Santa Rosa Junior College
Program Resource Planning Process

Computer Studies 2014

1.1a Mission

Our mission is to provide a strong foundation of knowledge and problem solving skills in computer studies to a diverse community, including Career Technical Education certificates, degree programs, and university transfer. (CS Department Meeting Feb. 2013)

1.1b Mission Alignment

The CS department mission aligns with the mission of the district in several ways:

- Providing lower-division academic preparation, including four transfer majors, Interactive Multimedia, Computer Science, Graphic Design, and Game Programming, as well as our Computer Literacy class, which many students take to meet general education requirements for a four-year degree.
- Delivering Career and Technical Education through certificate programs in Adobe Applications, Digital Media, Cisco Networking, IT Support, Web Programming, Web Design, and Microsoft Office Applications.
- Aligning curriculum to support economic development and job growth.
- Continuously improving our curriculum to reflect the growth and changes in computer- and technology-related fields. During the next decade millions of positions will become available that require varying types and levels of technological skills. With technology being integral to many professions, Computer Studies offers preparation and retraining in broad technology areas.
- Utilizing Student Learning Outcomes and Assessments to improve student retention and success.

1.1c Description

The CS department has a wide variety of clientele; there is a range in age, reason for taking a class, previous experience and basic skills level.

Program areas and the clientele they serve:

Computer Science/Programming:

Courses leading to an A.S. in Computer Science and transfer, and related certificates

- Transfer students wishing to pursue a Computer Science degree
- Students pursuing programming in another area, such as web programming or game creation
- Industry professionals upgrading skills.

Information Technology

Courses and certificates in networking and IT support; courses that support other areas of the department, such as database concepts and Unix; and a UC transferrable, general education course in computer literacy.

- Students seeking entry level positions in the IT field.
- Currently employed industry professionals seeking to gain or improve existing skills

Office Applications:

Courses leading to the Microsoft Office Skills certificate. These courses are also heavily used as requirements in programs across the district.

- Students pursuing certificates or degrees in other areas who need these skills as a foundation
- Students using these tools in their profession who need to update or improve their skills
- Adults planning to re-enter the workforce who need basic office skills

Adobe Program:

Courses that lead students to Adobe Application certificates. Some courses map to Adobe industry certificates. These courses also support programs in the Graphic Design and Digital Media areas.

- Students pursuing certificates or degrees in other areas who need these skills as a foundation
- Students wishing to gain skills in order to perform freelance work
- Students pursuing a certificate or major in Graphic Design who need these skills as a foundation
- Students using these tools in their profession who need to update or improve their skills

Digital Media/Multimedia Program:

Includes programs in game development, digital audio, 3D animation, and digital filmmaking. This is a collaborative effort with the Music, Communiation Studies, and Applied Technology Departments. CS has classes in each of these programs, and is the primary department for the game development and interactive media programs.

- Students training to enter the digital media field
- Students employed in the field desiring to update their skills with the most recent technology

Web Program:

Includes programs in web design, web programming, and interactive multimedia. Includes a capstone class in which students work with non-profit organizations throughout the county. All programs include core courses in web development and social media.

- Students training to enter the digital media field
- Students employed in the field desiring to update their skills with the most recent technology

1.1d Hours of Office Operation and Service by Location

CS has a presence both at the Santa Rosa and Petaluma campuses. Classes are offered in both Petaluma and Santa Rosa from 8:00 AM until 10:00 PM, Monday through Thursday, and during the day on Friday and Saturday.

The CS office on the Santa Rosa campus is generally open from 10:30am – 2:30pm Monday, Tuesday, and Thursday. These are the only hours we have staff available to keep the office open. When instructors have office hours outside of these hours, or when no student employee is available, students must go to the back door of the office and ring a door bell to gain entrance.

The Santa Rosa lab hours are controlled by Instructional Computing.
The Petaluma lab hours are controlled by Petaluma Administration.

1.2 Program/Unit Context and Environmental Scan

After declining rapidly for many years, the number of Computer Science majors at 4 year institutions has increased dramatically in the last few years, and enrollment in our Computer Science courses has increased commensurately.

Current technologies are, as always, changing rapidly, and Computer Studies strives to keep pace with these changes. For example, the department completely updated the curriculum in the web area. Formerly there were 11 certificates in the area; after revamping there are 4.

The labor market continues to show rapid growth in most computer related occupations, and especially in areas such as game development, multimedia, mobile application development, and video production. We are struggling to stay up-to-date with current technologies because we have no regular faculty who are experts in these fields and it is difficult to find adjuncts who can balance a demanding full-time position in the field with teaching schedules.

2.1a Budget Needs

2.1 Fiscal Year Expenditures

Santa Rosa Campus

Expenditure Category	Unrestricted Funds	Change from 2011-12	Restricted Funds	Change from 2011-12	Total	Change from 2011-12
Faculty payroll	$532,002.40	-24.38%	$0.00	0.00%	$532,002.40	-24.38%
Adjunct payroll	$179,486.09	-8.71%	$13,077.02	0.00%	$192,563.11	-2.06%
Classified payroll	$23,463.13	0.00%	$0.00	0.00%	$23,463.13	0.00%
STNC payroll	$0.00	-100.00%	$0.00	0.00%	$0.00	-100.00%
Student payroll	$8,095.39	-32.08%	$0.00	0.00%	$8,095.39	-32.08%
Management payroll (and Dept Chairs)	$50,727.60	-16.67%	$0.00	0.00%	$50,727.60	-16.67%
Benefits (3000's)	$239,511.78	-12.83%	$1,522.69	0.00%	$241,034.47	-12.28%
Supplies (4000's)	$1,587.29	-55.42%	$0.00	0.00%	$1,587.29	-55.42%

Services (5000's)	$118.42	-46.82%	$184.12	-96.63%	$302.54	-94.68%
Equipment (6000's)	$100.00	0.00%	$19,925.64	0.00%	$20,025.64	0.00%
Total Expenditures	**$1,035,092.10**	**-17.56%**	**$34,709.47**	**535.40%**	**$1,069,801.57**	**-15.16%**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Expenditure Category	Unrestricted Funds	Change from 2011-12	Restricted Funds	Change from 2011-12	Total	Change from 2011-12
Faculty payroll	$155,495.76	-3.04%	$7,387.74	-64.00%	$162,883.50	-9.96%
Adjunct payroll	$54,583.27	8.54%	$0.00	0.00%	$54,583.27	8.54%
Classified payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
STNC payroll	$0.00	0.00%	$1,240.00	0.00%	$1,240.00	0.00%
Student payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Management payroll (and Dept Chairs)	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Benefits (3000's)	$51,613.69	-12.04%	$2,228.06	-61.76%	$53,841.75	-16.53%
Supplies (4000's)	$46.28	-64.38%	$0.00	0.00%	$46.28	-64.38%
Services (5000's)	$0.00	0.00%	$6,237.95	-10.40%	$6,237.95	-10.40%
Equipment (6000's)	$0.00	0.00%	$0.00	-100.00%	$0.00	-100.00%
Total Expenditures	**$261,739.00**	**-2.87%**	**$17,093.75**	**-51.57%**	**$278,832.75**	**-8.51%**

Other Locations (Includes the PSTC, Windsor, and other locations)

