



Program Review & Planning (PRP)

PART 1: BASIC PROGRAM INFORMATION

Program Review is a self-study of your discipline. It is about documenting the plans you have for improving student success in your program and sharing that information with the college community. Through the review of and reflection on key program elements, program review and planning identifies program strengths as well as strategies necessary to improve the academic discipline, program, or service to support student success. With that in mind, please answer the following questions:

| | |
|-------------------------|---|
| Discipline Name: | CSWB |
| Department Name: | Computer Science and Information Technology |
| Division Name: | Mathematics and the Natural and Health Sciences |

Please list all participants in this Program Review:

| Name | Position |
|-------------|-----------|
| Steve Perry | Professor |
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| | | | |
|------------------------------------|---|------------------------------------|---|
| Number of Full Time faculty | 1 | Number of Part Time Faculty | 3 |
|------------------------------------|---|------------------------------------|---|

Please list the Classified positions (and their FTE) that support this discipline:

Department ADA - 10% CSIT
Systems Analyst - 10%

What additional hourly staff support this discipline and/or department:

Student workers in IT lab

Discipline mission statement ([click here for information on how to create a mission statement](#)):

The mission of CSWB discipline is to prepare students for employment in the web site development industry by educating them in the key software development applications necessary to develop web sites for organizations or businesses.

List all degrees and certificates (e.g., AA, AT, Certificates) offered within this discipline:

There are two Certificate of Proficiency programs: Web Developer with Emphasis in Java/Open Source and Web Developer with Emphasis in Windows

PART 2: Program Assessment

The first step in completing your self-study is to examine and assess your discipline/program. To accomplish this step, complete the Following Sections:

- Section 1: Program Data and Enrollment
- Section 2: Course Success Rates
- Section 3: Institution and Program Set Course Success Rate Standards
- Section 4: Completions
- Section 5: Labor Market Information (CTE programs only)
- Section 6: Additional Qualitative Information
- Section 7: Curriculum, Scheduling, and Student Learning Outcomes

SECTION 1: PROGRAM DATA & ENROLLMENT

Click on the following link to examine enrollment, efficiency, and instructional FTEF trends for your discipline. Log-in using your network username and password.

<https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Productivity%20Metric%20Summary.aspx>

- A. To access your discipline data, select your discipline from the drop down menu.
- B. To access course level data (e.g., COMM 100 or BIOL 100) use the drop down menus to select “discipline” and “catalog number”.

Use the data to answer the following questions.

1. Discipline Enrollment

| | | | | | | |
|---|-----------|--|------------------|--|-----------|---|
| Discipline Enrollment (over last 5 years) | Increased | | Steady/No Change | | Decreased | X |
|---|-----------|--|------------------|--|-----------|---|

Reflect on your enrollment trends over the past five years. Was the trend expected? What factors have influenced enrollment?

The CSWB enrollment, in terms of number of students, has decreased slightly over the past five years, with 352 students in Fall 2012-13, 360 students in Fall 2013-14, 338 in Fall 2014-15, 384 in Fall 2015-16, and 300 in Fall 2016-17. Expressed as a percentage of available seats it has been fairly steady, 78.57% in Fall 2012-13, 80.36% in Fall 2013-14, 75.45% in Fall 2014-15, 85.71% in Fall 2015-16 and 78.13% in Fall 2016-17.

A reasonably steady enrollment over time was expected. We used to offer two sections of CSWB 120 JavaScript and that has now declined to one section. We used to offer three sections of CSWB 110 Web Development and that has now declined to two sections. It may be that more students have been able to learn these skills on their own using free resources on the Web.

2. Course-Level Enrollment and Fill Rates

If there are particular courses that are not getting sufficient enrollment, are regularly cancelled due to low enrollment, or are not scheduled, discuss how your discipline is addressing this. For example, are there courses that should be deactivated?

