FOOTHILL COLLEGE
Program Planning and Review
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I. Department/Program Mission	
1. State the department name and everyone who participated in creating the comprehensive program plan.	Computers on the Internet (COIN): Sandi Watkins, Bob Cormia, Newton Chan, Mimi Will, and Tim Woods. In keeping pace with developments in the industry, we wish to change the name of the department to "**Computing on the Internet (COIN)**", rather than computers. This name change is more reflective of new and emerging technologies such as social computing, smart grid technology, machine learning (e.g., Semantic Web Technology).
2. State the program's mission. If you don't have one, create one.	**The mission of the Computing on the Internet Department is to develop and provide state-of-the-art, high quality curriculum is to promote student learning through lower-division academic instruction, career preparation, and continuous workforce improvement to advance California's economic growth and global competitiveness.** Objectives: The Department strives to create a student-centered learning environment that supports: ▪ Professional development, life-long learning , and transfer education, ▪ Training incumbent professional workers and technicians and a transitioning workforce, ▪ Training students in current and emerging developmental techniques and standards, including lifelong learning, as well as, fast skilling in rapidly changing fields. The Department places a high priority on enabling learning for diverse student populations with limited resources.

I. Department/Program Mission	
3. Explain how the program/department mission is aligned with the college mission?	Our purpose is to provide educational opportunity for all with innovation and distinction; and Our mission is to promote student learning through lower-division academic instruction, career preparation, and continuous workforce improvement to advance California's economic growth and global competitiveness.

II. Department and Program Description & Data

1. What are your hours of operation?	Our offices open at: 9 am Closed for Lunch: No ☐ or Yes ☒ If yes, when: 12 – 1 pm Our offices closed at: 5 pm			
2. What types of classes do you offer, at what locations, and at what times?	Times offered: ☒Morning (6AM-12PM) ☒Afternoon (12PM-4PM) ☒Evening (4PM-10PM)	Locations offered: ☒FH Main Campus ☐Middlefield ☐Off campus	Types Offered: ☒In Person ☒Hybrid ☒Distance	Status Offered: ☒Credit ☐Non-credit

3. List current positions and descriptions for all personnel in your area on the chart below (include position titles only, not individual names).

Faculty Positions by Discipline	**Full-time Headcount**	**Part-time Headcount**	**Brief Description of duties**
Computer Information Systems	2	2	Prepare and deliver lectures, develop curriculum, develop industry relationships to support development of new programs, participate as presenters, and participate in shared governance, industry advisory board members, and volunteers at national and international conferences (League for Innovation, CIT, Tech Ed, Technology, Colleges & Community – TCC, Worldwide Online Conference, and Women in Technology International).
Management and Classified Positions	**Full-time Headcount**	**Part-time Headcount**	**Brief Description of duties**
Dean	1		Provide division leadership, manage budgets, facilitate

			curriculum processes, supervise staff, assists students/faculty/staff, and coordinate program activities and oversight.
Administrative Assistant	1		Position currently filled through an "out-of-class" assignment, which ends in December. Div. Admin supports 3 distinct functions: CTIS, Apprenticeship, and COOP. Coordinate the day-to-day operations of the office; interacts with the public, students, administrators, faculty and staff; and monitors division budgets and fiscal management process.
Student Worker Positions	**Hours per Week**	**Months per Year**	**Brief Description of duties**

4. Given the data, describe the trends in enrollment, FTES, and Average Class size. What are the implications for your department?	In the 06/07 fiscal year, student enrollment (grades) was 1,262 and WSCH was 6,129 with a productivity of 502. In 07/08 fiscal year, student enrollment (grades) rose to 1,284 and WSCH rose to 8,738 with an increase in productivity of 632. In 08/09 student enrollment (grades) dropped to 1,096 while WSCH rose to 9,187 combined with a productivity rise to 709. The department has experience steady growth in WSCH averaging 17% for the period of 06/07 to 08/09. The average class size runs from 25 to 30 within the first week of the term. In the last 5 years, significant changes (wireless technology and the mobile Web, Web 2.0 and social networking,