Expenditure Category	Unrestricted Funds	Change from 2011-12	Restricted Funds	Change from 2011-12	Total	Change from 2011-12
Faculty payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Adjunct payroll	$233,231.21	0.69%	$0.00	0.00%	$233,231.21	0.69%
Classified payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
STNC payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Student payroll	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Management payroll (and Dept Chairs)	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Benefits (3000's)	$22,218.17	3.33%	$0.00	0.00%	$22,218.17	3.33%
Supplies (4000's)	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Services (5000's)	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Equipment (6000's)	$0.00	0.00%	$0.00	0.00%	$0.00	0.00%
Total Expenditures	**$255,449.38**	**0.91%**	**$0.00**	**0.00%**	**$255,449.38**	**0.91%**

Expenditure Totals

Expenditure Category	Amount	Change from 2011-12	District Total	% of District Total
Total Expenditures	$1,604,083.70	-11.81%	$109,755,801.72	1.46%
Total Faculty Payroll	$1,175,263.49	-13.77%	$37,642,229.36	3.12%
Total Classified Payroll	$23,463.13	0.00%	$17,914,387.66	0.13%
Total Management Payroll	$50,727.60	-16.67%	$9,033,594.60	0.56%
Total Salary/Benefits Costs	$1,575,884.00	-12.48%	$83,300,149.56	1.89%
Total Non-Personnel Costs	$28,199.70	53.90%	$13,951,537.78	0.20%

4000's - Supplies & Graphics:
The supply budget is minimal. Our budget is below the district-wide average for a department of our size.

Purchases:

- Consumables, pens, pencils, paper, other office supplies, advertising supplies.
- Reimbursing adjunct faculty for taking Adobe certification tests and purchasing study materials for those certification tests. The recertification tests are $60, there are about 8 adjunct faculty who recertify, occasionally in more than one test, the total is about $800 per year.
- Minor classroom equipment such as a multidirectional microphone for instructors teaching courses that are broadcast live to online students.

- Money transferred to Student Worker Account – by being frugal with supplies money is available for student workers. This became necessary when the CS Administrative Assistant position was cut from full to half time. It is only through the expert training and use of student assistants that the tasks of our department are completed.
- Budget needs: increase in the supplies budget to provide more minor equipment such as the microphone to support instruction to online students, videos for the Computer Literacy course, and replacement batteries for instructor laptops. Batteries, at a cost of over $100 per item, don't come out of the Academic Computing budget, and the laptop life is longer than the battery life.

2.1b Budget Requests

Rank	RS	ACTV	Object	Location	SP	M	Amount	Brief Rationale
0001	76	0701	4390	ALL	00	00	$2,000.00	Our supplies budget is very small, and this would allow us to purchase larger items annually. CS is a large department with a very small budget for graphics and supplies.

2.2a Current Classifed Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant	20	12	-Provide front-line customer service to students and instructors -Attend department meetings, take minutes. -Plan and coordinate annual CS Certificate Ceremony -Interview, hire, train and supervise student staff -Responsible for advisory committee needs including maintenance of membership database, email notifications to members, meeting room reservations, food service contracts, parking accommodations, generate member name tags, attend meetings and take meeting minutes. -Download room use reports from SIS and post weekly on classroom doors -Generate and track purchase requisitions using Escape software -Point of contact for faculty absences: Notification of lab staff, post signs, process NOAs -Collect and file course syllabi, proof syllabi for required content, send regular reminders to instructors. -Monitor Computer Studies and Graphic Design budget -Generate and track requisitions using Escape software -Complete Payment Request forms and submit for processing -Track and submit blanket purchase order receipts -Access student data in SIS -Maintain department course files -Prepare new course proposals and course revisions in CATS and track courses through curriculum process -Maintain various department files -Order and keep inventory of office supplies -Assist in development of scheduling proofs

2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
department chair	32	10	Fulfills the duties as described in the AFA contract.

			This is not an exhaustive list, but gives a good sense of what the job currently entails. Oversee the development of the schedule, hiring, staffing classes, evaluations, being aware of new policies and procedures, answering student questions, counseling students, interface with multiple deans and the department, oversee the budget, supervise the classified staff, prepare annual program review, oversee, develop and support curriculum through the curriculum process, participate in curriculum tech review committee, attend DCC/IM, DCC meetings, track absences/NOA forms, solicit and track CTEA funding, set up adjunct faculty meetings, communicate with the department including communicating and explaining policies, procedures, rules, regulations and requests. Organize PDA group activities. Spearhead events such as the department holiday party and retirement parties. Acknowledge classified staff during classified staff recognition week. Represent department at Public Relations events such as Day Under the Oaks, Career Day, and various meetings. Orient and evaluate new adjunct faculty. Oversee, organize and MC the certificate awards ceremony. With facilities: keep in communication with Walter Chesbro about lab usage, attend meetings about rooms, labs, other spaces that the department uses, and other departments use. Communicate with faculty from other departments about locking doors, turning off video equipment and other matters that arise. Strategic and tactical planning, writing PRPP. Time consuming and challenging - mediating between students and instructors.
Summer department chair	5	2	work with the dean especially enrollment management in the first weeks of the summer, answer questions, monitor absences, fill out and/or sign appropriate forms, track pending curriculum. Address any student/faculty problem Prepare for the fall semester.

2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Regular and FWS Student Employee	4	12	Administrative Assistant duties where student assistants provide support: Greet people entering the offices Answer questions Phones: answer questions, direct and/or guide students and potential students through SRJC website, refer to appropriate instructor, take messages, transfer caller to appropriate department/person. Mail - including repackaging and mailing contents of office mailboxes to faculty who teach off campus or on-line Contact students for class cancellations, post signs on classrooms Stock paper in machines, maintain back stock, track inventory Syllabi collection, review & filing Instructor office hours collection, posting, updating Create, update (multiple times) and post classroom use schedules Perform basic photocopier maintenance Prepare and post graphical finals schedule including non-CS finals using 3rd floor/Resolve any scheduling conflicts Prepare certificate brochures with inserts detailing each CS certificate -- print/cut/sort/insert and deliver across campus as needed

2.2d Adequacy and Effectiveness of Staffing

Our classified staff support is barely adequate, although an increase in hours would allow us to expand our office hours and complete tasks more effectively.

We currently do not have a student worker. When we had one, we used funds from other budgets to fund her, leaving us underfunded in those areas. We need to have additional funds allocated specifically for student workers.

2.2e Classified, STNC, Management Staffing Requests

Rank	RS	ACTV	Location	SP	M	Current Title	Proposed Title	Hrly	Type	Salary Increase	Benefits Increase	Total Increase
0001	00	0000	ALL	00	00	Student Assistant -increase hours by 572	same	$8.40	Student	$4,804.80	$0.00	$4,804.80

2.3a Current Contract Faculty Positions

Position	Description
Computer Science Lead (100%)	Teaches transfer Computer Science classes. Responsible for: Computer Science program, 4 year institution articulation, the Computer Science major, curriculum, liaison with local CSU.
Networking Lead (100%)	Teaches Cisco, Forensics, Security and other Networking classes. Anchor person for relationship with Cisco. Developing all new and revised networking curriculum. Training new Cisco 1, 2, 3, 4 adjunct instructors.
Interactive Multimedia Lead (100%)	Teaches digital media and web classes . Coordinator for the Interactive Multimedia major and certificate and Multimedia courses.
Web Lead (50%)	Teaches all levels of web classes. Coordinates the web certificates, maintains strong connection with local web industry.
Photoshop Lead (45%)	Certified in Photoshop. Teaches all levels of Photoshop and social media. Coordinates the Photoshop program including meeting and working with the several adjunct faculty who teach Photoshop classes and working with faculty to develop and update the Photoshop curriculum and CD's that are sold in the bookstore to students.
IT Support Lead/IT/Web (90%)	Coordinates the IT Support certificate and intro IT courses. Petamula faculty. Teaches IT and computer literacy classes. Faculty liaison for the CS Advisory Committee.
Photoshop (60%)	Teaches intro Photoshop courses. Chairs the scheduling committee.
Literacy/Intro Programming (100%)	Teaches Intro programming in C++ and Computer Literacy
Digital Media Coordinator (100%)	Coordinates district-wide digitral media programs. Teaches Photoshop and Video Production

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
ALL	9.0000	43.4100	11.7300	56.5900	Average over Fall 2012/Spring 2013, including Graphic Design. (GD is not included in 2.3a.)