There was a bit of a drop-off in CSWB 110 Web Development this Fall 2017 semester with 1 out of 3 sections getting cancelled due to low enrollment. We will see if this happens again in the Spring and, if so, we will adjust our schedule to only offer two

sections each semester. It may be that some students are learning the basics of HTML/CSS (that are taught in this program) on their own.

CSWB 210 ASP has been removed from the schedule and catalog due to 3 cancellations due to low enrollment.

We are adding a CSWB 180 Python course starting next Fall 2018 and expect high enrollment. Python has become one of the top two programming languages used in industry.

We are expecting the new AS degree in Web Design and Development will be approved by the Chancellor's office this Fall 2018 and this is likely to help increase enrollment in this discipline by keeping our courses up to date with an ever changing field.

3. WSCH/FTEF

Although the college efficiency goal is 525 WSCH/FTEF or 35 FTES/FTEF, there are many factors that affect efficiency (i.e. seat count / facilities / accreditation restrictions).

| Discipline Efficiency Trend | Increased | | Steady/No Change | | Decreased | X |
|-----------------------------|--------------------------|--|-----------------------|--|--------------------------|-----|
| Discipline Efficiency: | Above 525 (35 FTES/FTEF) | | At 525 (35 FTES/FTEF) | | Below 525 (35 FTES/FTEF) | 495 |

Reflect on your enrollment trends over the past five years. Was the trend expected? What factors have influenced enrollment?

The CSWB WSCH/FTEF has increased recently. It was 421.11 Fall 2016-17, 413.71 in Fall 2015-16, and 360.38 in Fall 2014-15 and 388.97 in Fall 2013-14

There has been a more efficient scheduling of the classes over the past year increasing the percentage of enrollment in each class.

Enrollment overall can be increased by offering classes at times convenient for our students, instead of our scheduling system. Enrollment can be increased by looking to add classes as the marketplace dictates, for example, we are adding a high-demand CSWB 180 - Python class to the schedule in Spring 2019.

4. Instructional FTEF:

Reflect on FTEF (Full-time, Part-time, and Overload) over the past 5 years. Discuss any noted challenges related to instructional staff resources.

Adding faculty support to our labs would help students who are increasingly using our open labs.

Having a dedicated lab room, staffed by both faculty and student workers, would greatly aid our students, especially the many students taking online classes. This would give them more opportunities to come on to campus to get direct help if they required it.

SECTION 2: COURSE SUCCESS RATES

Click on the following link to review the course success rates (% A, B, C, or Credit) for your discipline. Examine the following course success rates.

- A. On-Campus Course Success Rates
- B. Online Course Success Rates

- C. Course Success Rates by gender, age, ethnicity, and special population (use the filter buttons at the top of the worksheet to disaggregate success rates by demographic variables)
- D. Course Success Rates by class location (Escondido, CPPEN, etc.)

<https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Success%20and%20Retention.aspx>

1. Overall Success Rate:

Reflect on your discipline’s on-campus, online, and by location (ESC, CPPN, etc.) course success rates over the past five years. Compare your success rates to the overall college success rates. Are the rates where you would expect them to be? Have there been changes over time?

We have only one on-campus class in the CSWB discipline and its enrollment is between 20-25 students out of the 32 maximum that could be enrolled. There is a high demand for online classes in this Web Development discipline.

The demand has been fairly steady over the past five years.

The overall success rate percentage breakdown is:

| 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---------|---------|---------|---------|---------|
| 58.5% | 56.7% | 52.7% | 59.9% | 58.7% |

The DE vs on-campus success rate percentage breakdown is:

| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|--------------------|---------|---------|---------|---------|---------|
| Distance Education | 58.5% | 56.7% | 50.3% | 57.0% | 60.2% |
| San Marcos | 58.7% | 56.5% | 66.7% | 68.0% | 50.0% |

2. Course Success Rates by gender, age, ethnicity, and special population:

Reflect on your discipline’s success rates by the given demographic variables (gender, age, ethnicity, special population). Are there large differences between groups? If so, why do you think this is happening and what might you consider in the future to address the needs of these groups?

