

# 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.)

**Department: Life Sciences**

Instructional Discipline Reviewed

2007-08

**1. 3-year trend of quantitative data**

	Fall 2004	Fall 2005	Fall 2006	Definitions
<b>Enrollment at Census</b>	3,617	3,488	3,531	<i>Self Explanatory</i>
<b>Census Enrollment Load %</b>	99.70%	95.41%	96.03%	Enrollment at Census Divided By Sum of Caps (aka "Seats")
<b>WSCH</b>	12,860	12,333	12,690	Weekly Student Contact Hours
<b>FTEF</b>	428.68	411.10	423.00	One Full-Time Equivalent Student = 30 WSCH
<b>Total FTEF</b>	23.80	23.40	23.80	Total Full-Time Equivalent Faculty
<b>WSCH/FTEF</b>	540	527	533	WSCH Generated per Full-Time Equivalent Faculty Member
<b>Full-time FTEF</b>	8.20	8.40	8.40	FTEF from Contract Faculty
<b>Hourly FTEF</b>	13.40	12.80	12.80	FTEF from Hourly Faculty
<b>Overload FTEF</b>	2.20	2.20	2.60	FTEF from Contract Faculty Overload
<b>Part-Time FTEF</b>	15.60	15.00	15.40	Hourly FTEF + Overload FTEF
<b>Part-Time FTEF %</b>	65.55%	64.10%	64.71%	Percent of Total FTEF Taught By Part-Time Faculty
<b>Retention Rate</b>	92.73%	92.08%	92.13%	Non-W Grades (A,B,C,CR,D,F,FW,NC) Divided By A,B,C,CR,D,F,FW,NC,W Grades
<b>Success Rate</b>	68.32%	67.48%	63.29%	A,B,C,CR Grades Divided By A,B,C,CR,D,F,FW,NC,W Grades
<b>Degrees Awarded</b>	5	3	3	Total number of Degrees awarded for the Full Academic Year
<b>Certificates Awarded:</b>	13	11	7	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	13	11	7	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.**

It is clear from the above numbers that the Life Sciences Department has been at full capacity for the years cited. Adjunct instructors carry a large FTEF% and while the numbers change due to sabbatical leaves and other issues part-time instruction has impacted this discipline. The high census enrollment loads – approaching 100% for all cited years – are indicating the magnitude of the enrollment pressure felt by our students. WSCH/FTEF ratios range 527 – 540 show that we could have supported more sections had we the space available to grow. Part-time FTEF percentages that are near 65%, while they may be similar to the rest of the college, are a problem and their reduction should become a priority for the college planning councils.

Now that we have moved into the new Natural Sciences Building all the disciplines within the department have room to grow. This Spring 2008 we have 1 additional Anatomy course (+20% growth), 1 additional Microbiology (+ 20% growth) and several other courses, yet the number of students seeking courses has hardly been reduced. The largest two issues that control growth within this discipline are 1) funds to support the added laboratory expense and 2) recruitment of well trained instructors.

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

PLAN – 2007-08	Progress – 2008-09
<p><b>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.)</b></p> <p>With the exception of the small Medical Assisting discipline the Life Sciences Department could be characterized as having three major groups of students. They are 1) general education students, 2) biological sciences majors and transfer students and 3) allied health, pre-nursing students. These students generally use our courses as stepping stones on career paths that lead to further education. As a consequence, degrees and certificates are not typically sought although the curriculum programs exist. More important to these students are the articulation agreements, transferability and prerequisite knowledge that our courses provide.</p> <p>The Medical Assisting discipline, being a vocational program, meets the immediate needs of a small group of students for employment as skilled support staff in medical settings. These students require the completion of certificate programs as well as successful completion of license examinations prior to employment.</p>	
<p><b>b. Class scheduling (consider enrollment trends, growth, course rotation, comprehensiveness, etc.)</b></p> <p>Census enrollment load % (95% +) and WSCH/FTEF ratios (533 – 540) confirm that we should add sections to our schedule of classes – especially in those severely impacted allied health courses. Yet, with the current budget crisis and pending cuts we will not have the opportunity to grow.</p>	

