caused by confusion of transfer requirement change to CSUSM for general studies major. We had to create new courses (PHSC 101 and 101L) to satisfy this new transfer requirement. After students are well informed, I believe the enrollment will increase again.

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

| PLAN – 2007-08  | Progress – 2008-09  |
|---|---|
| <ul> <li>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.)</li> <li>We need to work with Counseling Department so that students are enrolled in correct PHSC class – CSU changed the requirement from PHSC 100 to 101, but students are told to take 100 instead of 101. Even if instructors told this, some students in 100 did not change the class because they insisted that they were guided by counselors.</li> </ul> | We have talked with the science alliance counselor, Renee Roth to clarify transfer requirements.  |
| b. Class scheduling (consider enrollment trends, growth, course rotation, comprehensiveness, etc.)  | Lectures: Due to the budget cut, we had to reduce more than 8% of class offerings in our department – some were PHSC lectures. However, the efficiency had increased.                     |
| Lectures: They seem to be offered at the right time except for Thursday nights – somehow, Thursday nights are not popular for PHSC students   | Lab: With the same reason above, students seem to take the lab hours at regular offering times.   |
| Labs: We are trying to find the best times for PHSC labs. We have found that PHSC students think starting a lab at 2 p.m. is too late and they don't like Friday lab either.  | NS-255 has been converted into a 48-student-lecture/30-student-lab room. This has eased the problem a little, but not completely. We will have to start looking into using lecture halls. |
| We have lost one 48-student-lecture-room, but instead, we have a 32-student-room. Due to this smaller size classroom, a creative scheduling is required to accommodate this difference without losing students.   |   |

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

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| PLAN – 2007-08   | Progress – 2008-09  |
| <ul> <li>Equipment/Technology – block grant funds, VTEA, other resources,<br/>etc.</li> </ul>  | This has not been successful due to the failure of awarded granted money.   |
| We will try to add a computer acquisition system (such as Pasco) to PHSC 100L and 101L. This will allow faster and more accurate data collections.   |   |
| b. Budget – budget development process, one-time funds, grants, etc.  NS255 will be remodeled to a lecture/lab room. The room needs basic measuring devices such as electronic scales (0 – 1000.00 g with 1/100 g accuracy), triple beam scales, stop watches, meter sticks, two meter sticks, 50-m tape measures, straight edge rulers, protractors, compasses. | Triple beam scales, stop watches, meter sticks, two meter sticks, 50-m tape measures, straight edge rulers, protractors, and compasses are ordered in this year's supply/equipment budeget. |
| c. Facilities – schedule maintenance needs, additional classrooms/labs due to growth, remodeling, etc.   |   |
| <ul> <li>d. Faculty position(s) – faculty priority process and projected full-time needs for 1 – 3 years</li> </ul>  |   |
| We do not have any full time instructor to oversee PHSC program. One full time instructor is required within 3 years.  |   |
| e. Staff position(s) – changes in instructional or support needs due to program growth, new technology, etc.   | We have not been able to hire a full time instructional support for the department.   |
| At this point, we have to share a person with Earth Sciences Department, but we do need a full time Physics/Engineering lab technician to service/maintain/fix old/new equipment. Some of them are old and irreplaceable, but still very valuable for students to understand important physics concepts.   |   |
| f. Other   |   |

| Discuss one discipline goal linked to Palomar's Strategic Plan 2009 and how it will support the success of students.  |
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| We have a better communication with CSUSM Physics Department so that our PHSC, Physics, and engineering students now have smooth transfer to their programs.  |
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| . 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   |
| Students are given regular quizzes and exams to assess their progress and success throughout the semester.  |
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| b. Discuss a learning outcome that is observable yet difficult to measure.  |
| Some adjunct instructors are told and thanked by physical science students at the end of semesters. Those students never had a science course and their enthusiasm toward the science was zero to negative at the beginning of the semester, but they truly enjoyed the course and opened their eyes to science by the end of the semester. |
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| . Are there other resources (including data) that you need to complete your discipline review and planning?  Our allocated budget seems to be lower than other departments' budget according to WSCH percentage. | . Describe a discipline accomplishment that you want to share with the college community.                 |
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| 9.               | For programs with an external accreditation, indicate the date of the last accreditation visit and discuss recommendations and progress made the recommendations. |                 |  |  |  |  |  |
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| 10. O            | ther comments, recommendations:   |                 |  |  |  |  |  |
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| Pleas            | se identify faculty and staff who participated in the development of the revie  | wer's planning: |  |  |  |  |  |
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| Dono             | rtment Chair/Designee Discipline Review and Signature   | Date            |  |  |  |  |  |
| <del>De</del> pa | rtment Chair/Designee Discipline Review and Signature   | Date            |  |  |  |  |  |
|                  |   |                 |  |  |  |  |  |
| Divis            | ion Dean Review and Signature   | <br>Date        |  |  |  |  |  |
| •                |   | 24.3            |  |  |  |  |  |