Note: Institutionally, the College has a goal to close the performance gap of disproportionately impacted students, including African-American, Hispanic/Latino, veterans, foster youth, and students with disabilities. You can access the Student Equity Plan on the SSEC website <https://www2.palomar.edu/pages/ssec/>

| Gender | Most years the Male/Female success rates are within 10% of each other | | | | | | | | | | | | |
|------------------|--|---------|---------|---------|---------|---------|---------|--|--|--|--|--|--|
| Age | In general, 75% or more of our students are over 25 years of age. This over-25 group generally does not perform as well as the 20-24 age group. Many of our “older” students have full-time work and family responsibilities that can interfere with their ability to keep up with the class pace. | | | | | | | | | | | | |
| Ethnicity | <p>The only two ethnic groups represented are Hispanic and White. In all years, except 2013-14, the Hispanic group underperformed the White group.</p> <p>The success rate percentage breakdown is:</p> <table border="1"> <thead> <tr> <th></th> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> <th>2016-17</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | | | | | | |
| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | | | | | | | | |
| | | | | | | | | | | | | | |

COMPREHENSIVE PROGRAM REVIEW AND PLANNING

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|--|---|---------|---------|---------|---------|---------|
| | Hispanic | 23.5% | 66.7% | 55.6% | 48.4% | 48.3% |
| | White | 61.3% | 57.7% | 55.0% | 59.6% | 58.6% |
| Special Population (examples- veteran, foster youth, etc) | There are a significant number of veterans that take our classes and their success rates are no different than the success rate of the entire discipline. | | | | | |
| | The number of enrollments were: | | | | | |
| | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| | Veterans | 168 | 156 | 161 | 174 | 137 |
| | The success rate percentage breakdown is: | | | | | |
| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | |
| Veterans | 57.1% | 58.1% | 52.8% | 62.6% | 57.7% | |

3. Disaggregated Course Success Rates (Select at least two other variables):

Disciplines/programs find it useful to examine course success rates by other types of variables (e.g., time of day, level of course (basic skills, AA, Transfer). Examine course success rates disaggregated by at least two other variables and reflect on your findings.

1. Success Rates by Gender:

| | | | | | |
|--------|---------|---------|---------|---------|---------|
| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| Female | 35.3% | 69.6% | 46.9% | 61.4% | 61.5% |
| Male | 58.8% | 53.7% | 54.8% | 59.7% | 56.9% |

The success rates by gender are roughly equal, with slight variations from year to year. During the last two years females are succeeding at a slightly higher rate than males. There are no recommended changes based on gender differences.

2. Success Rates by Financial Aid:

| | | | | | |
|---------------|---------|---------|---------|---------|---------|
| | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| No Aid | 60.7% | 59.3% | 51.4% | 64.0% | 61.6% |
| Financial Aid | 52.8% | 53.0% | 55.8% | 54.3% | 51.5% |

The success rates by whether or not a student receives financial aid are roughly equal, with slight variations from year to year. During the last two years those receiving financial aid are succeeding at a rate of 10% less than students who receive no aid. We may need to reach out a bit earlier in the class to students receiving financial aid and encourage them to ask for assistance when they are having difficulties.

SECTION 3: INSTITUTION AND PROGRAM SET COURSE SUCCESS RATE STANDARDS

ACCJC requires that colleges establish institutional and program level standards in the area of course success rates. These standards represent the lowest success rate (% A, B, C, or Credit) deemed acceptable by the College. In other words, if you were to notice a drop below the rate, you would seek further information to examine why the drop occurred and strategies to address the rate.