	migration of TV formats to the Web) have impacted what we previously called the Internet. Additionally, recent emphasis in energy technology, including smart and microgrids, will likely impact enrollments starting in 2010 to 2011, especially if funding from recent grant activity occurs. The impact of this growth and evolution on CTIS is significant in two ways: tools and process. In 1995 a knowledge of HTML was considered leading edge; today it is either mainstream or transparently built into a host of Web authoring tools. However, where HTML was initially approachable to almost anyone, today markup and scripting languages comprise XHTML, XML, JavaScript, and AJAX, with custom derivatives appearing in business and technology sites. Markup languages have become a specialty in addition to design. The current Web design series, COIN61, COIN63, COIN65, and COIN78, will need to be revisited to include XHTML and XML, JavaScript, CSS, and HTML 5, with an emphasis on a continuum of skills which Web developers will need to author, design, and program in the emerging 'Web as a Platform' model. An additional significant trend is the shift from traditional (face to face) instruction to Web assisted (online) and hybrid instruction. Ideally our classes would be 'one size fits all' allowing our students to have maximum flexibility in enrollment and attendance.
5. Student Achievement: Given the data, describe the trends in overall success rates, retention rates, and degrees and certificates awarded. What are the implications for your department?	In the 06/07 fiscal year, there was a retention rate of 87% and a success rate of 76%. In 07/08, the retention rate remained unchanged holding at 87% and success rate dropped to 74%. In 08/09, the retention rate dropped to 82% and the success rate dropped to 73%. The majority of COIN courses are offered in an online modality. Students need to be better prepared for online courses – and especially using (ETUDES-NG). We lose a great deal of students (attrition) because of the modality, and

	nuances and differences in online pedagogy among faculty (CMS etiquette). A one-week free (non-credit) course for online learning would be beneficial. Students need to have a better understanding as to how learning is different from on-ground courses, and quickly absorb specific directions each faculty requires for communication and assignment submission. The department will be working through research to find pilot methodologies that will help enhance student retention and success. In 2007, there were 4 Associate's degrees and 15 Certificates (Awards<2 years) completions in the region for Web Page, Digital/Multimedia and Information Resources Design; none were issued by Foothill College. As regional data supports, degrees and certificates are not a priority for our students, given that courses are tied to application-specific skill attainment. We have not been emphasizing to students the importance of working toward a certificate, but this could potentially be a big draw to enhance enrollments and retention. There is good growth potential in developing workforce certifications (< 1 yr) for both displaced workers, as well as continuing education for professionals wishing to expand their skills.
6. Student Equity: Given the data, describe the trends with respect to underrepresented students. How will your program address the needs/challenges indicated by the data?	The department will be focusing on developing basic skills courses: Web Social Computing, Technology plus social events. We need tutors / Tutorial Center / Lab Assistants, and online Teaching Assistants. Online courses have different support issues than on-ground courses. Supplemental Web material is useful for creative methods to personalize online instruction. Online instruction is essentially race, ethnicity, gender blind, but language skills and attempting to accommodate registered ADA students can be particularly important in student-faculty interactions.

	In comparing 2007/08 (total headcount 1,284) with 2008/09 (total head count 1,096), **retention increased** for Pacific Islander students by 7 percentage points (67%). Student **retention decreased** for Asian students by 3 percentage points (82%); for Black students by 13 percentage points (74%); for Filipino students by 11 percentage points (74%); for Hispanic students by 1 percentage point (88%); for White students by 5 percentage points (82%); for Other students by 27 percentage points (64%). **Pacific Islander, Black, and Filipino Ethnicity students seem to have a disproportionally lower percentage of student retention.** Percentage of **success increased** 3 percentage points for Asian students (75%); 6 percentage points for Hispanic students (71%); 27 percentage points for Pacific Islander students (67%). Percentage of **success decreased** 15 percentage points for Black students (49%); 13 percentage points for Filipino students (52%); 1 percentage point for White students (74%); and 38 percentage points for Other students (45%). Percentage of **non-success decreased** for Asian students by 5 percentage points (8%); 7 percentage points for Hispanic students (17%); for Pacific Islander students by 20 percentage points (0%); 4 percentage points for White students (8%). Percentage of **non-success increased** 2 percentage points for Black students (26%); 2 percentage points for Filipino students (22%); and 9 percentage points for Other students (18%). T**here are significant increases in non-success for Pacific Islander students that need to be addressed.** Ethnic groups, other than Asian and White, are not well represented in current COIN Programs. Other underrepresented students include those with handicaps such as hearing impaired, visually impaired and physically impaired. Online sections have different support issues than on-ground courses. Online students rely heavily upon supplemental

