PROGRAM EVALUATION SUMMARY

Computer Information Science

1. Program Strengths

   a. The CIS program evidences a strong enrollment history, as well as a strong certificate and degree completion rate.
   b. The program has a dedicated and resourceful full-time faculty member
   c. Program faculty member is diligent in assessment of course and program SLOs

2. Program Weaknesses

   a. According to the report, the classroom computers (in CL 130) are not effective to accommodate some of the programs being taught in the program; similarly, the overhead projector in CL 130 needs replacement
   b. Qualified adjunct instructors and one additional CIS instructor are needed to meet enrollment demand

3. Recommendations for Program Improvement
   a. It appears that the Title III Virtual Campus grant may help fund purchases of new computers and equipment for the program
   b. In April , the Board of Trustees approved the hiring of three full-time faculty, including an instructor in CIS

4. Committee Determination: Report is accepted and may proceed to the next step in the process.

PROGRAM REVIEW REPORT: COMPUTER INFORMATION SYSTEMS

1. SUPPORT OF THE COLLEGE MISSION STATEMENT

The Computer Information Systems Department (CIS) offers an Associate in Science Degree in Computer Information Systems and Certificates of Preparation in Computer Animation, Graphic Design and Web Content, Computer Applications, Information Technology Literacy, and Management Information Systems. The courses in these programs will prepare students for immediate employment in entry level positions within the local and regional community. After completing the degree and certificate programs, the student will be able to work as any of the following: productivity software specialist, computer repair technician, local area network technician, technical/software support specialist (help desk), entry level graphic and web designers, web coders, and computer animators.

In accordance with the *Palo Verde Community College's Mission Statement: 2002-2007*, the Computer Information System program's Associate in Science Degree and Certificates fulfill the primary mission of the college by offering transferable courses for a degree or certificates as well as preparing students with skills in vocational and occupational fields needed to secure employment, retraining, and economic development.

These programs develop computer competencies for the workplace, educational advancement, and personal use. ***They provide a foundation for developing workplace and lifelong learning skills, and knowledge in accordance with the College's Strategic Plan***.

2. ACCOMPLISHMENTS IN ACHIEVING GOALS OUTLINED IN THE PREVIOUS PROGRAM REVIEW

a. New Certificates: designed and updated as mentioned in the last program review:

1. The CIS Department has created new certificates in Graphic Design and Web Content, updated the Computer Applications certificate, designed a new certificate program titled "Computer Maintenance and Help Desk Support", and has placed outdated, obsolete, or programs not demanded by students or industry on inactive status.

2. One of the exciting things on the horizon for the CIS department is a new program that is developed and awaiting Curriculum approval Spring 2013. A new certificate of preparation in Computer Maintenance and Help Desk Support will consist of 4 courses that will be offered each year. These courses will also be available for concurrently enrolled high school students.

b. Computer Animation added to AS degree:

1. Computer Animation courses and courses of each of the other certificate programs are now a part of the newly adopted and approved AS degree in CIS

c. Course Additions and Revisions:

1. It was mentioned that courses would be offered in one unit workshops, computer security, help desk operations, and various operating systems. Due to the current department only having one full-time instructor, the CIS department has revised all course outlines, placed numerous courses on inactive status, revised AS degree programs and certificates to reflect current labor market demand, created

new certificate programs, but did not address curriculum development in computer security. It is the hope of the department to employ a second full-time instructor who will be qualified to teach courses in network security and other CIS content not currently offered by PVC.

2. To address this, the CIS department placed the AS degree in CIS on inactive status while it closely monitored the TMC process according to SB1440 legislation. Through this process, the CIS department revamped its AS degree to provide a program of study in which all courses directly support the mission of the department, reflect the input from the Advisory Committee, align to labor market data, and can be offered in a two year cycle so that students can complete an AS degree in a timely manner.

3. The same process was followed for many of the certificate programs. The Computer Applications certificate of preparation was placed on inactive status, while the department addressed the same issues as mentioned in the revision of the AS degree. Through this process, the Computer Applications certificate and the Information Technology Literacy were redesigned to offer a powerful program of study in which students could complete the entire certificate in a year, with all CIS courses being offered each year. This allows students to progress toward a degree or certificate regardless of which semester they enter Palo Verde College. Since the last full program review, the CIS department has created a new certificate titled: Graphic Design and Web Content. This program has demonstrated its need due to the consistent enrollment and data demonstrating completion of the certificate program.

d. Testing Programs standardized for each course:

1. All courses have been developed to utilize a standardized entry and exit exam. Unfortunately, not all adjunct instructors adhere to this vision. All courses taught by the full-time instructor utilize the benchmark assessment and data is compiled to assist in program review and SLO/PSLO assessment. A recognized certificate testing contract has been formulated with PVC and an outside IT Testing center (Prometric) in which students and community members can test for industry recognized computer certifications through Palo Verde College. These certifications help participants find employment, as these certificates are recognized by most industries.

e. SLO Assessment of all CIS courses:

1. **The Computer Information System's curriculum has been rewritten to include Student Learning Outcomes (SLOs) and Program Level SLOs (PSLOs) for each degree and certificate that is offered through the CIS department.** The Introduction to Personal Computer Applications course (CIS 102) provides cross curriculum integration; students are able to create term papers, graphs and charts, databases, spreadsheets, and multimedia presentations for assignments in their other classes.

f. Grants and Funding:

1. In the last full program review, finding financial resources to support the program was mentioned as a weakness of the program. To remedy this, the CIS department has received financial assistance with software through Title 3, and has been written into the VTEA grant and has received graphic design templates for using in the graphic design courses and the computer animation courses. In addition, network and computer maintenance tools and specialized equipment was purchased to

support the newest certificate program in CIS "Computer Maintenance and Help Desk Support" approved by the Curriculum Committee Spring 2013.

g. **Counseling and Marketing**:
   1. The need for a vocational counselor to coordinate and assist with the enrollment of high school students and to support career planning in CIS courses was addressed as a weakness in the last full program review. Since that time, a full-time vocational counselor has been designated to help with this process. This position is paid for through VTEA and CTE funds.