2.3c Faculty Within Retirement Range

For the 2014-2015 acadmic year we have 10 full-time faculty in our department (including Graphic Design). This is down from 13 full-time faculty in the 2011 - 2012 academic year, and down from a high of 17 eight years ago. We have had 8 retirements in the last 8 years and one new hire. There is still a critical need to replace more of our 8 retirements. Due to the high level of specialization in our field and the rapidly changing nature of the field, this reduction has impacted our ability to continue offering high quality cutting edge programs.

Of our 10 full-time faculty, 6 are 56 or older. 4 have informally announced retirements within the next 1 - 3 years, and we expect 2 more to follow quickly.

CS will be facing major challenges and negative impacts to our programs if not enough faculty members are replaced each year in the next 3 years. Without more full-time faculty we will have difficulty maintaining the variety and quality of curriculum areas that we currently support, let alone keeping up with the rapid advances in technology.

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

Request #1: Graphic Design/InDesign/Illustrator

Our Graphic Design program coordinator is on 50% pre-retirement reduced load and will retire soon, our InDesign program coordinator has retired, and our Illustrator program coordinator has retired. These programs have been struggling due to lack of coordination.

Request #2: Web/Mobile/Gaming Programmer.

Our department is falling behind the cutting edge in these rapidly evolving technologies because we have no regular faculty who are experts in these fields. Also, it is extremely difficult to find adjuct willing to teach these courses, since they are professionals in a high demand, highly compensated field.

Request #3: Office Applications

This is one of our biggest areas in terms of FTES and number of sections. We offer about 30 sections each semester from this area, and currently they are taught exclusively by adjunct instructors. There is a need for a coordinator for the program and for coordination to keep courses up-do-date with frequent software updates.

General Information:

It is extremely difficult to recruit faculty in Computer Studies. Within Computer Studies there are diverse subject matter areas. Each of these requires specific advanced knowledge, with industry experience. In many cases, certification is required. In addition, in most cases potential instructors can expect to be paid much more for their time in an industry position than they will be in a teaching position. There are specific examples of potential instructors who have elected not to teach for this reason.

The diverse and rapidly changing nature of our department means that we need contract faculty in each area in order for that area to thrive.

The adjunct pool is opened each year but we still have difficulty staffing some classes, such as game programming, InDesign, and advanced video production. We have interviewed about 15 candidates and added about 8 to the pool. Our current pool contains fewer than 10 people.

Without new contract faculty to replace our recent and current contract faculty who are retiring at a rapid rate, CS will face major challenges and negative impacts on our programs.

There was a time when instructors in the department could teach any of our courses. Instructors now must have highly specialized areas of expertise. Even within an area like the Adobe program, an instructor who can teach the Photoshop classes would not be likely to have the certification, skills and industry experience to effectively teach the InDesign or Dreamweaver classes.

2.3e Faculty Staffing Requests

Rank	RS	ACTV	Location	SP	M	Discipline	SLO Assessment Rationale
0001	76	0701	Santa Rosa	02	01	Graphic Design/InDesign/Illustrator	
0002	76	0701	Santa Rosa	02	01	Web/Mobile/Gaming Programmer	
0003	76	0701	Santa Rosa	02	01	Office Applications	

2.4b Rational for Instructional and Non-Instructional Equipment, Technology, and Software

Many of our equipment needs are taken care of through the IT department, which is responsible for the computer labs we use. However, items like extra cords for laptops, mice for laptops, and replacement batteries for laptops are not the responsibility of Academic Computing. Since so many of our faculty use laptops for instruction, these items are required.

More than half the courses taught in the Department are online. Some of those courses employ CCCConfer and are recorded or broadcast real time to students via the web. Such teaching innovations require some specialized instructional equipment, such as multi/omnidirectional microphones, wireless headsets, webcams, etc.

Our Department is moving rapidly toward more instruction in design for mobile devices, particularly in our InDesign class, Graphic Design classes, and our new mobile media courses. For that reason, the Department needs Android tablets and iPads to test the platforms being taught. A locking cabinet/charging rack are necessary to safeguard equipment and ensure it is operational throughout the class.

In order to grow our Networking program, upgrades and additional equipment are necessary. Much of the current equipment is over ten years old, in an industry with a five-year replacement cycle. It is not anticipated that the TAA grant will cover these expenses.

Budget Requests:

To better serve the students in the Networking Program on the Petaluma campus, we will make the lab equipment more accessible and secure by mounting the routers, switches and etc. in 4-5 portable rack units. The rack units will have locking doors, patch panels, power strips and other hardware to make them self-contained enabling the students to practice their lab exercises and experiment with various configurations whenever the classroom is available and not be limited to scheduled class time only. Containing the equipment thusly will also prevent damage to delicate parts and increase its longevity. Cost for this will be approximately $4,500.

2.4c Instructional Equipment Requests

Rank	RS	ACTV	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	76	0701	Santa Rosa	04	01	tablets for hands-on instruction	30	$850.00	$25,500.00	Dave Harden	will vary	Dave Harden
0002	76	0701	Santa Rosa	04	01	locking tablet storage and charging rack	1	$550.00	$550.00	Dave Harden	will vary	Dave Harden
0003	76	0701	Petaluma	04	01	rack unit for networking equipment	1	$4,500.00	$4,500.00	Michael McKeever	will vary	Michael McKeever
0003	76	0701	Santa Rosa	04	01	Apple Developer Account	1	$99.00	$99.00	Dave Harden	will vary	Dave Harden
0004	76	0701	Petaluma	04	01	Cisco 2911 Router plus security package	1	$11,000.00	$11,000.00	Michael McKeever	will vary	Michael McKeever
0004	76	0701	Petaluma	04	01	Cisco high speed WAN interface card	6	$380.00	$2,280.00	Michael McKeever	will vary	Michael McKeever
0005	76	0701	Santa Rosa	04	01	Power cords	3	$100.00	$300.00	Dave Harden	offices	Dave Harden
0005	76	0701	Santa Rosa	04	01	Replacement batteries for instructors' laptops	2	$150.00	$300.00	Dave Harden	will vary	David Harden
0006	76	0701	Santa Rosa	04	01	Laptop Mice	3	$25.00	$75.00	Dave Harden	offices	Dave Harden
0007	76	0701	Santa Rosa	04	01	microphones and webcams for online lectures	2	$150.00	$300.00	Dave Harden	will vary	David Harden

2.4d Non-Instructional Equipment and Technology Requests

Rank	RS	ACTV	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact

2.4e Safety, Utility, and ADA Impacts

2.5a Minor Facilities Requests

Rank	RS	ACTV	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	76	0000	ALL	00	00	Urgent	Maggini Hall	2923	$7,000.00	Expand 2923 to accomodate increased lab demand due to removing DHR

2.5b Analysis of Existing Facilities

The heating and cooling system on the third floor of Maggini is not adequate. The cold in the winter and heat in the summer are not conducive to student learning and make it very difficult for instructors to teach and students to focus.