	material. Looking for creative ways to personalize online instruction. The division as a whole will be looking to better identify barriers opposing student success. We will be developing a survey instrument that will seek to identify challenges, needs, and opportunities in raising student success and retention.
7. Given the data, discuss how the FTEF trends and FTEF/FTES ratio will impact your program. Include any need for increasing or reducing your program faculty. What are the implications for your department?	At present, we have no full time faculty to lead the Department in curriculum and program development. Unless and until this problem is corrected, it does not bode well for upgrading and refreshing of the curriculum. In 2006/07 fiscal year, Full-time FTEF was 2.18 and PT/Overload was 1.36. In 2007/08 fiscal year, Full-time FTEF was 2.67 and PT/Overload was 1.35. In 2008/09, Full-time FTEF was 2.18 and PT/Overload was 1.38. The drop in total FTEF for 2008/09 was an 11%, which directly correlates with an 11% increase in Productivity. One faculty member is working on a reduced contract through Article 18, and 2/3 of the FTEF for the other full-time faculty member is dedicated to a multi-year grant project. In order to increase enrollments in COIN Programs, additional staff will need to be hired to cover a broader range of classes and support a series of new workforce development certifications.
8. Given the data for distance learning, describe the trends related to success, retention, and student satisfaction. Discuss solutions to ensure that rates match or exceed those of comparable traditional format courses.	Retention is a continuing problem. Students drop for myriad reasons, but more emphasis on staff development to assist faculty in developing courses that meet all student learning styles would be helpful. Peer review of classes with good retention rates would additionally be helpful as would continuing discussions of other methods of engagement. In the 06/07 fiscal year, Distance Education student enrollment (grades) was 1,105 and WSCH was 4,717 with a productivity of 434. In the 07/08 fiscal year, Distance Education student enrollment (grades) increased to 1,152 and WSCH increased to 7,605 with a productivity of 625. In the 08/09 fiscal year, Distance Education student enrollment (grades) decreased to

	946 and WSCH increased to 7,866 with productivity increasing to 716. In 06/07, retention was 88%. In 07/08, retention dropped to 87%. In 08/09, retention decreased to 82%. Student success for 06/07 was 76%; in 07/08, the success rate decreased to 74%. In 08/09, the success rate continued to drop to 73%. As mentioned previously, COIN courses are predominantly taught in an online modality. Raising student retention and success is a primary focus for the department.
9. Optional: Provide any additional data relevant to your program. (Indicate the source of the data).	Retention rates can be buffeted by changes in employment – i.e. many COIN students are underemployed, and sudden unexpected changes in employment can affect educational priorities – usually forcing students to discontinue a course. (Retention and Student Success in Higher Education M. Yorke, B. Longden, 2004 - Open University Press). In 2009, there were 74,083 jobs in the Greater South Bay and Peninsula region in the occupations of computer programmers, computer software engineers (applications), computer software engineers (systems software), computer specialists (e.g., Web designers), and multi-media artists and animators (Source: Economic Modeling Specialists, Inc. [EMSI] Complete Employment - 3rd Quarter 2009). It is estimated that there will be a 39% growth in this sector by 2019, which translates to 27,779 new jobs. Combining this figure with expected replacement needs, there will be a demand for 50,029 placements (Source: EMSI Complete Employment - 3rd Quarter 2009). As noted in a recent article (2008), "Increasingly, jobs require advanced technological know-how, creative problem-solving abilities and superior communication skills. However, the high level of education needed for these positions is becoming financially out of reach for a growing number of Americans. Employers will be forced to create their own degree programs to develop potential future employees. Companies have already seen the benefits of tuition assistance