3. POPULATIONS SERVED

Populations served by our programs include students in the A.S. Degree for Computer Information Systems, the Computer Applications Certificate, Computer Animation Certificate, Information Technology Literacy Certificate, Graphic Design and Web Content Certificate, Management Information Systems Certificate, concurrently enrolled high school students, lifelong learners, and students taking computer courses in order to obtain the skills that will make them successful in school, work, and personal environments.

Our core classes span the curriculum of the College and are highly recommended for student success at the college level.

These classes also draw members from the community who would not be regular students of the College. These classes also are representative of the lifelong learning patterns and are the standard which businesses want information technology taught in the local and regional areas. Due to the nature of information technology, students, regardless of their physical abilities or age, will be able to take advantage of this field of study. In today's current global workplace, all jobs utilize and require competence in computer literacy.

4. CURRICULUM HISTORY

The total curriculum of the CIS Department has been updated, reviewed, and accepted for the new degrees and certificate programs. This curriculum is appropriate and follows the State guideline for the freshman and sophomore transferable courses. All courses in the program are offered within a two-year time frame.

A.S. Degree, Computer Information Systems

A minimum of 60 units of Associate Degree credit college work.
For All Associate of Science (AS) Majors all listed Courses are required.

DEPT	COURSE #	CIS CORE COURSE WORK	REQUIRED UNITS
CIS	101	INTRODUCTION to COMPUTER & INFORMATION SCIENCE	3
CIS	102`	PERSONAL COMPUTER APPLICATIONS	3
CIS	123	WEB PAGE DESIGN - HTML	3
CIS	130	INTRODUCTION to 3D COMPUTER ANIMATION	3
		Or	
CIS	150	WINDOWS	3
CIS	248	SYSTEMS ANALYSIS AND DESIGN	3
CIS	265	ADOBE PHOTOSHOP	3
		Or	
CIS	170	COMPUTER MAINTENANCE	3

		RESTRICTED ELECTIVES (CHOOSE 6 UNITS)	
CIS	124	WEB PAGE DESIGN TOOLS	3
CIS	131	ANIMATION PRINCIPLES AND PRODUCTION I	3
CIS	132	ANIMATION PRINCIPLES AND PRODUCTION II	3
CIS	133	ADVANCED 3D COMPUTER ANIMATION	3
CIS	260	DESKTOP PUBLISHING	3
CIS	XXX	MANAGING OPERATING SYSTEMS	3
CIS	XXX	COMPUTER HELP DESK SUPPORT	3
REQUIRED ELECTIVES		**RESTRICTED COURSES CHOOSE 3 UNITS**	
MAN	105	PRINCIPLES OF MANAGEMENT AND ORGANIZATIONS	3
MAN	106	PERSONNEL MANAGEMENT	3
MAN	107	SMALL BUSINESS MANAGMENT	3
BUS	201	PRINCIPLES OF ORGANIZATIONAL LEADERSHIP	3

CERTIFICATES IN COMPUTER INFORMATION SYSTEMS

The Computer Information Systems Program is designed to offer five (5) certificates for the student seeking entry-level employment as a computer applications specialist, Web design specialist, Graphic Designer, life-long learner, MIS entry level position, or computer animator.

These Certificates can be completed within one year.

COMPUTER APPLICATIONS

Course#	Course Title	Units
	(Required Courses for the Certificate – 12 Units)	
CIS 101	Introduction to Computers and Information Systems	3
CIS 102	Personal Computer Applications	3
CIS 123	Web Design Using HTML	3
CIS 260	Desktop Publishing	3
	(Select at least three (3) elective units from the list below)	
CIS 124	Web Page Design Tools	3
CIS 130	Intro. to 3D Computer Animation	3
CIS 131	Animation Principles and Production I	3
CIS 132	Animation Principles and Production II	3
CIS 133	Advanced 3D Computer Animation	3
CIS 248	Systems Analysis and Design	3
CIS 265	Adobe Photoshop	3
	TOTAL REQUIRED UNITS	**15**

INFORMATION TECHNOLOGY LITERACY

Course#	Course Title	Units
CIS 101	Introduction to Computers and Information Systems	3
CIS 102	Personal Computer Applications	3
CIS 248	Systems Analysis and Design	3

	TOTAL REQUIRED UNITS	**9**

MANAGEMENT INFORMATION SYSTEMS

Course#	Course Title	Units
CIS 101	Introduction to Computers and Information Systems	3
CIS 248	Systems Analysis and Design	3
MAN 105	Principles of Management	3
ACC 100	Basic Accounting	4
	TOTAL REQUIRED UNITS	**13**

3D COMPUTER ANIMATION

Course#	Course Title	Units
CIS 130	Introduction to 3D Computer Animation	3
CIS 131	Animation Principles and Production I	3
CIS 132	Animation Principles and Production II	3
CIS 133	Advanced 3D Computer Animation	3
	TOTAL REQUIRED UNITS	**12**

GRAPHIC DESIGN AND WEB CONTENT

Course#	Course Title	Units
CIS 123	Web Design Using HTML	3
CIS 124	Web Page Design Tools	3
CIS 260	Desktop Publishing	3
CIS 265	Adobe Photoshop	3
	TOTAL REQUIRED UNITS	**12**

5. SCHEDULING

- The CIS Department utilizes a one year certificate scheduling model.
- The CIS Department presents a two-year A.S. degree model for the students.
- **At least five (5) sections of the introductory core classes are offered each semester**.
- Two courses are being revised and revamped from inactive status and two new courses have been developed awaiting approval from the Curriculum Committee. These four courses are a part of a new certificate program which is designed to be offered starting Fall 2013.
- Students are encouraged to get their A.S. degree with multiple certificates.
- Certificates will be available for students working toward an A.A. degree.
- Classes are offered during morning, afternoon, and evening hours.
- Classes are offered Fridays, online, through I-TV, and in the correspondence modalities.
- Special attention has been given to the scheduling process so that local area high school students can concurrently enroll in CIS courses during their traditional high school day. Attention to scheduling courses around the local unified school district's bussing schedule is an area of emphasis when the schedule is being developed.