In the near future we are going to face a shortage of classrooms equipped with student computer stations. Expanding room 2923 would allow the Department to increase capacity to hold a full class of students.

3.1 Diversify Funding - Grants/Contracts

We will be applying for:

Digital Media gear CTEA grant
Jobs Board Website CTEA grant

3.2 Cultural Competency

The diversity statement of each applicant applying to work in our department is read and considered as part of the paper-screening and interview process.

Each prospective instructor is asked a question that tests their sensitivity to and awareness of diversity issues during their interview.

Our department works well with students with disabilities. The department's wide variety of on-line courses makes college more accessible to those with limited mobility.

Several of our student assistants have been single-mothers returning to school, and we feel that they bring a degree of empathy when interacting with our students, many of whom are returning after several years hiatus from school.

3.3 Professional Development

We would appreciate additional funding for conference attendance, as our rapidly-changing field requires constant skill updates.

We have conducted periodic flex activities for faculty.

Our classified staff is encouraged to attend trainings and participate in professional development.

3.4 Safety and Emergency Preparedness

We have 2 department safety leaders, one located on the 2nd floor of Maggini and one on the 3rd floor.

3.5 Sustainable Practices

Our department is nearly paperless. Almost all class materials, in face-to-face classes and online classes alike, are posted online for students. In addition, more than 50% of our sections are online, reducing the various environmental impacts of students driving to campus and parking.

4.1a Course Student Learning Outcomes Assessment

SLO Assessments systematic, ongoing cycle of evaluation:

We are in the process of completing SLO assessments of the remaining courses that have not been previously assessed. In addition, we created a schedule for re-assessing all courses over the next 6 years.

4.1b Program Student Learning Outcomes Assessment

program	initial assessment	next assessment
Computer Science major	sp 2013	fall 2015
Adobe InDesign	sp 2013	fall 2015
Adobe Photoshop	fall 2013	fall 2015
Adobe Applications	fall 2014	fall 2016
Adobe Illustrator	fall 2014	fall 2016
Cisco Networking	fall 2014	fall 2017
IT Support	fall 2014	fall 2017
Office Applications Specialist	fall 2014	fall 2017
Graphic Design major/cert	fall 2014	fall 2018
Graphic Design Production Fundamentals	fall 2014	fall 2018
Interactive Media Developer major/cert	fall 2014	fall 2019
Web Fundamentals	fall 2014	fall 2019
Web Designer	fall 2014	fall 2019
Web Programmer	fall 2014	fall 2020
Game Programming major/cert	fall 2014	fall 2020

4.1c Student Learning Outcomes Reporting

Type	Name	SLO Identified	SLOs on Web	Assessment Methodology Identified	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	cs 10 Intro to Programming	Spring 2008	Spring 2008	Spring 2009	Spring 2009	Spring 2009	Fall 2009
Course	cs 10 Intro to Programming	Spring 2008	Spring 2008	Spring 2009	Spring 2009	Spring 2009	Fall 2009
Course	cs 101a - PCs for new users	Spring 2008	Spring 2008	N/A	Fall 2014	Fall 2014	Fall 2014
Course	cs 101B - PC Concepts and Prac	Fall 2007	Spring 2008	Fall 2007	Fall 2007	Fall 2007	Spring 2008
Course	cs 105a Intro to Mac	Spring 2008	Spring 2008	N/A	N/A	N/A	N/A
Course	cs 105b More Mac Intro	Spring 2010	Spring 2010	N/A	N/A	N/A	N/A
Course	cs 11- Data Structures	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 115.11a Robot Design & Prog	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 12 Assembly Language	Fall 2009	Spring 2010	N/A	N/A	N/A	N/A
Course	cs 150.21 Webpage Tips & Trick	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 160.11a Word, Level 1	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	CS 162.7 Outlook	Spring 2008	Spring 2008	Spring 2009	Spring 2009	Spring 2009	Fall 2009
Course	cs 165.31 Integration	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 167.11 Outlook	Spring 2008	Fall 2010	Spring 2010	Spring 2010	Spring 2010	Spring 2010
Course	cs 17.11 Java Programming	Spring 2008	Fall 2009	N/A	Fall 2013	Fall 2013	Fall 2013
Course	cs 170.11a Photoshop Elements	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 175.11 - Adobe Acrobat	Spring 2009	Spring 2009	N/A	N/A	N/A	N/A
Course	cs 175.21 Font Management	Fall 2009	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 182.51 Cable/DSL Security	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 182.52 Sending Files by Web	Spring 2009	Fall 2009	N/A	N/A	N/A	N/A
Course	cs 182.53 Comp Forensics, Intr	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 19.11a Intro Visual Basic	Spring 2008	Spring 2008	N/A	N/A	N/A	N/A
Course	cs 19.21a - C# Intro	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 19.21B - C# Advanced	Fall 2008	Summer 2008	N/A	N/A	N/A	N/A
Course	cs 260.11a Self-Paced Word, 1	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 266.12 Self-Paced Windows	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 5 Computer Literacy	Spring 2009	Fall 2009	Fall 2009	Fall 2009	Fall 2009	Fall 2009
Course	cs 50.11a HTML and CSS 1	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 50.11b HTML & CSS 2	Spring 2008	Spring 2008	N/A	N/A	N/A	N/A
Course	cs 50.11c CSS	Spring 2010	Fall 2010	N/A	Spring 2014	Spring 2014	Spring 2014
Course	CS 50.21 Web Design 1	N/A	N/A	N/A	Fall 2014	Fall 2014	Fall 2014
Course	cs 50.21a Web Graphics, Intro	Spring 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 50.21a Web Graphics, Intro	Spring 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 50.21a Web Graphics, Intro	Spring 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 50.21b Web Graphics, Adv	Fall 2009	Fall 2009	N/A	N/A	N/A	N/A
Course	cs 50.25 Electronic Portfolio	Fall 2010	Spring 2010	N/A	N/A	N/A	N/A
Course	CS 50.31 Web Content Developme	Spring 2010	Fall 2010	N/A	Fall 2014	Fall 2014	Fall 2014
Course	CS 50.32 Web Proj Mngmt	Spring 2010	Fall 2010	N/A	Fall 2014	Fall 2014	Fall 2014
Course	CS 50A Web Development 1	N/A	N/A	N/A	Fall 2014	Fall 2014	Fall 2014
Course	CS 50B Web Development 2	N/A	N/A	N/A	Fall 2014	Fall 2014	Fall 2014
Course	cs 53.11a Dreamweaver Intro	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011