Discipline Level Course Success Rate:

- A. The College’s institutional standard for course success rate is 70%.**
- B. Review your discipline’s course success rates over the past five years.**
- C. Identify the minimum acceptable course success rate for your discipline. When setting this rate, consider the level of curriculum (e.g., basic skills, AA, Transfer) and other factors that influence success rates within your area. If you set your discipline standard below the College’s standard, please explain why.**

| | |
|--|-----|
| Standard for Discipline Course Success Rate: | 70% |
| Why? | |
| <p>This is in line with the college success rate and reflects a reasonable minimum to produce students ready for gainful employment.</p> <p>The college has established program level standards by tracking the success rates of SLOs (Student Learning Outcomes) for each course and program.</p> <p>The success rates for the two programs in this discipline are:</p> <p>89.27% percent of students passed the assessment for the Web Developer with Emphasis in Java/Open Source program.</p> <p>88.16% percent of students passed this assessment Web Developer with Emphasis in Windows program.</p> <p>This exceeds the minimum acceptable course success rate needed for this discipline which has been set at 70%, in line with the College’s institutional standard.</p> <p>The students who complete the coursework in this discipline are exceeding the success rate expected for this discipline.</p> | |

SECTION 4: COMPLETIONS

Click on the following link to review the completions for your discipline.

<https://sharepoint2.palomar.edu/sites/IRPA/SitePages/Degrees%20and%20Certifications.aspx>

- A. To access your discipline data, go to the "Awards" tab at the bottom of the page and click on your discipline.**
- B. To access your program level completions, click on the tab titled "Awards by Academic Plan" at the bottom of the page and then click on your discipline.**

1. Overall Completions:

Reflect on your discipline’s overall completions over the past five years. Are the completions where you would expect or want them to be? What is influencing the number of completions?

Completions in the Certificate of Proficiency have held steady over the past 4 years, with a recent spike this last year. Five years ago they were higher.

The five year breakdown is:

| | | | | |
|---------|---------|---------|---------|---------|
| 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| 16 | 5 | 3 | 4 | 9 |
| 16 | 5 | 3 | 4 | 9 |

We have just dropped the CPs and added a CA in Web Development this year to replace them. We will need to follow the new trends going forward.

We expect to offer a new AS/CA degree program in Web Design and Development in the Fall 2018 semester, pending approval of the Chancellor's office.

2. Specific Degree/Certificate Completions:

Do you have degrees or certificates with few or no completions? If so, what factors influence completions within specific programs? If you have degrees/certificates with few completions, are they still viable? What can be done to help students complete programs within your discipline?

n/a

SECTION 5: LABOR MARKET INFORMATION (CTE PROGRAMS ONLY)

If you have CTE programs in your discipline, refer to the following link to obtain relevant labor market data. This data can be found on the Centers for Excellence website at <http://www.coecc.net/Supply-and-Demand.aspx>

Example of Labor Market Information:

| SOC | Description | Counties | 2014 Occupations | 2017 Occupations | Change | % Change | Openings | Annual Openings | 10% Hourly Earnings | Med Hourly Earnings | Entry Level Education (Typical) |
|---------|--------------------------|-----------|------------------|------------------|--------|----------|----------|-----------------|---------------------|---------------------|---------------------------------|
| 13-2011 | Accountants and Auditors | Imperial | 341 | 361 | 20 | 5.8% | 57 | 19 | \$17.70 | \$26.09 | Bachelor's degree |
| 13-2011 | Accountants and Auditors | San Diego | 12,554 | 13,735 | 1,181 | 9.4% | 2,388 | 796 | \$20.88 | \$32.92 | Bachelor's degree |

1. What is the regional three-year projected occupational growth for your program(s)?

Web Development & Administration

Occupation & Wage Data

In 2015, there were 2,389 computer science and information systems: web development & administration related jobs in San Diego County that typically require a community college degree or less (Table 6). Looking forward to 2020, the labor market demand for computer science and information systems: web development & administration occupations in the county is projected to grow by 13 percent (growth of 300 jobs). There will be 466 open positions due to retirements or other replacement factors in the next five years. The median hourly wages for this occupation is \$30.04.

(See below...)