Currently there is only one full-time instructor teaching courses. This teacher has developed the program so that he could offer all courses each year so that students could succeed in the courses and complete certificates

in a year's time. To support the student who can only take brick and mortar courses in the evening, an adjunct has been hired to teach introductory courses face to face in the evening. Online courses and correspondence courses are also utilized to reach the working student. The CIS department strives to accommodate all of our students scheduling needs. We are continually expanding the distance education CIS course offerings through various modalities such as correspondence, I-TV, and online courses. Summer courses are also offered in both the online and correspondence modalities.

6. STUDENT LEARNING OUTCOMES

It is our intent and practice to integrate information technology in all our students' lives from the point of view of lifelong learning. Since the last full program review, the CIS department has developed and implemented Student Learning Outcomes (SLOs) for every course in the discipline. Each of these SLOs have been assessed and evaluated. The data resulting from this process has provided valuable information which has helped in the focus of the department and the goals of the CIS curriculum. It is important to note, that the CIS department was quite pleased with the data collected for the SLOs. It appears that the department is offering challenging and rigorous curriculum in which the students are demonstrating proficiency and success. We have developed entrance and exit exams for the CIS classes as well as standardized exams for the department as a whole. We have participated in regional and state business and information technology consortiums.

We have been posting syllabi on-line for the CIS courses. All CIS syllabi list student learning outcomes.

During the 2012-2013 academic term, the CIS department has worked as a model program developing, assessing, and implementing the data collected from Program Level Student Learning Outcomes. These PSLOs have been designed for each degree and certificate offered in the CIS discipline. The Business Division, and the CIS department in particular are the first to develop, assess, and implement these PSLOs. Though this is a labor intensive process, and having only one faculty member to do the work, the data collected has been invaluable to the success and direction of the CIS department.

We have introduced rubrics for the CIS Department. These rubrics are provided for all courses and assist the students with successful completion of major projects and reports. The use of rubrics was determined an important tool that was needed to implement through analysis of SLO data and has been incorporated into the entire program since 2011. We also have a module in every course outline dealing with critical thinking. Students in each CIS course are tasked with applying critical thinking to real-world scenarios. This process has helped students tie their education to business, educational, and real-world scenarios. All CIS classes require term projects, capstone projects, portfolios, or classroom presentations.

Palo Verde College – 2012-2013 Program Student Learning Outcomes Computer Information Systems

AS Degree - Computer Information Systems

Certificate of Preparation - Information Technology Literacy, Computer Applications, Computer Animation, Graphic Design and Web Content, and Management Information Systems

AS Degree - Computer Information Systems Program Student Learning Outcomes (2012-2013)
PSLO 1 (General Education): Acquire fundamental grounding in communications, science, mathematics, humanities, the social sciences and self-development in preparation for an occupation, and possible transfer to a four-year institution. (Assessment of this Program SLO is based on the assessments of representative courses selected from each general education area.)

PSLO 2 (Technology Skill Sets): Demonstrate knowledge of technology applicable to the field, and a proficiency in appropriate software; be competent evaluators and users of hardware; adapt to technological changes and select a current solution for a given problem.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessments of ENG 101, MAT 86/88, BIO 100, POS145, & GES 115)

Program Assessment of PSLO 2 (Based on assessment of CIS 101)

- *86% of the students were able to demonstrate the competencies of the SLO.*

PROGRAM ACTION PLAN

- *Provide clearer information to student about the goals or objectives of the relevant assignment or assessment methods, increase in class discussions and activities, increase student collaboration and/or peer review, and increase guidance for the student.*

Certificate of Preparation in Information Technology Literacy
Program Student Learning Outcomes (2012-2013)

PSLO 1 (Information Competency): Acquire and validate resources to solve technical problems; use information resources to gather discipline specific information or materials.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessment of CIS 102)

- *92% of the students were able to demonstrate competency of the SLO.*

PROGRAM ACTION PLAN

- *Increase in class discussions and activities and increase student collaboration and/or peer review.*

Certificate of Preparation in Computer Applications
Program Student Learning Outcomes (2012-2013)

PSLO 1 (Information Competency): Students will demonstrate understanding of the basics of computers and applications, including web page design and desktop publishing.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessment of CIS 124)

- *81% of the students were able to demonstrate competency of the SLO*

PROGRAM ACTION PLAN

- *Increase student collaboration and/or peer review, provide more frequent or more detailed feedback on student progress, increase guidance for the student, and increase interaction with students outside of class.*

Certificate of Preparation in Computer Animation
Program Student Learning Outcomes (2012-2013)

PSLO 1 (Information Competency): Students will demonstrate understanding of 3D animation principles in 3D production.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessments of CIS 133)

- *84.2% of the students* demonstrated *competency of the SLO.*

PROGRAM ACTION PLAN

- *Provide clearer information to student about goals or objectives of the relevant assignment or assessment methods and revise activities leading up to and/or supporting assignments or assessment methods.*

Certificate of Preparation in Graphic Design and Web Content
Program Student Learning Outcomes (2012-2013)

PSLO 1 (Technology Skill Sets): Demonstrate knowledge of technology applicable to the field, and a proficiency in appropriate software; adapt to technological changes and select a current solution for a given problem.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessments of CIS 265)

- *85% of the students demonstrated competency of the SLO*

PROGRAM ACTION PLAN

- *Revise activities leading up to and/or supporting assignments or assessment methods and increase student collaboration and/or peer review.*

Certificate of Preparation in Management Information Systems Program Student Learning Outcomes (2012-2013)
PSLO 1 (Technology Skill Sets): Demonstrate knowledge of technology applicable to the field, and a proficiency in appropriate software related to managing information systems; adapt to technological changes and select a current solution for a given problem in today's business environments.