Course	cs 53.11b Dreamweaver, Adv	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 55.11 Javascript	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 55.12 ASP.NET	Spring 2008	Spring 2008	N/A	N/A	N/A	N/A
Course	cs 55.13 PHP	Fall 2009	Fall 2009	N/A	N/A	N/A	N/A
Course	CS 57.11 Intro to Social Media	N/A	N/A	N/A	Fall 2013	Fall 2013	Fall 2013
Course	cs 60.11a MS Word, Core Level	Fall 2008	Fall 2010	Spring 2009	Spring 2009	Spring 2009	Fall 2009
Course	cs 60.11b MS Word, Expert Leve	Spring 2010	Fall 2010	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 61.11 Microsoft Excel	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 61.11a MS Excel, Core Level	Spring 2010	Fall 2010	N/A	Spring 2014	Spring 2014	Spring 2014
Course	cs 61.11b MS Excel, Expert Lev	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 62.11a MS Powerpoint	Spring 2010	Fall 2010	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 62.11b MS Powerpoint, Exper	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 63.11 Microsoft Access	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 63.11a MS Access, Core	Spring 2010	Fall 2010	N/A	Fall 2013	Fall 2013	Fall 2013
Course	cs 63.11b MS Access, Expert Le	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 63.12 MS Access, Adv	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 65.11 MS Office Suite	Spring 2010	Spring 2010	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 65.11a MS Office, Level 1	Fall 2009	Fall 2009	N/A	N/A	N/A	N/A
Course	cs 65.11b MS Office, Level 2	Fall 2009	Fall 2009	N/A	N/A	N/A	N/A
Course	cs 70.11a Adobe Photoshop 1	Spring 2008	Spring 2008	N/A	Spring 2011	Spring 2011	Spring 2011
Course	cs 70.11b Adobe Photoshop 2	Spring 2008	Spring 2008	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 70.12 Adobe Photoshop Adva	Spring 2008	Spring 2008	Fall 2010	Fall 2013	Fall 2013	Fall 2013
Course	cs 70.13 Photo Fixing Images	Spring 2008	Spring 2008	N/A	Fall 2013	Fall 2013	Fall 2013
Course	cs 71.11 Adobe Illustrator 1	Spring 2010	Spring 2010	N/A	Fall 2011	Fall 2011	Fall 2011
Course	cs 72.11a Adobe InDesign 1	Spring 2008	Spring 2008	Fall 2010	Fall 2010	Fall 2010	Fall 2010
Course	cs 72.11b - Adobe InDesign 2	Spring 2008	Spring 2008	Fall 2010	Fall 2010	Fall 2010	Fall 2010
Course	cs 72.11c Adobe InDesign 3	Spring 2008	Spring 2008	N/A	Spring 2011	Spring 2011	Spring 2011
Course	cs 72.91a MS Publisher, Lev 1	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 74.11 Intro to Digital Medi	Fall 2009	Spring 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 74.21a Digital Video Prod 1	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 74.21b Digital Video Prod 2	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 74.21c Digital Video Prod 3	Spring 2010	Spring 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 74.31a Flash Web Animation	Spring 2008	Spring 2008	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 74.31b Intermed Flash	Spring 2010	Spring 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 80.11 Exploring Windows	Spring 2010	Fall 2010	N/A	Spring 2014	Spring 2014	Spring 2014
Course	cs 80.13 Windows Command Line	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 80.15 IT Essentials 1	Spring 2009	Spring 2009	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 81.21 Intro to Unix	Spring 2010	Fall 2010	N/A	Fall 2013	Spring 2014	Spring 2014
Course	cs 81.22 Intro Linux Sys Admin	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 81.61 SQL	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 82.21a Network Fundamentals	Fall 2008	Fall 2008	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 82.21a Network Fundamentals	Fall 2008	Fall 2008	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 82.21b Networking Routing	Fall 2008	Fall 2008	N/A	Fall 2014	Fall 2014	Fall 2014
Course	cs 82.21c LAN Switching	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 82.21d Accessing the WAN	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Course	cs 82.41a Telecomm 1	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 82.41b Telecomm 2	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 82.51 Virus Protection	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A

Course	cs 82.55 Comp Security Princpl	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 82.56 Network Security	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	cs 84.11 Supporting Windows	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 84.13 Supporting Apps	Spring 2010	Fall 2010	N/A	Spring 2012	Spring 2012	Spring 2012
Course	cs 84.21 Management Info Sys	Spring 2010	Fall 2010	N/A	N/A	N/A	N/A
Course	Interactive Media Design Major	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Adobe Applications Specialist	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Adobe Illustrator Cert	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Adobe InDesign Cert	Spring 2011	N/A	N/A	Spring 2013	Spring 2013	Spring 2013
Certificate/Major	Adobe Photoshop Cert	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Cisco Networking Cert	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	computer science	Fall 2008	Fall 2008	N/A	Spring 2013	Spring 2013	Spring 2013
Certificate/Major	Dreamweaver Content Developer	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	General Multimedia Cert	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Help Desk	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	HTML Content Developer	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Interactive Media Design Cert	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	IT Essentials Cert	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Office Applications Specialist	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	PC Specialist	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Graphic Design	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Graphic Production	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Project Management	Spring 2011	N/A	N/A	N/A	N/A	N/A
Certificate/Major	Web Site Development: ASP Prog	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Site Development: Java Pro	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Site Development: JavaScri	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A
Certificate/Major	Web Site Development: PHP Prog	Fall 2008	Fall 2008	N/A	N/A	N/A	N/A

4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
All CS Courses		X														
CIS 101A		X		X												
CS 10		X									X					
CS 101B		X		X												
CS 50.32					X			X	X					X		
CS 70.11A/B, 70.12, 70.13		X										X				
CS 71.11/A/B/C		X										X				
CS 72.11A/B/C		X										X				
CS 82.21A/B/C/D		X									X			X		
CS 84.11		X						X	X	X				X		

4.2b Narrative (Optional)

5.0 Performance Measures

Not Applicable

5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

When we have multiple sections of a class we offer both day and evening sections. We offer very few courses on Friday or Saturday because the demand for those times has been very low.

When we have multiple sections of a class we offer one section in Petaluma when possible. We also have some programs that are offered exclusively in Petaluma, such as Game Design, Cisco Networking, Help Desk, and IT Essentials.

We are the leading department in offering alternative delivery modes. More than 50% of our sections are offered online, and many are offered in multiple formats so the student can choose between face-to-face or online. Most of our online courses include video transmissions that can be attended live or watched later.

Some of our programs are suffering due to lack of full-time faculty to oversee them.

We offer every class that is part of a certificate at least once a year, so students are able to complete their certificates in a reasonable amount of time.

5.2a Enrollment Efficiency

5.2a Enrollment Efficiency The percentage of seats filled in each Discipline at first census based on class limit (not room size).

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	80.3%	94.9%	95.7%	88.2%	96.1%	105.7%	100.2%	98.3%	105.3%
ALL Disciplines	**80.3%**	**94.9%**	**95.7%**	**88.2%**	**96.1%**	**105.7%**	**100.2%**	**98.3%**	**105.3%**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	88.3%	94.1%	97.9%	46.7%	107.3%	107.2%	0.0%	106.5%	92.0%
ALL Disciplines	**88.3%**	**94.1%**	**97.9%**	**46.7%**	**107.3%**	**107.2%**	**0.0%**	**106.5%**	**92.0%**

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	93.0%	93.0%	91.3%	95.7%	102.4%	16.7%	0.0%	0.0%	75.0%
ALL Disciplines	**93.0%**	**93.0%**	**91.3%**	**95.7%**	**102.4%**	**16.7%**	**0.0%**	**0.0%**	**75.0%**

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	89.1%	93.8%	93.6%	92.5%	100.6%	96.6%	100.2%	99.8%	101.8%
ALL Disciplines	**89.1%**	**93.8%**	**93.6%**	**92.5%**	**100.6%**	**96.6%**	**100.2%**	**99.8%**	**101.8%**

Our enrollment efficiency saw a significant drop in Fall 2013. It remains to be seen whether that is a new trend or a anomoly. In any case we don't believe this to be the result of scheduling practices. One possible explanation is that we struggle to find qualified instructors to teach in some specializations such as web programming and digital media. This lack of expertise makes it difficult for us to address emerging technologies and attract students.