Table 6. Employment Outlook for Computer Science and Information Systems: Web Development & Administration Occupations Requiring Associate Degree or Less in San Diego county

| SOC | Occupation | 2015 Jobs | 2020 Jobs | 5-Yr Change | 5-Yr % Change | 5-year Openings | Annual Openings | Median Hourly Earnings |
|---------|----------------|-----------|-----------|-------------|---------------|-----------------|-----------------|------------------------|
| 15-1134 | Web Developers | 2,389 | 2,689 | 300 | 13% | 466 | 93 | \$30.04 |

Table 6.1 shows the employment outlook for web development & administration occupations with specific zip codes in East San Diego County.

Table 6.1. Employment Outlook for Computer Science and Information Systems: Web Development & Administration Occupations Requiring Associate Degree or Less in east San Diego county

| SOC | Occupation | 2015 Jobs | 2020 Jobs | 5-Yr Change | 5-Yr % Change | 5-year Openings | Annual Openings | Median Hourly Earnings |
|---------|----------------|-----------|-----------|-------------|---------------|-----------------|-----------------|------------------------|
| 15-1134 | Web Developers | 96 | 104 | 8 | 8% | 16 | 3 | \$31.13 |

2. What is being done at the program-level to assist students with job placement and workforce preparedness?

We are looking for internships for our students.

Our instructors have real-world experience and coach students on the job skills that they need to have on their resumes and on how to be prepared for job interviews.

3. If your program has other program-level outcomes assessments (beyond SLOs and labor market data), including any external mandated regulatory items, discuss how that information has been used to make program changes and/or improvements.

N/A

4. When was your program’s last advisory meeting held? What significant information was learned from that meeting? (CTE programs are required by Title 5 to conduct a minimum of 1 advisory meeting each year)

The last advisory meeting was held on Nov. 4, 2017

1. There is a movement to try to save students money by finding free books and course material through the Open Educational Resource initiative
2. There was a discussion of improving our offerings in Cyber Security
3. Some discussion of the pros/cons between lecture, hybrid, and all online training.

SECTION 6: ADDITIONAL QUALITATIVE INFORMATION

Not all information important to reviewing your program is quantitative or included in the section above.

Describe other data and/or information that you have considered as part of the assessment of your program. (Examples of other data and factors include, but are not limited to: external accreditation requirements, State and Federal legislation, four-year institution directions, technology, equipment, budget, professional development opportunities).

N/A

SECTION 7: CURRICULUM, SCHEDULING, AND STUDENT LEARNING OUTCOMES

1. SLO Assessment Results:

How have SLO assessment results impacted your planning over the last three years? Consider curriculum, teaching methodology, scheduling, department discussion (FT & PT faculty included) resources, etc. Refer to the SLO/PRP report – <https://outcomes.palomar.edu:8443/tracdat/>

We have meet our SLO assessment goals 100% of the time. The SLO assessment results are positively showing that the planning over the past three years was appropriate. This is in line with the college success rate and reflects a reasonable minimum to produce students ready for gainful employment.

The success rates for the two programs in this discipline are:

89.27% percent of students passed the assessment for the Web Developer with Emphasis in Java/Open Source program.

88.16% percent of students passed this assessment Web Developer with Emphasis in Windows program.

This exceeds the minimum acceptable course success rate needed for this discipline which has been set at 70%, in line with the College’s institutional standard.

The students who complete the coursework in this discipline are exceeding the success rate expected for this discipline.

2. SLO Assessment Methods:

How effective are your current methods/procedures for assessing course and program student learning outcomes? What is working well and how do you know? What needs improvement and why? Refer to the SLO/PRP report – <https://outcomes.palomar.edu:8443/tracdat/>

Since the goal of the course in this program is to teach skills in the web development discipline that a student can use to gain employment in the field, the primary methods of assessment involve the student’s ability to both produce web applications that meet specific criteria (that one might find specified for a business web application) and follow current industry standards.

The assessment takes place by having the instructor review the student’s assignment (project) submission and ensuring that they work and have met all the specific requirements. After running the student’s application on a web server, then the program code is inspected to see that the student solved the problem using the programming techniques that are being taught and has followed the proper coding standards required (i.e. ones that are generally followed in the industry, such as proper indentation, variable and function naming, etc.)