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

PLAN – 2007-08	Progress – 2008-09
<p><b>a. Equipment/Technology – block grant funds, VTEA, other resources, etc.</b></p> <p>With our new building comes much new and exciting equipment. But, also with the new building comes the need to equip more than double the amount of lecture and laboratory classrooms.</p> <p>I have listed specific items that we need to equip our expanded laboratories and to maintain our programs under each discipline. Many items are low in cost but more numerous while several are quite substantial in cost – such as a set of microscopes.</p>	
<p><b>b. Budget – budget development process, one-time funds, grants, etc.</b></p> <p>Support staff will need to be increased at the same rate that classroom instruction increases. The three department support staff are working at and above capacity. Further growth will come at the expense of instructional quality in our laboratories. The department will curtail growth that impacts instructional quality.</p> <p>This is especially true within the microbiology and biology disciplines as they are a labor intensive courses. A tremendous amount of staff support – whether from our lab staff technicians or from our student workers, is required to keep these programs at their high academic levels. Special techniques and safety skills are required by all who participate in this large segment of our department.</p> <p>Staff training opportunities are currently slight or not available due mostly to time constraints. Training time takes away from valuable actual work time and job responsibilities have grown over the past few years and especially have increased due to the move into the new building. Much more time is required by each of our technicians in servicing the ‘building’ needs as compared to our old facilities. Safety is significantly more complicated due to the nature of a multiple floor, enclosed building as well as the issues of fires, bomb threats, evacuation plans, elevators, open stairs, wheelchairs and a multitude of others.</p>	
<p><b>c. Facilities – schedule maintenance needs, additional classrooms/labs due to growth, remodeling, etc.</b></p> <p>All of our student microscopes will need ongoing maintenance and repair. There needs to be funds in the budget process for repair and/or replacement of items that fail. We should plan on a useful life for our equipment and have money set aside for replacement once that time comes. This is not the way the current thinking works.</p> <p>Other scheduled maintenance needs are 1) regular service and maintenance of the autoclave 2) ) regular service and maintenance of the ice maker and 3) regular service and maintenance of the computerized physiology equipment.</p>	

<p><b>Each of these items represent large capitol expense for equipment that have a long functional life span , if and only if, they are well maintained. It would be foolish to fail to plan for this fiscal responsibility and let these items prematurely deteriorate for lack of maintenance.</b></p>	
<p><b>d. Faculty position(s) – faculty priority process and projected full-time needs for 1 – 3 years</b></p> <p><b>The Life Sciences have hired tenured track positions in Spring 2006, 2007 and currently are in process with 2 more instructors. For that reason we are not requesting a new position at this time. We will likely submit a request in Spring 2009.</b></p>	
<p><b>e. Staff position(s) – changes in instructional or support needs due to program growth, new technology, etc.</b></p> <p><b>Support staff will need to be increased at the same rate that classroom instruction increases. The three department support staff are working at and above capacity. Further growth will come at the expense of instructional quality in our laboratories. The department will curtail growth that impacts instructional quality.</b></p>	
<p><b>f. Other</b></p>	

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

**The unified goal that runs throughout the department is to equip our students to think and function in an ever changing, highly technical society. This has broad applications to their lives whether they are vocational students, general education students, transfer students or allied health students.**

**Being able to use technology in a clear and concise manner and to understand the benefits, limitations and liabilities is directly applicable to the working environment.**

**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.**

**A unified learning outcome that runs through the department is research and critical thinking. In all cases it is measured by hands on application of the scientific method by performing small, but well planned research projects that have well structured reports and presentations upon completion.**

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

**Critical thinking that occurs outside of our classrooms will confirm how successful we are inside our classrooms. We are not there to witness our success.**

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

**Our new Natural Sciences building is beyond our expectations. Our department has been invigorated with all the new opportunities this facility provides.**

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

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

10. Other comments, recommendations:

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

Ralph Ferges

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Ralph Ferges  
Department Chair/Designee Discipline Review and Signature

\_\_\_\_\_ Date

\_\_\_\_\_ Division Dean Review and Signature

\_\_\_\_\_ Date

\* By no later than 2/14/08, forward a hard copy to Instructional Services for review by IPC.

\* Also, by no later than 2/14/08, forward an electronic copy to Institutional Research and Planning.