PROGRAM ASSESSMENT RESULTS:

Program Assessment of PSLO 1 (Based on assessments of CIS 101)

- *86% of the students were able to demonstrate the competencies of the SLO.*

PROGRAM ACTION PLAN

- *Provide clearer information to student about the goals or objectives of the relevant assignment or assessment methods, increase in class discussions and activities, increase student collaboration and/or peer review, and increase guidance for the student.*

7. PROGRAM AND COURSE COVERAGE

The CIS department currently only has one full-time instructor. In the past, this instructor has been responsible for program review, SLO analysis, data collection, teaching face to face courses, developing curriculum, and chairing the Business Division. This has been a lot of work for the instructor. For this reason, adjuncts have assisted in teaching many of the correspondence courses offered through the CIS department. With that being said, an evaluation process for adjuncts was attempted during the Fall 2012 term. Unfortunately there were obstacles that were encountered in this process and the effort seemed to be a waste of time. Having qualified, professional, and dedicated adjuncts will be a crucial link between student success, SLO assessment, and demonstrating program completers. Since many of the adjunct faculty are not qualified to teach the upper-level courses, the full-time instructor teaches those face to face.

It has been found that the lack of connection with students in the introductory courses offered by adjuncts through the correspondence modalities does not necessarily promote retention and pursuit of certificates and degrees in the CIS field. For this reason, the full-time instructor has been attempting to meet with the adjuncts to address the goals of Palo Verde College and the CIS department in particular. Addressing absences of the full-time instructor is an area of discussion. Currently there is not a qualified instructor that could fill in if an emergency arose to the full-time faculty member. For this reason, Palo Verde College has placed advertisements seeking qualified applicants for the CIS discipline.

8. PROFESSIONAL DEVELOPMENT

There are many available seminars and conventions in information technology that are available to our department and division. The CIS faculty member has continued a program of self-study to enable himself to teach new subjects and to present classes on updated versions of various software packages. A list of the software and topics that were mastered during the past 3 years appears below:

• Windows 7	• Computer Maintenance
• Android OS	• Help Desk Support
• Mobile Platforms	• HTML and Cascading Style Sheets
• Blender Animation	• Adobe Photoshop
• Adobe Creative Suite CS 5.5	• Cinema 4D Animation
• HTML 5	

The CIS full-time faculty member regularly participates in webinars, web-based training, and other online professional development activities in the CIS discipline in order to stay current with emerging technologies. This is demonstrated in the development of new courses and programs at PVC in the CIS field.

Information technology changes so rapidly (completely every three years) that professional development in the CIS department needs to have an extremely high priority just to keep up with the technological wave and learning curve. The funds for professional development need to be allocated and budgeted at the departmental level. CIS faculty has over twenty (20) different workshops and seminars available to them in the Southern California area through the California College Consortium per year. Unfortunately many of these workshops are costly and are only offered during the school year. Due to budget constraints at Palo Verde College, there have not been funds available for attendance at these conferences and workshops. Another issue that has occurred is that the full-time instructor could not attend many of these conferences during the school term due to the lack of qualified instructors who could cover the courses in the instructor's absence.

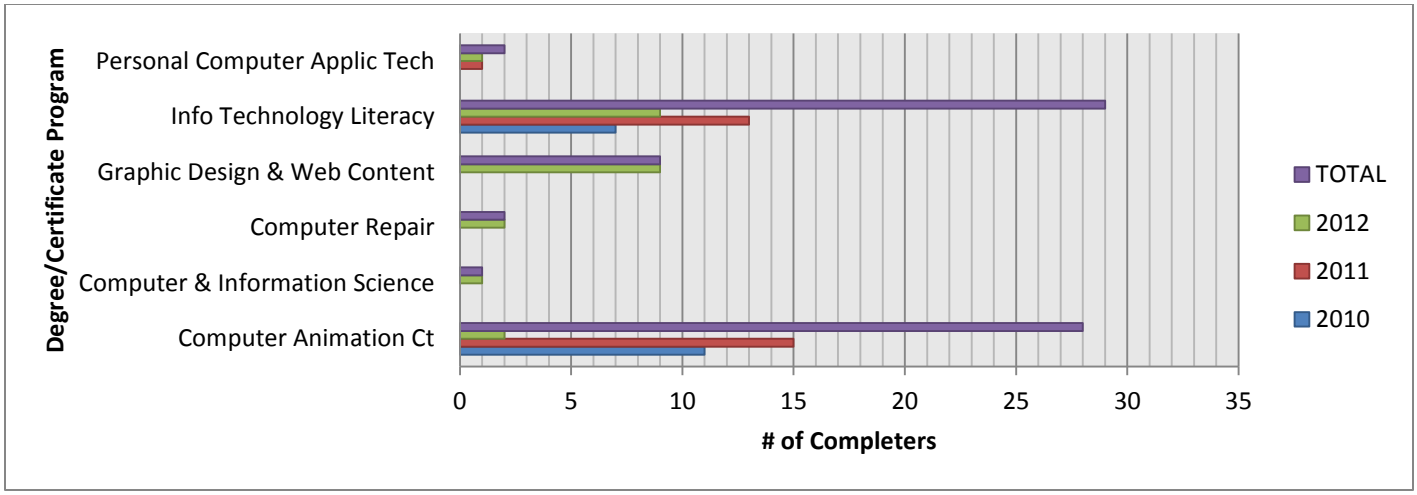
Flex Days give us time for in-service opportunities within the College. Institutional day is another opportunity for professional growth within the college community. CIS faculty members participate in all these activities and will continue to be an active part of the future events.

The full-time faculty member from the CIS Department has served in leadership capacities on a variety of committees and professional groups. Most of the professional development that occurs is through individual participation. Presently, the full-time instructor takes courses to enrich his knowledge of the subject area. Staying ahead of the technological curve is an important task of the instructor. He devotes a large amount of time and resources to studying current and emerging trends as they relate to his department and discipline areas.