These methods have proved to be effective since we are exceeding our positive assessment goals.

While there are no specific improvements to recommend at this time, this process is ongoing. As students make comments in the discussion board, email, or in person We make incremental improvement in the course

material on an ongoing basis.

3. Program SLOs:

How do your program SLOs represent the scope and depth of learning appropriate to the degree/certificate programs offered? What needs improvement and why? Refer to the SLO/PRP report – <https://outcomes.palomar.edu:8443/tracdat/>

The program SLOs reflect the needs of the IT job market. Our programs are designed to meet the needs of the IT job market.

Most of the students are older adults (30+ years) who are working full-time and have families.

It is our observation that most students take classes in our program to gain a particular skill that can either be used to get a different job or provide them growth opportunities in their current job. Very few students take these classes to complete the program.

There is still “value-added” by having a program, however. Courses are grouped in such a way that a student will better understand what classes to take and in what order. This is will be further helped in the future when our Guided Pathways project is implemented.

There are two significant improvements happening in the Web Development area. First, a new 18-unit Web Development CA has been created and approved. Our new Python course will be added to this program starting in Fall 2018.

Additionally, we have been working with the Graphic Communications department on a cross-listed degree, “Web Design and Development” AS degree/CA and hope that receives full approval from the Chancellor's office to begin in Fall 2018.

4. Curriculum overview:

Does your program offer sufficient opportunities for students to learn current disciplinary and professional knowledge, skills, competencies, etc. for the type and level of degree/certificate offered? Discuss how your course/program reviews, since the last PRP, have changed and/or impacted your program. How is the potential need for program/course deactivation addressed by the department?

The program does offer current professional knowledge and skills for the IT job market. One improvement being made is to drop the Microsoft ASP training (which has diminished in the market) with Python Programming which is ascending in the job market.

As mentioned in #3 above, we have a new 18-unit “Web Development” CA program that has just been approved and a new “Web Design and Development” AS degree / CA program that may be able to be offered in Fall 2018

5. Curriculum scheduling:

Describe how you schedule your courses to include a discussion on scaffolding (how all parts build on each other in a progressive, intentional way), and scheduling of courses so students can follow the best sequence. Address how enrollment issues impact scheduling and student completion/achievement.

The core three courses in this program build on Web Development skills in a progressive way. CSWB 110 - Web Development

with HTML/CSS provides the foundation, the next course is CSWB 120 - JavaScript which completes the basic web development skill set by allowing students to add interactivity to their websites. The third course in the series is CSWB 135 - Advancement JavaScript/Mobile App which allows the advanced student learn how to develop mobile applications and use the advanced features of JavaScript.

CSWB 110 and CSWB 120 have enough demand to be offered every semester. CSWB 135 is offered once per year in the Spring.

6. Curriculum communication:

How does regular communication with other departments that require your courses in their programs occur – scheduling, review scheduling conflicts/overlaps for courses within same program, etc.?

We work with the Graphic Communications department, primarily, since CSWB 110 and CSWB 120 are part of the Web Design programs offered there. There are no significant overlaps in scheduling since virtually all the classes are offered online.

PART 3: Program Evaluation and Planning

Program Evaluation and Planning is completed in two steps.

Section 1: Overall Evaluation of Program

Using the results of your completed assessment (See Sections 1-6 above), identify the strengths and areas for improvement within your program. Also consider the areas of opportunities and any external challenges your program faces over the next three years. Summarize the results of your assessment in the Grid below.

Section 2: Establish Goals and Strategies for the Next Three Years

Once you have completed your overall evaluation, identify a set of goals and strategies for accomplishing your goals for this upcoming three year planning cycle. Use the template in Section 2 below to document your goals, strategies, and timelines for completion.