5.2b Average Class Size

5.2b Average Class Size The average class size in each Discipline at first census (excludes cancelled classes).

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Computer Studies	24.4	26.4	30.2	19.4	28.9	31.8	30.6	30.1	31.
ALL Disciplines	**24.4**	**26.4**	**30.2**	**19.4**	**28.9**	**31.8**	**30.6**	**30.1**	**31.**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Computer Studies	26.5	25.8	27.3	14.0	28.3	30.7	0.0	29.5	27.
ALL Disciplines	**26.5**	**25.8**	**27.3**	**14.0**	**28.3**	**30.7**	**0.0**	**29.5**	**27.**

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Computer Studies	27.9	27.9	25.3	28.7	30.5	1.9	0.0	0.0	7.
ALL Disciplines	**27.9**	**27.9**	**25.3**	**28.7**	**30.5**	**1.9**	**0.0**	**0.0**	**7.**

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013

Computer & Information Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Computer Studies	26.8	27.1	27.1	25.6	29.7	24.6	30.6	29.9	28.
ALL Disciplines	**26.8**	**27.1**	**27.1**	**25.6**	**29.7**	**24.6**	**30.6**	**29.9**	**28.**

5.3 Instructional Productivity

5.3 Instructional Productivity The ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF) in each Discipline at first census.

Santa Rosa Campus

Computer & Information Sciences		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Computer Studies		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	19.08	115.61	113.75	17.87	109.77	213.98	41.05	207.36	208.96
	FTEF	1.98	6.89	7.05	0.98	6.55	12.89	2.86	13.19	12.90
	Ratio	**9.65**	**16.78**	**16.14**	**18.19**	**16.77**	**16.60**	**14.38**	**15.72**	**16.19**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Computer & Information Sciences		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Computer Studies		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	3.99	43.70	35.05	1.58	39.25	47.68	0.00	49.89	44.17
	FTEF	0.33	3.21	2.47	0.21	3.29	3.04	0.00	3.56	3.29
	Ratio	**12.09**	**13.62**	**14.16**	**7.61**	**11.92**	**15.66**	**0.00**	**14.01**	**13.43**

Other Locations (Includes the PSTC, Windsor, and other locations)

Computer & Information Sciences		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Computer Studies		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	47.58	107.82	110.43	48.68	120.57	0.00	0.00	0.00	0.00
	FTEF	4.03	8.92	7.80	3.61	8.10	0.00	0.00	0.00	0.00
	Ratio	**11.80**	**12.09**	**14.15**	**13.49**	**14.89**	**0.00**	**0.00**	**0.00**	**0.00**

ALL Locations (Combined totals from ALL locations in the District)

Computer & Information Sciences		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Computer Studies		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
	FTES	70.65	267.12	259.23	68.13	269.58	261.66	41.05	257.25	253.13
	FTEF	6.34	19.02	17.32	4.80	17.94	15.94	2.86	16.75	16.19
	Ratio	**11.15**	**14.05**	**14.96**	**14.20**	**15.03**	**16.42**	**14.38**	**15.36**	**15.63**

Our productivity for Spring 2013 was 15.63, the second highest that it has ever been. For the last few semesters up through Spring 2013, our productivity was relatively high due to the fact that almost every one of our sections was closed with 10 students on the wait list on day one of the class. Since then we have been able to add more sections, which has resulted in a decrease in the pressure on our classes, allowing us to better meet student demand for classes.

5.4 Curriculum Currency

All of our courses and programs have been updated within the last 6 years.

5.5 Successful Program Completion

Despite the inactivation of several of our certificates, the number of certificates awarded trended up significantly in 2011-2012. There was no particular certificate that was responsible; many certificates saw incremental improvement. None of these should be interpreted to represent a trend in a particular area, other than an overall upward trend in the number of certificates awarded.

The department actively advertises its certificates, encouraging students to complete a program of study and receive a certificate.

We have a certificate awards ceremony.

Faculty members go to high school events, the career fair, and other events to promote our certificates.

Increasing the completion rate of our certificates is a high priority for our department. We have completed updates to every certificate to bring them more in line with the latest industry standards, and these revisions were approved by CRC in Fall 2011. We are having regular discussions about how to better publicize our certificates. And we have plans to create capstone courses for many of them so that they can be automatically awarded to students who have completed them.

The Computer Science major has been under-utilized historically, but enrollments in Computer Science are increasing dramatically so we expect to see the numbers in this major increase.

	06-07	07-08	08-09	09-10	10-11
Computer Studies: Adobe Applications Specialist	8	5	17	12	
Computer Studies: Adobe Certification Training in Dreamweaver	3	6	4	6	
Computer Studies: Adobe Certification Training in Illustrator	1	8	19	9	
Computer Studies: Adobe Certification Training in InDesign	28	15	8	20	
Computer Studies: Adobe Certification Training in Photoshop	44	27	5	15	
Computer Studies: ASP Programmer	0	0	1	0	
Computer Studies: Cisco Certification Training in CCNA	10	21	24	17	
Computer Studies: HTML Web Content Developer	5	13	10	22	

Computer Studies: IT Support	0	1	4	4	
Computer Studies: Java Programmer	0	1	0	1	
Computer Studies: JavaScript Programmer	0	1	0	0	
Computer Studies: Microsoft Office Specialist	3	4	5	1	
Computer Studies: PHP Programmer	0	1	0	2	
Computer Studies: Web Graphic Designer	3	3	0	4	
Computer Studies: Web Graphic Production	0	0	5	6	
Computer Studies: Web Project Manager	0	1	0	1	
Digital Media: General Multimedia	1	1	1	0	
Digital Media: Interactive Multimedia	0	0	0	3	
Graphic Design	12	10	9	16	
Graphic Design Production Fundamentals	3	3	2	8	
Computer Science A.S.	1	0	0	1	
Graphic Design A.A.	6	7	5	2	
Interactive Media Design A.A.	0	0	1	1	
TOTALS	**128**	**128**	**120**	**151**	**1**

5.6 Student Success

5.6a Retention The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	76.7%	69.3%	67.4%	61.9%	68.4%	72.1%	72.4%	69.2%	69.4%
ALL Disciplines	**76.7%**	**69.3%**	**67.4%**	**61.9%**	**68.4%**	**72.1%**	**72.4%**	**69.2%**	**69.4%**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	92.5%	76.2%	78.6%	85.7%	72.3%	76.4%	0.0%	72.3%	75.2%
ALL Disciplines	**92.5%**	**76.2%**	**78.6%**	**85.7%**	**72.3%**	**76.4%**	**0.0%**	**72.3%**	**75.2%**

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	68.8%	67.4%	66.5%	68.6%	68.8%	100.0%	0.0%	0.0%	96.7%
ALL Disciplines	**68.8%**	**67.4%**	**66.5%**	**68.6%**	**68.8%**	**100.0%**	**0.0%**	**0.0%**	**96.7%**

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	72.2%	69.2%	67.9%	67.0%	69.0%	73.4%	72.4%	69.8%	71.1%
ALL Disciplines	**72.2%**	**69.2%**	**67.9%**	**67.0%**	**69.0%**	**73.4%**	**72.4%**	**69.8%**	**71.1%**

The department retention rate is lower than the campus average. Possible reasons for this are (1) many of our classes (for example, CS 10) are simply difficult classes that experience somewhat lower retention for that reason, and (2) more than half of our sections are online, and online classes generally have a somewhat lower retention rate.