9. STUDENT PERFORMANCE AND COMPLETION

2010-2012 CIS AS Degree and Certificate Completion Data:

			2010	2011	2012	TOTAL
CISAN	**Computer Animation Ct**	**Certificate - 6.0-17.9 Units**	11	15	2	28
CIS	**Computer & Information Science**	**Associate of Science**			1	1
CISRP	**Computer Repair**	**Certificate - 6.0-17.9 Units**			2	2
CISGD	**Graphic Design & Web Content**	**Certificate - 6.0-17.9 Units**			9	9
CISLT	**Info Technology Literacy**	**Certificate - 6.0-17.9 Units**	7	13	9	29
CISAP	**Personal Computer Applic Tech**	**Certificate - 6.0-17.9 Units**		1	1	2



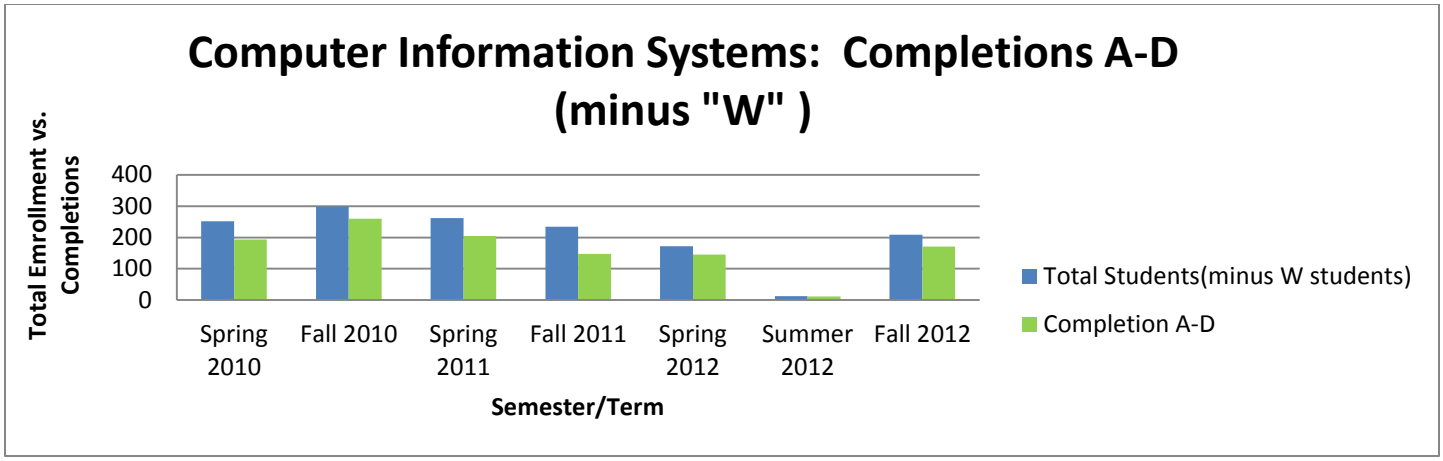
Although the total number of people completing the A.S. Degree in Computer Information Systems has been low in the past, we anticipate steady growth over the next five years due, in large part, to the new certificates being introduced in this year's catalog and due to the fact that the AS degree has been revised. This revision has occurred because many of the courses that were required for the older AS degree were never offered and students were not able to complete the AS degree in two years because of this. The courses that are a part of the current AS degree in CIS are all offered in a two year cycle. It is our belief that as more students become aware of the degree, more students will pursue it and complete it.

In the past three years, 1 (4) A.S. Degrees in Computer Information Science has been awarded. It is important to note that the AS degree in CIS was inactive from Spring 2010 - Fall 2012 while it was being revised and updated. During that time the AS degree was being revised to align with state standards and SB1440 legislation.

During the past three years, all of the certificates offered in the CIS discipline have been revised and updated. Some of the certificates were placed on inactive status during the revision process. The Computer Repair Certificate was put on inactive status beginning Spring 2010 as the competencies and courses did not align with the content that was to be addressed. This lack of cohesion resulted in the full-time faculty member working on revising the certificate program. The new certificate program is currently awaiting Curriculum approval and is scheduled to be offered beginning fall 2013. This new certificate will address the skills and competencies needed to maintain a computing system and help desk support position.

The Personal Computer Applications certificate also demonstrated low completion rates during this program review cycle. During this time, the certificate program was on inactive status from Spring 2010 – Fall 2012. This certificate program was revised to also address the competencies expected for this certificate. We already have an increase in students pursuing this certificate. This will be demonstrated in the next program review "snapshot". It is our belief that the courses offered in each of these certificates directly relate to industry expectations and are vital to entry-level employment in the CIS field. We expect to see significant progress in our completion rates due to the revisions made to the AS degree in CIS and the certificates that are currently offered and those pending curriculum approval.

There is a consistent rate of completion for the CIS classes (A-D) of (80.43%). That is 9.42% higher than the last program review!



	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Summer 2012	Fall 2012
Total Students(minus W students)	252	299	262	234	172	13	209
Completion A-D	193	260	205	147	145	12	171

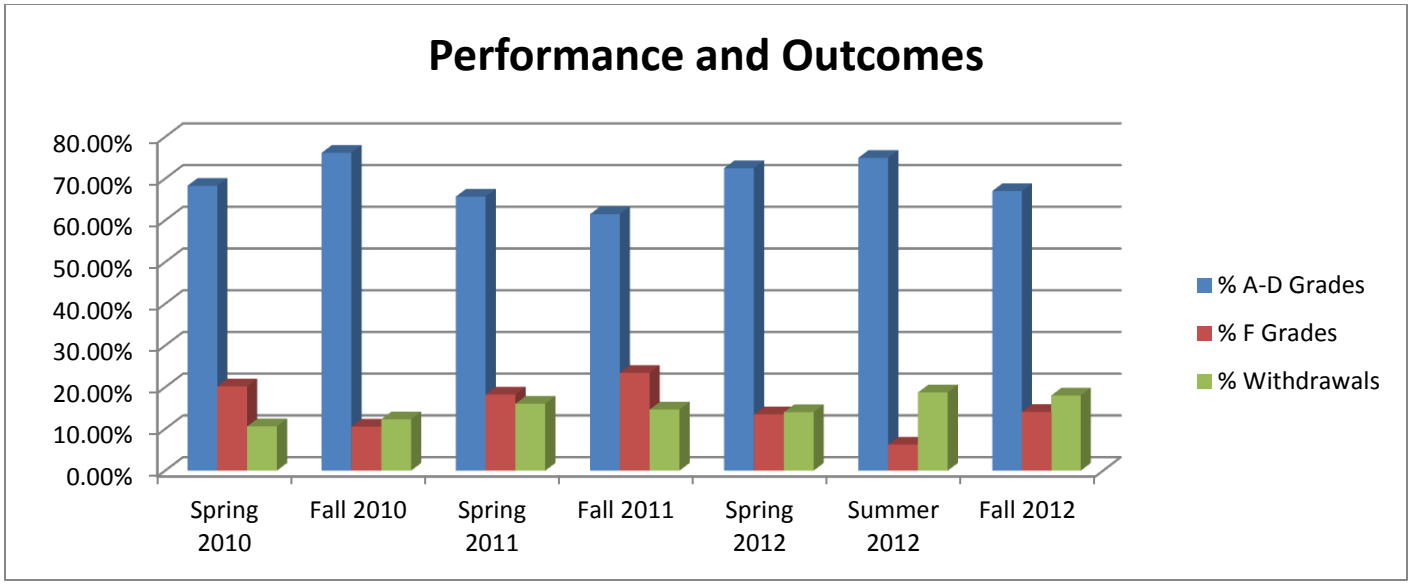
The introductory CIS class (CIS 102) is the practical, hands-on component of the total curricula at the College, preparing students for success in all other areas of study.