SECTION 1: OVERALL EVALUATION OF PROGRAM

1. Discuss your discipline’s strengths, weaknesses, opportunities and threats in regards to curriculum, assessment, enrollment, success rates, program completion, etc. For helpful suggestions on how to complete this section, go to <http://www2.palomar.edu/pages/irp/files/2017/02/Helpful-Tips-for-Completing-a-SWOT.pdf>

Strengths:

We succeed in providing the software development skills necessary to allows student to gain employment in the IT/Web industry. The students’ success rate and job market analysis show a strong correlation. Our courses are taught by instructors that have significant experience working in the industry and have many year teaching experience as well. We endeavor to keep up with evolving industry standards and software developments and adjust our curriculum accordingly.

Weaknesses:

Students would benefit by being taught more advanced topics but, when advanced courses have been offered, not enough students register so the classes are cancelled. Perhaps, when our new AS degree is fully approved next year we will have an opportunity to have a guided path that leads to advanced courses.

Students may benefit by an expansion of our open lab to include instructors who are knowledgeable in some of the more advanced topics.

COMPREHENSIVE PROGRAM REVIEW AND PLANNING

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|-----------------------|--|
| Opportunities: | We are taking advantages of the job market growth in Python programming by adding a new class in Python. Additionally we have reworked our two CP programs into a new 18-unit "Web Development" CA program and are expecting increased enrollment when our new "Web Design and Development" AS degree program is approved. |
| Threats: | The college overemphasis on efficiency numbers threaten to cancel classes that are otherwise "solvent" and take away learning opportunities for our students... which is directly in conflict with the goals expressed in Palomar College's Mission Statement. |

SECTION 2: Establish Goals and Strategies for the Next Three Years

1. Progress on Previous Year's Goals: Please list discipline goals from the previous year's reviews and provide an update by placing an "X" the appropriate status box .

| Goal | Completed | Ongoing | No longer a goal |
|---|-----------|---------|------------------|
| Provide an engaging teaching and learning environment for students. Support and encourage students who are pursuing a career in Web Development. Help our students achieve the learning outcomes necessary to continue their education. | | X | |
| | | | |
| | | | |

2. New Discipline Goals: Please list all discipline goals for this three-year planning cycle (including those continued from previous planning cycle):

| Goal #1 | |
|---|---|
| Program or discipline goal | Try to increase retention by offering substantial support in a regular lab |
| Strategies for implementation | Schedule faculty in regular lab sessions to assist students |
| Timeline for implementation | Fall 2018 |
| Outcome(s) expected (qualitative/quantitative) | Aim for a 10% increase in student retention due to increasing student satisfaction |
| Goal #2 | |
| Program or discipline goal | Provide an engaging teaching and learning environment for students. |
| Strategies for implementation | Produce demonstration videos for online classes with corresponding exercises to emulate a classroom lab |
| Timeline for implementation | Fall 2018 |
| Outcome(s) expected (qualitative/quantitative) | Increased student satisfaction reported by students in surveys and communications |
| Goal #3 | |
| Program or discipline goal | Support and encourage students who are pursuing a career in Web |

COMPREHENSIVE PROGRAM REVIEW AND PLANNING

| | |
|---|---|
| | Development. |
| Strategies for implementation | Inform students about the current directions in industry and help them focus on the skills that will help them with gainful employment |
| Timeline for implementation | Fall 2018 |
| Outcome(s) expected (qualitative/quantitative) | Increased student satisfaction reported by students in surveys and communications relating to understanding the skills they need to focus on to help them with gainful employment |
| Goal #4 | |
| Program or discipline goal | Help our students achieve the learning outcomes necessary to continue their education. |
| Strategies for implementation | Monitor industry needs and create or improve classes to help students be prepared for gainful employment |
| Timeline for implementation | Fall 2018 |
| Outcome(s) expected (qualitative/quantitative) | An increase of 10% in students' assessments on programming assignments. |
| Goal #5 | |
| Program or discipline goal | Remove MS ASP course from program discipline |
| Strategies for implementation | Deactivate CSWB 210 ASP and replace it with CSWB 180 Python |
| Timeline for implementation | Fall 2018 |
| Outcome(s) expected (qualitative/quantitative) | CSWB 210 ASP will be removed from catalog and CSWB 180 will be added |

3. How do your goals align with your discipline's mission statement?

They prepare students for employment in the web site development industry by educating them in the key software development applications necessary to develop web sites for organizations or businesses.