	in terms of recruiting, training and retaining workers. Organizations will initiate entire programs with precise coursework centered on their company culture and goals, eliminating the need for extensive on-the-job training, and saving both the company and workers thousands of dollars. Future students will hold degrees in things like **Web Design** from Microsoft College or **Virtual Community Relations from Google University**. Large employers such as IBM have already instituted courses specifically tailored to their needs. This will become more widespread as companies look for better ways to develop a well-trained workforce." (http://www.jobjournal.com/article_full_text.asp?artid=2384). Internet and Web Technologies have both grown and evolved significantly during the last decade and even the last five years. In the decade following the ecommerce explosion (1999) and subsequent bursting of the dot-com bubble (2000) e-business, Internet marketing, and XML technology grew steadily albeit more slowly. During this period from 2000 to 2009, and especially in the last 5 years, three significant changes (wireless technology and the mobile Web, Web 2.0 and social networking, and migration of TV formats to the Web) have impacted what we previously called the Internet. The Web is now a platform, the cloud is the new OS, social networking is the new thing, and the mobile Web (and wireless in general) has extended the Internet to 3 billion people. Internet technology for machine computing is growing past e-business and into energy (smart grid) and advanced sensor technology.
10. Are you seeing trends that are not reflected in the data cited above? If yes, please explain.	There are several highly dynamic emerging technologies that seek to support and enhance human and machine computing, social computing (Web 2.0), and the world of mobile devices and the mobile Web. This change reflects the melding of tools, process, and markup languages, and embraces Web 1.0, Web

	2.0, Web 3.0 (Semantic Web) and the emerging Web 4.0 (Metaweb). Other technologies that should be seriously investigated include: Microsoft Azure (MS Cloud computing platform), Amazon Web Services (Amazon cloud computing platform and infrastructure), and Adobe Flex (After Macromedia acquisition, Adobe is transforming flash platform beyond the Web into enterprise and the mobile markets with the Flex framework). In addition, digital media and entertainment: increasingly the Web is a platform and channel for entertainment, information, and other content from more traditional channels, such as TV, radio, and distribution of movies, music and other copyrighted entertainment, including multiplayer games, and virtual worlds. The skill set required developing multimedia games, CD-ROMs and DVDs, and entertainment is still one which requires formal training; but YouTube, digital cameras, and a host of applications including Flash and Final Cut Pro are extending multimedia publishing to millions of people with little formal training in video production. Programming for virtual worlds requires similar skills, including tools called 'Maya' which are used in Second Life.

Summary of Planning Goals & Action Plans				
11. Identify 3-6 operational goals and link them to one or more college strategic initiatives or to your operations.				
Department Operational Goals	**College Strategic Initiatives**			
Identify 3-6 operational goals	Building a Community of Scholars	Putting Access into Action	Promoting a Collaborative Decision-making Environment	Operations Planning
Retire outdated curricula and create new relevant courses.	☒	☐	☐	☒
Social Software	☐	☐	☒	☐
Identify problem areas for underrepresented populations.	☐	☒	☐	☐
Increase collaborative development (conflict / goal resolutions, workflow	☒	☐	☒	☐

etc.)				
Present papers at League of Innovation	☒	☐	☐	☐
Improve our ability to meet current and future industry demands.	☒	☐	☐	☐

12. What is your plan for accomplishing your goals?

Department Operational Goals	Activities	
Retire outdated curricula and create new relevant courses.	Retired several courses in Fall 09. Will continue to review active courses and their standing with industry and program goals.	
Identify problem areas for underrepresented populations.	The Division shall develop a survey to solicit feedback on student challenges and barriers.	
Collaborative development	Utilize Google Wave for Collaborative writing / process development – better sharing of common documents	
Improve our ability to meet current and future industry demands.	Work closely with Advisory committee, as well as, follow industry trends as reflected in workforce research. This shall be accomplished through increased experiences and interactions with industry.	
Training of faculty in new techniques	Technology mentoring	
Developing the 'seasons of curriculum'	Monthly meetings on long range curriculum goals and activities	
Pursuing new funding for emerging programs	Better monitoring of grant opportunities and partnering with organizations like NOVA	
Better technical currency	Encourage faculty to attend seminars (Google, Stanford, PARC, SAP, etc.)	

13. Are additional resources needed to accomplish your department operational goals? If yes, identify the resource, as well as the purpose and rationale for each resource.

Identified Resource	Purpose	If requesting funding, provide a rationale of how each request **supports one or more college strategic initiative and/or supports student learning.**	
A. Additional faculty	Develop multimedia and interactive technologies	Multimedia curriculum and faculty competencies also support better online student engagement and learning. COIN responsibilities would be part of the CIS FTE request.	
B. Updated course material	Currency in online tutorial deployment (our students expect better course materials)	Currency of material is critical in technology; no student enjoys having to learn outdated material.	
C. Updated faculty	Learn/Teach a new prep.	One quarter of release time.	