We will maintain our level of rigor in regard to the CIS core classes, making them available to day, evening, week-end, and to distance learning students along with ensuring that the IGETC requirement is always articulated for the transfer students.

10. ENROLLMENT AND FINANCIAL TRENDS

Student enrollment growth in CIS classes has been strong over the past three years.

	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Summer 2012	Fall 2012
Total Classes	14	16	17	10	9	1	12
Total Students	282	341	312	239	200	16	255
AVG # Students/Class	20.14	21.31	18.35	23.9	22.22	16	21.25
% A-D Grades	68.30%	76.19%	65.69%	61.47%	72.50%	75%	67.02%
% F Grades	20.20%	10.55%	18.26%	23.43%	13.50%	6.25%	14.10%
% Withdrawals	10.60%	12.31%	16.02%	14.64%	14%	18.75%	18.03%



It is a concern of the CIS department and PVC in particular that a large percentage of students begin a course but withdraw prior to completing it. To address this, the CIS faculty member regularly emails students that are absent from class, utilizes the bridge to promote important dates and events in each course, and provides students assistance outside of regularly scheduled class times. Persistence in courses is a focus of the CIS department and the full-time faculty member is aware of this issue. It is our belief that even though a significant portion of students are withdrawing from courses, the percentage of students withdrawing from other disciplines will be the same or greater. From data collected to date, many of these students are inmate students who do not begin the course after completing a pre-test and completing the syllabus receipt form. In addition, a large portion of these students are receiving financial assistance and do not drop the course because they do not want to lose their financial assistance for having a smaller course load.

2009-2010	Salaries	Benefits	Supplies	Contracts	Capital	TOTAL
CIS	$ 199,507.16	$ 49,606.98	$ 647.76	$ -	$ -	$ 249,761.90
2010-2011	**Salaries**	**Benefits**	**Supplies**	**Contracts**	**Capital**	**TOTAL**
CIS	$ 192,089.00	$ 52,355.51	$ 417.98	$ -	$ -	$ 244,862.49
2011-2012	**Salaries**	**Benefits**	**Supplies**	**Contracts**	**Capital**	**TOTAL**
CIS	$ 101,646.34	$ 32,770.74	$ -	$ -	$ -	$ 134,417.08

1 FTES = $4564.83 (*See Appendix A)

Equations for FTES Calculation: #Students x #hours per week x 18(weeks) / 540=

<u>2010-2011</u>:
613 x 3 x 18 / 540 = 61.3
40 x 5 x 18 / 540 = 6.66
Total CIS FTES 2010-2011= 68

#FTES x $4,564.83=
68 x 4564.83 = $310,408.44

<u>2011-2012</u>:
435 x 3 x 18 / 540 = 43.5
20 x 5 x 18 / 540 = 3.3
Total CIS FTES 2011-2012 = 46.8

#FTES x $4,564.83=
46.8 x 4564.83 = $213,634.04

Total $ FTES – Cost of Program =	**Total $ FTES – Cost of Program =**
$310,408.44 - $244,862.49 =	$213,634.04 - $134,417.08 =
Profit = $65,545.95	**Profit = $79,216.96**

- During the 2010-2011 academic year, 653 students enrolled in CIS courses. The cost of Salaries, Benefits, and Supplies during this time totaled $244,862.49. This equates to a cost of $374.98 per student.

- During the 2011-2012 academic year, 454 students enrolled in CIS courses. The cost of Salaries, Benefits, and Supplies during this time totaled $134,417.08. This equates to a cost of $296 per student.

- It appears that having only one full-time faculty member reduces the overall cost per student. It also is clear that having larger class sizes (enrollment) has also helped reduced the cost per student.

11. FACILITIES AND EQUIPMENT

The classroom computers at the Blythe campus are quickly becoming outdated. Presently they are able to successfully support instruction in all CIS courses. In the future, newer computers should be purchased to address this issue. Many of the programs utilized in the CIS curriculum are heavily dependent upon processor speed, memory, and storage. Unfortunately many of these computers barely satisfy the minimum requirements. I envision, that many of the programs needed for the CIS program will soon require more that the computing resources available in these computers. For this reason, I believe the college will need to address a technology replacement plan, especially for the technology utilized in the CL 130 classroom. Since these computers are used for more than accessing the internet or producing simple word processing documents, a proactive technology replacement plan needs to be put in place.

One of the major needs of the program is a modern and powerful LCD projector. For the past 5 years, the courses taught have utilized an outdated projector that does not brightly or accurately display information on the projection screen in the front of the classroom. To address this, the CIS department has submitted numerous requests for a new projector, as this projector is used daily in all courses taught by the full-time faculty member. Through this process, a new projector was recommended by administration, but lack of budget resources prevailed. Presently, the IT department is replacing the old projector with a newer version that is missing the remote control. This will drastically help with the resolution, but the CIS department is looking forward to having a new projector in the future with a working remote control.

During the fall 2012 semester, the CIS department presented a “Program Amendment Request” for Perkins/VTEA funding. Through this process, the CIS department was able to purchase equipment and specialized tools which will support existing courses and provide support for the new certificate program scheduled for activation in fall 2013. Networking, help desk, and computer maintenance tools and equipment were purchased for this certificate program, and graphic tablets were purchased to support the Computer Animation and Graphic Design and Web Content certificate program.