The only significant differences in student outcomes when broken down by sub-group is that White and Asian students performed much better in each measure when compared to all other ethnicities. (The Filipino measures are an exception, apparently due to a small sample size.) However, this difference is reflected in the overall district outcomes as well.

5.6b Successful Course Completion The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	75.5%	66.9%	65.1%	58.9%	65.3%	69.1%	70.4%	66.3%	66.4%
ALL Disciplines	**75.5%**	**66.9%**	**65.1%**	**58.9%**	**65.3%**	**69.1%**	**70.4%**	**66.3%**	**66.4%**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	92.5%	74.1%	76.5%	85.7%	69.3%	72.3%	0.0%	70.5%	73.7%
ALL Disciplines	**92.5%**	**74.1%**	**76.5%**	**85.7%**	**69.3%**	**72.3%**	**0.0%**	**70.5%**	**73.7%**

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	66.1%	65.5%	64.0%	65.6%	66.4%	100.0%	0.0%	0.0%	96.7%
ALL Disciplines	**66.1%**	**65.5%**	**64.0%**	**65.6%**	**66.4%**	**100.0%**	**0.0%**	**0.0%**	**96.7%**

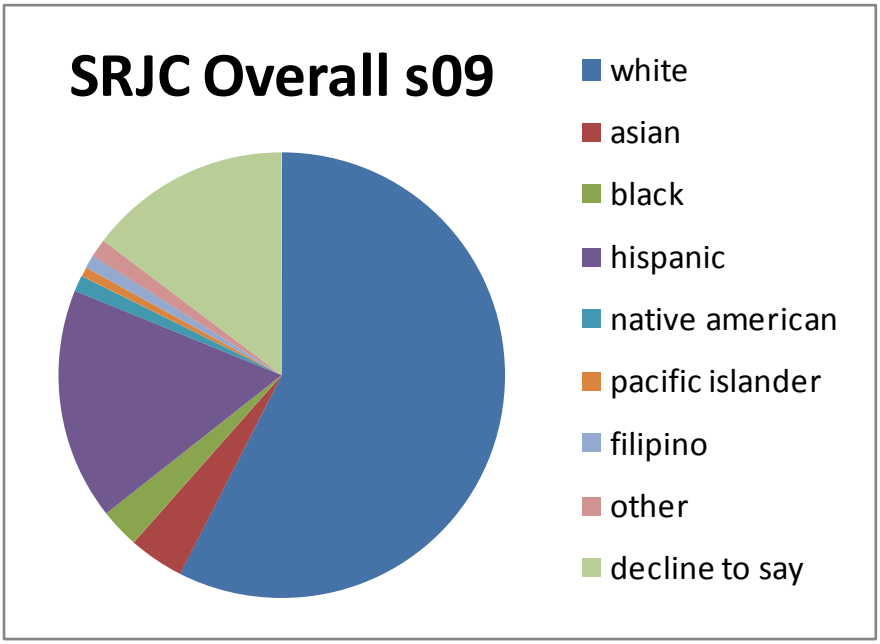
ALL Locations (Combined totals from ALL locations in the District)

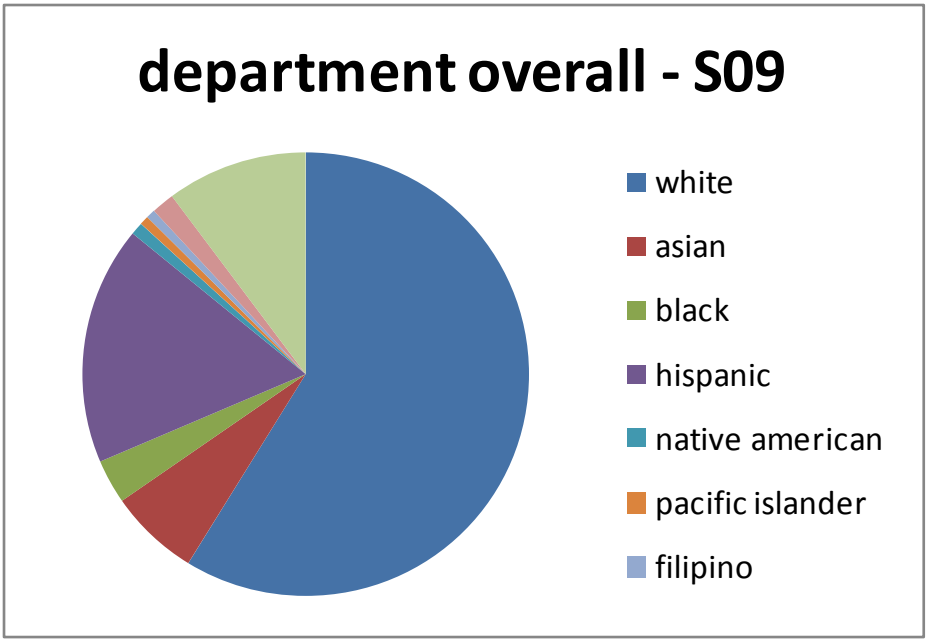
Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013
Computer & Information Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Computer Studies	70.1%	67.1%	65.5%	64.1%	66.3%	70.2%	70.4%	67.1%	68.4%
ALL Disciplines	**70.1%**	**67.1%**	**65.5%**	**64.1%**	**66.3%**	**70.2%**	**70.4%**	**67.1%**	**68.4%**

5.7 Student Access

Ethnicity:

Looking at the overall ethnicity of the college and comparing it to the department overall, there is hardly any difference between the two. The department is as well balanced as the college.





When looking at specific classes, as representing the different aspects of the department's varied offerings, there is some variation. The programming classes tend to have more white students, the transfer classes have a significant number of black students. The introductory/basic course has more ethnic diversity, and serves more of the underrepresented population; that is English language learners, reentry students, retraining students.

There has been no significant changes over the past four years.

Gender:

Over the past year the gender distribution remains basically the same. The department is more evenly balanced in this area than the college.

Data	F 07	S 08	X 08	F 08	S 09	X 09
% male	50%	51%	45%	47%	49%	51%
% female	50%	49%	55%	53%	51%	49%

The programming classes are less balanced, having more white males than any other group. This would be an area to pursue; encouraging young women to go into computer science.

5.8 Curriculum Offered Within Reasonable Time Frame

All of our courses are offered at least once per year. In each certificate, required courses are alternated by semester so that student can always take the course in sequential semesters. Here is a list of courses that are rotated:

Fall only classes:

CS 12 Assembly Language
CS 55.11 Javascript
CS 55.13 PHP
CS 63.11B MS Access Part 2
CS 70.13 Image Correction and Restoration with Adobe Photoshop
CS 72.11C InDesign 3
CS 74.21C Video Post-Production Techniques 3
CS 74.41A Game Design 1 (tentative; call for details)
CS 82.21A Cisco 1
CS 82.21B Cisco 2
CS 84.11 Supporting Microsoft Windows
CS 175.11 Adobe Acrobat

Spring only classes:

CS 70.12 Adobe Photoshop Advanced Concepts
CS 72.11B InDesign 2
CS 74.21D Video Post-Production Techniques 4
CS 74.31B Intermediate Flash
CS 74.41B Game Design 2 (tentative; call for details)
CS 81.62 Database Concepts
CS 82.21C Cisco 3
CS 82.21D Cisco 4
CS 84.13 Supporting Software Applications
CS 165.31 MS Office Integration

5.9a Curriculum Responsiveness

Computer Studies is constantly updating courses and certificates to stay on the cutting edge of technological advances.