III. Curriculum	
Curriculum Overview	
1. How does your curriculum address the needs of diverse learners?	We make an effort to provide different approaches of content delivery for differing styles. (e.g., lectures, labs, multimedia, etc.) Some courses have been designed to accommodate self-paced study. The Department offers different levels/speeds/intensity of courses, e.g. some COIN courses offer(s) different levels of complexity for differing levels of technical ability and/or preparedness.
2. How does your curriculum respond to changing community, student, and employer needs?	Industry Advisory committees, guest speakers, outreach, community events (Code Camp), updating courses on a constant basis, and student feedback. We are continuing and enhancing our collaboration with industry advisory boards.
3. How does your curriculum support the needs of other certificates or majors?	A great many of our certificates overlap with other departments. EBUS/BUS, CAST/COIN, and a proposed Social Computing GE.
4. Do your courses for the major align with transfer institutions?	This is not our population's primary goal. These courses are not easily articulated given the heavy industry-driven focus. The primary goal of these courses and certificates is to enhance the skills and immediate employability of a transitioning workforce.
5. Do your courses have appropriate and necessary prerequisites? Identify any challenges and plans to address the challenges.	Advisories – given the nature of our student population, it is unlikely formal prerequisites are practical or documented. We have in-person and online counseling that has helped align students with the best courses for their goals. The best approach to providing foundational knowledge is to have a series of smaller (possibly, self-paced) feeder courses in broad competencies, such as programming, markup languages, or CIS concepts. (DE Anza teaches CAST courses this way – CAOS)

6. Review the attached curriculum report for currency. What is your plan to address the deficiencies? (Consider: Title V, course deactivation, updated prerequisites, cross-listed courses, measuring student learning outcomes, curriculum sheets, certificates and degrees).	COR development is an ongoing and continuous process, New courses and updating of existing courses begins in winter/spring and is completed in early fall. Because of the nature of our discipline, course development must be agile, focused, and rapid. Faculty are encouraged to 'own and manage' a suite of courses and continually revisit currency.	
7. Does your program offer distance education courses?	Yes. Over 60% of our WSCH is associated with Distance Education, and almost all new courses have a Web component.	
8. If you offer distance education courses, list one or two short examples of how your distance education courses provide for effective interaction between students and faculty.	ETUDES-NG CMS (Course Management System) includes online forums, chats, online private messaging, blogging, and wiki (and other collaborative) writing formats for comments, as well as, email and private messaging.	
9. If you offer distance education courses, list one or two short examples of how your distance education courses provide for effective interaction among students.	Online forums allow for group discussions, and collaborative writing and file sharing tools supports group projects, and private messaging.	
College Skills (Pre-collegiate) Overview (Data Available Fall 2009-filling out this section is optional)		
10. What college skills should a student have before entering your program?	Basic arithmetic and computational skills, reading, writing, critical thinking, ability to communicate in basic English, perform spell-checking, and some familiarity with using Web based communication and collaboration tools, such as email and social portals (Yahoo!)	
11. Given the data, comment on the effectiveness of the assessment and placement of college skills students into your program. (For MATH, ENGL and ESL only).	For the majority of our courses, MATH and ENGL placement will help students in academic transfer courses, especially programming and traditional computer science. However, many 'adult learners' are not native speakers, and often struggle in reading and interpreting written directions (distance education).	
12. In what ways are you addressing the needs of the college skills students in your program?	Writing assignments (related to class topics) are assigned in almost every class, regardless of curriculum (programming and Web development courses have writing assignments).	

13. How are faculty in your program collaborating with other disciplines and services to meet the needs of college skills students?	Academic Senate and Curriculum Committee discussions. Additionally, developing sustainability / environmental programs has encouraged collaboration (threading environmental and global consciousness issues into curriculum)	
Program Mapping		
14. If applicable, identify any sequence of courses that are part of your program. List in the order that they should be taken by students.	COIN 51 / COIN 61 / COIN 63 / COIN 65 / COIN 70 / COIN 78 / COIN 84 is a complete Internet markup curriculum starting out with Internet fundamentals, working through all aspects of Web development, and finishing with a Web portfolio / project.	
15. For your courses that are part of a sequence – are the student learning outcomes well aligned with the next course in the sequence? Please work with the college researcher to answer this question - once your sequence of courses is identified.	Yes – we use an ontology / process map to frame a continuous and integrated set of SLOs through the course sequence. Internet technology courses develop skills in organizing, analyzing, and presenting information, and additionally in collaboration between and among individuals and workgroups. These activities build awareness of communication styles and the need for cultural competency in preparing documents for a diverse audience. The Internet itself thrives and builds on human diversity. The electronic commerce program achieves competencies in understanding and applying business and marketing principles to Internet technology to achieve functional and productive online commerce. Internet publishing using HTML, XML, and other multimedia formats develops effective presentation skills, data modeling and representation, and ability to render information in machine readable data formats. Social media programs develop competencies in optimizing Web formats and functionality for human interaction. Informatics programs develop the knowledge, skills, and abilities to organize, analyze, and communicate information.	