Presently, the CIS department is utilizing the latest stable Microsoft Operating System (Windows 7), and utilizes the current Microsoft Office Suite and Adobe Creative Suite. This has been a change implemented by the full-time faculty member in this discipline. This was also a recommendation by the program review committee at the last two-year review.

The physical classroom space is quite adequate. The rapidly changing technology will always make equipment and software upgrades a constant budgetary requirement.

12. STRENGTHS AND WEAKNESSES

STRENGTHS:

- Enrollment: Overall enrollment in CIS classes has been excellent with an average number of students per class of 20.45. (Please see chart in *Enrollment Trends* section of this review.) The CIS department has been able to promote degrees and certificates through various enrollment and course modalities. The CIS department has offered numerous courses through correspondence to local and incarcerated students. In addition, the CIS department offers courses to local high school students through concurrent enrollment during their traditional school day. The CIS department has also offered courses online and continues to offer courses during the summer term when courses are offered.

- Programs: We have recently reviewed and rewritten the A.S. Degree and Certificate programs to match current trade advisory committee recommendations. We have rewritten or revised all of our course outlines to ensure we are meeting state and federal standards. Currently we offer an AS degree in CIS, and five certificates. Presently the CIS faculty member is seeking approval of four courses that will focus on computer maintenance and help desk support. These courses will be a part of a new certificate program.

- SLOs/PSLOs: Currently the CIS full-time faculty member has written SLOs for all CIS courses offered at PVC. In addition, the full-time faculty member has evaluated and assessed each of these SLOs and has created an action plan to address each of these items. Program Level SLOs have been designed for each degree and certificate program offered by the CIS Department. Each of these PSLOs have been assessed and evaluated and an action plan has been created to address these items. The CIS department is one of the first departments to complete SLO assessment and PSLO assessment.

- VTEA Participation: During the Fall 2012 semester, the CIS full-time faculty member completed a program amendment to allow participation in the VTEA/CTE Transitions program. Through this involvement, the CIS faculty member has been able to purchase equipment and technical supplies which will offer students the opportunity to utilize cutting-edge technology and tools to enrich the curriculum offered by the CIS department.

- Software: Presently the CIS department has been able to offer courses utilizing the latest MS Office software suite and the latest Adobe Creative Suite. This helps students gain the skills and competencies necessary for employment in the CIS field. In addition, the CIS department utilizes Open Source software for many of the courses offered at PVC.

- Computer Animation: Palo Verde College is one of the first community colleges in the state to offer a computer animation certificate program. Students are able to complete a certificate program in computer animation in a year's time. These students are able to utilize cutting-edge software to produce professional work, the same software utilized by animation studios throughout the world.

WEAKNESSES:

- Equipment: Since the last program review, computers have not been ear-marked for the CL130 classroom to replace outdated technology. The computers are adequate for "surfing the web" or producing word processing documents, but struggle running resource-intensive applications utilized in many of the CIS

courses.

A technology replacement program for all computers throughout the College needs to be implemented in the upcoming year. This would replace one third (1/3) of all of the older equipment at the College every few years.

We have a uniform hardware/software platform throughout the College community, and we must strive to keep it. The high-speed Internet connection is very useful in enhancing instruction, and in communications throughout the College community.

In addition, the CIS full-time faculty member has been requesting an LCD projector for use in the CL130 classroom. The instructor utilizes the projector daily for all CIS courses and needs a high quality projector installed to replace the broken, outdated, and incomplete technology currently available in the CL130 classroom. Many of the monitors located in CL130 are also broken and others are quickly nearing the end of their useful life-cycle.

- Promotion and Advertising: This is the area of greatest need for improvement to increase student enrollment and participation. Marketing and advertising the CIS program to non-traditional students outside of the PVC campus is an area of need. It appears that PVC needs an aggressive marketing campaign targeting students interested in community college courses. Throughout the state, a majority of colleges are full and have reached "CAP". They have to turn students away. During this same time, PVC is struggling to obtain enrollment.

- Data Collection: It is very difficult to obtain accurate and timely data to address program improvement and to support the goals and requirements of the VTEA/CTE Transitions grant. It appears that we do not have a local expert on hand that can create the queries and reports necessary for program improvement through our current MIS system.

- Qualified Adjuncts & Additional Full-Time CIS Instructor: Unfortunately, there are not many people living in the local region who are qualified to teach CIS courses. Many of the adjuncts that are currently employed by PVC do not fulfill the requirements of the CIS department. This includes uploading content and syllabi to the "Bridge", maintaining regular and effective contact with students, providing feedback on student work, returning graded work back to the student in a timely fashion, evaluating SLOs, designing powerful and useful syllabi, turning in grades in a timely fashion to the PVC registrar, and maintaining rigor consistent with the course outline for courses in which they teach. An evaluation process for adjuncts was completed during the Fall 2012 semester but nothing ever took place from this process.

  It is the CIS department's hope that PVC will continue seeking qualified adjunct instructors from outside of the local area. In addition, the CIS department needs qualified adjuncts to teach face-to-face courses in the evenings.

  Due to data collected in this program review it is quite evident that the CIS department would benefit by employing an additional highly qualified CIS instructor to teach new content to the students of Palo Verde College.

- High School Enrollment: There needs to be a continued focus on advertising and enrolling concurrently enrolled high school students into the CIS programs. These local high school students do not have CIS courses offered at their schools and continually seek enrollment in PVC courses during their traditional

school day. Unfortunately, many students are not aware that these courses are available to them and do not know which courses they are enrolling for. When a local high school student registers for their next year's courses, they only see "Computers" as an option. We presently offer "Computer Animation", "Graphic Design and Web Design", and will soon offer "Computer Maintenance and Help Desk Support".

13. PLANS TO REMEDY WEAKNESSES

Counseling and Marketing: We will continue a dialog with both the College and the public school counselors regarding our programs. We will continue to need a vocational counselor for not only the CIS department, but for all of the vocational departments at the College. We need to expand our marketing and promotion efforts to include brochures and flyers placed at the public school campuses, at the prisons, at our own facility, and around town. We would like to participate in the local fair by setting up a booth with demonstrations of computer animation and computer repair. This would be a great place to make contact with our future students.