Each goal, listed above, is too help the student with the various things that need to be learned and practiced in order to gain employment in the information technology industry with emphasis on web development.

4. How do your goals align with the College's Strategic Plan Goals?

There is no specific goal in the College's Strategic Plan that aligns with the discipline's mission of provide an engaging teaching and learning environment for students. We support and encourage students who are pursuing a career in Web Development. We help our students achieve the learning outcomes necessary to continue their education. Our goals do align with Palomar's Mission Statement (shown at the top of the College's Strategic Plan) of helping our students achieve the learning outcomes necessary to contribute as individuals and global citizens living responsibly, effectively, and creatively in an interdependent and ever changing world.

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PART 4: FEEDBACK AND FOLLOW-UP

This section is for providing feedback.

Confirmation of Completion by Department Chair

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|-------------------------|--------------|
| Department Chair | Terrie Canon |
| Date | 2/28/18 |

***Please email your Dean to inform them that the PRP has been completed and is ready for their review**

Reviewed by Dean

| | |
|--------------------|----------------|
| Reviewer(s) | Margie Fritch |
| Date | March 13, 2018 |

1. Strengths and successes of the discipline as evidenced by the data and analysis:

Data section identifies disproportionate impact with Hispanic students.

2. Areas of Concern, if any:

Disproportionate impact with Hispanic students needs to be analyzed and program needs to address how to reduce this impact.

3. Recommendations for improvement:

LMI and goals section needs some work.

***Please email your VP to inform them that the PRP has been completed and is ready for their review**

Reviewed by: Instructional Planning Council PRP Sub-Committee

| | |
|--------------------|---------------------------|
| Reviewer(s) | (mgf), smd, Justin Smiley |
| Date | (12/12/17); 12/18/17 |

1. Strengths and successes of the discipline as evidenced by the data and analysis:

Data presented for success rates.
Removing CPs and adapting AS/CA program to stay current

2. Areas of Concern, if any:

(Typos, grammatical errors)
Mission Statement - Only preparation for employment? How?
Goals incomplete or insufficient.

3. Recommendations for improvement:

(Correct minor errors to provide better institutional documentation)

Are there other factors relating to declining enrollment? How can we address this, other than canceling classes?

Finding internships for students could be another goal.

More and specific SLO data would be helpful

Another goal could be dropping MSFT ASP and responding to emerging industry needs

4. Recommended Next Steps:

Proceed as Planned on Program Review Schedule

X Repeat Comprehensive Review

Reviewed by: Vice President

Reviewer(s) Jack S. Kahn Ph.D.

Date 1/20/18

1. Strengths and successes of the discipline as evidenced by the data and analysis:

1. Excellent discussion of enrollments and data included!
2. The demographic section of differences is written well- needs analysis though- what might be contributing to these differences for hispanics? What can we do to address it?
3. SWOT discussion is a good start but needs more reflection on changes needed to the program – since this is a program review etc.

2. Areas of Concern, if any:

- a. Mission could be expanded- see models at other community colleges
- b. Wsch/ftf is reporting on fill rates not wsch/ftf
- c. Success rate is reported incorrectly also (though its correct in the demographics suggestion)
- d. Labor Market data is incomplete
- e. SLo data is nearly there- what is discussed in the non-SLO section is closer- bring thi down to the SLO section and see the rubric to make adjustments
- f. Goals are incomplete – this isn't a comprehensive review though a good start

3. Recommendations for improvement:

4. Recommended Next Steps:

Proceed as Planned on Program Review Schedule

X Repeat Comprehensive Review

Upon completion of PART 4, the Program Review document should be returned to discipline faculty/staff for review, then submitted to the Office of Instruction and Institutional Research and Planning for public posting. Please refer to the Program Review timeline.