16. If applicable, describe any capstone course, signature assignment (project, service learning, portfolio), or exam that demonstrates knowledge, skills, and abilities, indicating successful program completion?	Students in many courses are required to complete a final project which demonstrates their mastery of course concepts. This project must consist of well-formed, valid code and information which complies with current standards. We are designing service learning into our social media certificate with the goal of collaborative community based projects. COIN 56 E-Business students prepare a business plan or an e-marketing initiative plan for existing business.	
Course Scheduling & Consistency		
17. Given available data, describe the trends in the scheduling of morning, afternoon, and evening classes, as well as Friday, Weekend, and Distance Education classes. Comment on the feasibility of offering classes at non-standard times.	Given the nature of our discipline, most of our classes are offered online. We are the largest online department in CTIS. Schedule volatility is inherent with Internet technologies. We have been very responsive to adjusting to a shifting student demand.	
18. Are required courses scheduled in appropriate sequence to permit students to complete the program in the prescribed length of time? If yes, describe the rationale upon which the sequence is based. If no, what is the plan to change the scheduling pattern? What are the barriers that prohibit implementation of the changes? Explain.	Given population diversity and economic uncertainty, we continually adjust our schedule based upon community feedback. We offer a sequence of courses that increase in complexity from fall to spring schedules. Campus system structure has been a challenge in offering both standardized and customized courses. Many of our students are “shopping” for skills.	
19. How does the department determine that classes are taught consistently with the course outline of record?	Instructor evaluations, course syllabus are reviewed quarterly, and CORs are now reviewed annually using our ‘four seasons curriculum review’.	
Summary of Planning Goals and Action Plans		
20. What are your goals with respect to curriculum and how will those goals be measured?	Goals for curriculum and program success include incumbent worker success, skill transfer into new industries, and ability of our students to take advantage of new opportunities in emerging fields including social computing and new energy. The department will also create a curriculum development project plan that will identify tasks needed for new and existing courses, as well as, timelines for completion.	
21. Are additional resources needed to accomplish your curriculum goals? If yes, identify the resource, as well as the purpose and rationale for each resource. **(Yes – more time for faculty to develop courses and pursue funding for new programs).**		

Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**	
1 New Full Time Faculty	To lead the Department in the development and teaching of current, relevant course materials.	The loss of key faculty in multimedia and interactive technology has left the Division and COIN/CAST without currency and leadership in Web technology. In order for us to offer new courses and programs, we must find and hire an adjunct faculty member. Adjunct faculty members are not paid for program development, so finding motivated part timers to build a new program has been unsuccessful.	

IV. Student Learning Outcomes

Student Learning Outcome Assessment

1. **Be sure to complete your student learning outcomes assessment for each course online through the C3MS system. When the program review form is online, the resources that you tie to your student learning outcomes will be included here on this form.**
2. Are additional resources needed to accomplish your student learning outcome goals that were not included in C3MS report? If yes, identify the resource, as well as the purpose and rationale for each resource.

Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**
Time	Focus on courses	Many faculty across the campus have complained that the amount of time required to do a thorough job of SLO development by established deadlines isn't congruent with full teaching loads in any one quarter. This is why we are developing the 'four seasons of curriculum' approach to CORs.