We also plan to develop CDs to show at the prisons, and other presentations in order to recruit students to the CIS program.

Grants and Funding: CIS staff will look for new opportunities to provide greater financial resources to the program.

The CIS department will continue to pursue data collection as this is vital to the CIS department's involvement in the VTEA/CTE Transitions grant.

The full-time CIS faculty member has already met with the past three VPs of Instruction to address the CIS technology needs. Presently, the Interim VP has mentioned utilizing technology from the Needles campus which will soon be replaced by a 1.3 million dollar equipment purchase. It is our hope, that the technology which is replaced by this purchase could be implemented into the CL130 classroom.

Presently, PVC is seeking qualified applicants for CIS adjunct & full-time positions. It is our hope that this process will help fulfill the needs of the department and students enrolled in CIS programs.

14. PLANS TO ADVANCE THE PROGRAM

New Certificates: Presently, the CIS department has rewritten and revised all courses and programs offered in the CIS Department. In addition, the CIS Department is awaiting curriculum approval for four new courses which are part of a new certificate program in Computer Maintenance and Help Desk Support. It is our intention to begin offering these courses fall 2013.

Continued Pursuit of Local High School Student Enrollment: The CIS department will continue to design courses which correspond to the bussing schedule of the local high schools. By designing these courses around their bussing schedule, high school students are able to enroll in CIS courses and programs during their traditional school day. It is important to note, that concurrently enrolled high school students are able to take college courses at no cost which is a big selling feature.

Course Additions and Revisions: All courses will continue to be revised and updated to stay current with current and emerging trends as they relate to CIS. In addition, SLOs and PSLOs will continue to be assessed, evaluated, and implemented in all CIS courses.

Testing Programs: The CIS department has worked with the PVC IT department to secure PVC as a local Prometric testing center. Now students enrolled in CIS courses and local community members can take various industry recognized certification tests. These tests include A+, Net+, Security +, MS Office Specialist, etc.

Continued Annual Program Advisory Committee Meetings: The CIS department will continue to hold annual advisory meetings, seeking insight, input, and information from local and regional businesses and employers. It is the goal of the CIS department to support the needs of our local industries and teach skills that will help students gain employment.

Continue Seeking Open Source and Open Content Resources: The full-time CIS faculty member will continue seeking open source alternatives to costly "mainstream" software packages. In addition, the CIS faculty member will continue seeking alternatives to costly textbooks in the CIS discipline. The current full-time CIS instructor has been looking into Open Content Resources to support instruction in the CIS programs.

Continued Involvement in the VTEA/CTE Transitions Grant: The CIS department will continue its involvement in the VTEA grant. Through participation in this grant, the faculty member is able to pursue non-traditional enrollment (females in male dominated fields) and provide all students will cutting edge equipment and resources which will help prepare them for employment in the CIS field.

Continued Analysis & Implementation of SLO and PSLO Data: The CIS full-time faculty member will continue analyzing SLO and PSLO data for each course, certificate, and degree it offers. In addition, it will implement the items addressed in the "Action Plan" portion of the SLO and PSLO analysis.

Employment of Another Full-Time CIS instructor: In order for this program to continue to grow and flourish, another highly qualified instructor is needed to teach new content to CIS students at Palo Verde College.

APPENDIX A

PRIMER ON COMPUTING FULL-TIME EQUIVALENT STUDENT (FTES)

California Community Colleges state apportionment is primarily driven by the Full-Time Equivalent Student (FTES) workload measure. FTES is not "headcount enrollment," but is the equivalent of 525 hours of student instruction per each FTES. For the 2007-08 Fiscal Year, the funding rate for each CREDIT FTES is $4,564.83 (this is a uniform CREDIT FTES rate for all community college districts and is adjusted annually for COLA) [the NONCREDIT FTES rate for the same period is $2,744.96, while the rate for Career Development and College Preparation (CDCP) NONCREDIT FTES is $3,232.07]. CDCP Noncredit FTES is generated by Noncredit courses that are eligible to received an enhanced noncredit rate because they are part of a program or sequence of courses approved by the Chancellor's Office pursuant to Title 5 Section 55151. As provided by Title 5 Section 55151, these CDCP noncredit courses must result in a noncredit certificate of completion leading to improved employment or a noncredit certificate of competency in a recognized career field articulated with degree applicable coursework.

Basically, an FTES [formerly called "average daily attendance," (ADA)] was theoretically derived by considering that one student could be enrolled in courses for 3 hours a day, 5 days a week, for an academic year of 35 weeks---so basically, a total of 525 hours per one FTES (3 x 5 x 35 = 525).

The FTES are computed under four different attendance accounting formulas; positive attendance (actual attendance each class meeting), weekly census, daily census, and the alternative attendance accounting procedure for independent study/work experience education and distance education courses not computed using the other basic procedures (see Calif. Code of Regulations, Title 5 section 58003.1). Each method of attendance accounting ultimately calculates to a number of FTES (workload in contact hours) based on the number of students enrolled, the length of the course, and divided by 525. Per Title 5 Section 58003.1(a), the determination of the which attendance accounting procedure to apply is based on the type of course, the way the course is scheduled, and the length of the course. In the case of Noncredit courses, Title 5 Sections 58006 and 58007 provide that contact hours and FTES shall be computed based on the count of students present at each course meeting ("positive attendance" procedure – actual student contact hours) except those noncredit distance education courses computed on the alternative attendance accounting procedure defined in section 58003.1(f)(2). Other than this fairly rare exception, noncredit courses must be on the positive attendance procedure (actual student contact hours/525 = FTES).

The major number of FTES reported by the colleges are generated in weekly census procedure courses that are scheduled in the primary terms (quarter or semester system colleges). Courses that are scheduled as "weekly census" must be scheduled the same number of hours each week of the primary term. The terms usually equate to 35 weeks, but in some instances there are more weeks, or fewer weeks, than 35. However, in the calculation of FTES for any primary