CS 5 is the only general education course. It does contain some objectives related to social issues and ethics as they relate to computers, but does not address gender, global perspectives, or American cultural diversity directly. We need to work on this.

Several other departments have certificates that require our courses. For example, some health sciences certificates require CS 5, and some BAD certificates require some of our office applications classes.

The Department is excited about its role in the recently launched Digital Media certificates. Game Design and Programming courses have been added to the curriculum; however, due to the difficulty in finding/retaining faculty in this highly employable area, two sections (Spring and Fall 2014) had to be cancelled because there was no faculty to teach.

Mobile Media is an emerged/recently emerged area in which the Department has developed curriculum. However, the curriculum has not been presented in Cluster Tech or to the Curriculum Review Committee because no lower division comparable (to date) has been located from a California institution. Even if the course were to be approved - like Game Development and Design courses - the Department may experience difficulty finding/retaining qualified faculty.

Course offerings continue to be collaborated with the two (2) Advisory Committees.

5.9b Alignment with High Schools (Tech-Prep ONLY)

We do have programs that align with high school preparation and we do have courses that are articulated with high school courses or part of a tech prep or 2+2.

The following table lists the specific courses:

Industry Sector	SRJC Course	SRJC Course Title	SRJC Units	High School Course Name(s)/Sequence
Healdsburg, *Healdsburg Unified*				
Information Tech	CS 80.15	IT Essentials 1	4.0	IT Essentials
Information Tech	CS 82.21A	Cisco Netwkg 1 (Exploration 1)	4.0	Cisco Discovery 1 + Discovery 2
Santa Rosa, *Santa Rosa City Schools*				
Information Tech	CS 80.15	IT Essentials 1	4.0	IT Essentials
Information Tech	CS 82.21A	Cisco Netwkg 1 (Exploration 1)	4.0	Cisco Discovery 1 + Discovery 2
In Development 2009-2010 *(awaiting signatures and/or Credit by Exam approval)**:*** ***High Schools Participating*:**				
Digital/MultiMedia	CS 50.11A	Web Design: HTML 1	1.5	CGHS, PNR, Pet, CHS
Digital/MultiMedia	CS 50.11B	Web Design: HTML 2	1.5	CGHS, PNR, Pet, CHS
Digital/MultiMedia	CS 74.21A	Digital Video Prod. 1*	1.5	AHS, EMHS, HHS, SRHS, SVHS, WHS
Digital/MultiMedia	CS 74.21B	Digital Video Prod. 2*	1.5	AHS, EMHS, HHS, SRHS, SVHS, WHS
Information Tech	CS 80.15	IT Essentials 1	4.0	Middletown High School
Information Tech	CS 82.21A	Cisco Netwkg 1 (Exploration 1)	4.0	Middletown High School

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

Yes, the requirements for the Computer Science major are in very close alignment with lower division requirements at CSUs and UCs.

5.11a Labor Market Demand (Occupational Programs ONLY)

The data in the table below shows that all of our Computer Studies related field continue to see growth. The data does not do a good job of breaking the occupations down into relevant categories. For example, we know that Web designers are in high demand and yet there is no separate category for Web.

We know that there is very high demand in the area of Game Design. We are also aware that there is a new trend toward dramatically increased enrollment in transfer Computer Science courses.

2006-2016 Occupational Employment Projections
Santa Rosa-Petaluma Metropolitan Statistical Area
(Sonoma County)

SOC Code	Occupational Title	Annual Average Employment		Employment Change		A
		2006	2016	Numerical	Percent	New Job
00-0000	**Total, All Occupations**	**219,300**	**248,200**	**28,900**	**13.2**	**2,**
11-0000	**Management Occupations**	**16,600**	**18,090**	**1,490**	**9.0**	
11-3021	Computer and Information Systems Managers	320	390	70	21.9	
15-0000	**Computer and Mathematical Occupations**	**4,110**	**5,630**	**1,520**	**37.0**	
15-1000	Computer Specialists	4,080	5,600	1,520	37.3	
15-1021	Computer Programmers	270	280	10	3.7	
15-1031	Computer Software Engineers, Applications	1,040	1,560	520	50.0	
15-1032	Computer Software Engineers, Systems Software	590	790	200	33.9	
15-1041	Computer Support Specialists	680	780	100	14.7	
15-1051	Computer Systems Analysts	490	660	170	34.7	
15-1061	Database Administrators	140	190	50	35.7	
15-1071	Network and Computer Systems Administrators	340	480	140	41.2	
15-1081	Network Systems and Data Communications Analysts	440	730	290	65.9	
15-1099	Computer Specialists, All Other	90	100	10	11.1	
27-0000	**Arts, Design, Entertainment, Sports, and Media Occupations**	**3,520**	**4,050**	**530**	**15.1**	
27-1024	Graphic Designers	350	390	40	11.4	
27-4000	Media and Communication Equipment Workers	800	970	170	21.3	
27-4011	Audio and Video Equipment Technicians	80	90	10	12.5	
27-4021	Photographers	560	670	110	19.6	
27-4032	Film and Video Editors	60	70	10	16.7	
27-4099	Media and Communication Equipment Workers, All Other	50	60	10	20.0	
43-0000	**Office and Administrative Support Occupations**	**34,450**	**37,490**	**3,040**	**8.8**	
43-1000	Supervisors, Office and Administrative Support Workers	2,590	2,760	170	6.6	
43-1011	First-Line Supervisors/Managers of Office and Administrative Support Workers	2,590	2,760	170	6.6	
43-4171	Receptionists and Information Clerks	1,420	1,630	210	14.8	
43-4199	Information and Record Clerks, All Other	450	430	-20	-4.4	
43-6000	Secretaries and Administrative Assistants	6,110	6,800	690	11.3	
43-6011	Executive Secretaries and Administrative Assistants	2,920	3,430	510	17.5	
43-6014	Secretaries, Except Legal, Medical, and Executive	1,500	1,510	10	0.7	

43-9000	Other Office and Administrative Support Workers	7,370	7,700	330	4.5
43-9011	Computer Operators	100	80	-20	-20.0
43-9022	Word Processors and Typists	260	230	-30	-11.5
43-9199	Office and Administrative Support Workers, All Other	1,460	1,300	-160	-11.0

5.11b Academic Standards

The Computer Studies Department meets twice a month and the subject of academic standards is often the topic. For example, we have had many discussion about how to best reconfigure our classes to remove DHR and best meet the needs of our students. As another example, we have had several discussions about best practices for teaching online courses. We have not reached conclusions on either of these, but are close on both.

6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	ALL	00	00	Reach 90% completion of SLO assessments		1 year	
0001	ALL	00	00	incorporate mobile media into curriculum		1 year	Tablet devices for instructor demos and for student use

6.2a Program/Unit Conclusions

Location	Focus Areas & Questions
ALL	Computer Studies is constantly doing data analysis of enrollment and completion data, job demand, and practices as other learning institutions. Some of our conclusions follow:
ALL	Demand for mobile media coursework is exploding, and the correct way to incorporate mobile media into our curriculum is to incorporate courses into various web and digital media certificates.
ALL	Our Networking programs must be expanded and new directions regarding security related to homeland security must be explored.

6.2b PRPP Editor Feedback - Optional

Please see the BPS Dean PRPP for commentary on the CS Department.

6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	ALL	00	00	Reach 90% completion of SLO assessments		1 year	
0001	ALL	00	00	incorporate mobile media into curriculum		1 year	Tablet devices for instructor demos and for student use