V. Departmental Engagement		
1. What standing committees, if any, does your department maintain? What are the committee charges and membership?	CTIS curriculum committee and developing a more formalized approach to pursuing funding opportunities.	
2. What interdepartmental collaboration beyond college skills has your department been involved in during the past 4 years?	Pursuing The American Recovery and Reinvestment Act of 2009 (ARRA) opportunities, engaging in professional and industrial activities such as Google I/O participation.	
3. What has your department done since its last program review to establish connections with schools, institutions, organizations, businesses, and corporations in the community?	We have a Business Advisory Group which meets quarterly to advise us on industry trends and needs. We are also highly integrated into NOVA works planning activities for funding / deployment of new employment training (especially ARRA and new energy development).	
4. In what ways, if any, are you or have you worked with area high schools to align curriculum from the high school to your course?	We work through Foothill HS outreach activities (Rhonda Goldstone) and have a presence in our Technology Day on a yearly basis.	
5. In what ways if any, are you working with CSUs, UCs, private, or out-of-state institutions to align courses and develop articulation agreements?	CTIS and COIN has a connection with SJSU and UCSC to develop new courses and programs in Informatics and Social Computing. Our goal is to develop a GE social computing course which articulates to UCSC.	
Summary of Planning Goals and Action Plans		
6. What are your goals with respect to departmental engagement and how will those goals be measured?	Within COIN we are developing a stronger working relationship within our group in new Web development tools, including social and interactive media. We will need to be working very closely with industry in developing new courses and programs which will be an important measure for engagement success.	
7. Are additional resources needed to accomplish departmental engagement goals? If yes, identify the resource, as well as the purpose and rationale for each resource.		

Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**	
New faculty	Replace loss of interactive multimedia faculty	We are deficient in a core area of Web	

	member.	technology instruction – and our department has also lost faculty time through Article 18 and other departmental assignments (NSF grants).	

VI. Professional Development	
1. List a sampling of professional development activities that faculty and staff have engaged in during the last two years.	Conferences, workshops, classes, including Google I/O (annual summit), Stanford Media, and PARC (Palo Alto Research Center) on Web 2.0, mobile and human computing systems. Also, webinars on ETUDES-NG and @One
2. What opportunities does your department take to share professional development experiences with colleagues?	Department meetings, online discussions, faculty listserve, and thoughtful discussions during division planning meetings.
3. In what ways have faculty shared, discussed, and used professional development activities to improve program effectiveness?	We have started development of the new Web markup certificate, social media / social computing, and new interactive formats for communication and collaboration. PARC and Stanford (MediaX), and Google I/O were critical components of this dialog.
4. In what ways have staff shared, discussed, and used professional development activities to improve program effectiveness? What professional development needs do you have in the coming years?	We have added an experimental course in Social Media, and integrated content form PARC/Stanford. More college offerings in development of effective online instructions would be valuable, since the majority of our offerings are online.
5. Are there unmet or upcoming professional development needs among faculty in this program? If yes, then please explain a proposed plan of action for addressing this need and any necessary resources.	Problem – Technology programs come up quickly which does not align with college professional development approval process. Faculty must find time during the day or ad hoc to attend these conferences, some pay their own way to attend. Need release time for professional and curricular development. College sponsored grant-based/research-focused externships would allow faculty to work, teach, and gain new and relevant competencies without affecting the limited budget funding.
Summary of Planning Goals and Action Plans	
6. What are your goals with respect to professional development and how will those goals be measured?	It is difficult to make 5-year plans in technology; however we have planned to add social media/computing as a competency and new Web markup formats (HTML 5), and rebuild multimedia and interactive technologies. Maintaining Instructor and Curricular Currency is especially challenging

VI. Professional Development			
		given the pace of change and the loss of faculty headcount in COIN/CAST.	
7. Are additional resources needed to accomplish professional development goals? If yes, identify the resource, as well as the purpose and rationale for each resource.			
Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**	
A. Additional faculty	Multimedia and interactive technology	Given consistent growth in enrollment, WSCH, productivity, and job demand, the Division will be seeking an additional Full-time faculty position that is broadly defined with a wide skill set so that the new member can contribute to several CTIS departments.	
B. Release time	Social computing certificate	Work with other faculty across the campus to develop social computing in a global context – integrating sociology, psychology, and collaborative problem solving. These fit the mission of a community college – develop effective community collaboration skills.	

VII. Support Services		
Support Services		
Consider the support services needed by your program when reflecting over the following questions		Comments or explanations of barriers and solutions.
1. Is there adequate clerical or administrative support for this program?	**Yes** | No	The online bookstore ordering form needs considerable revision. There are also CD versions of several of our texts that are considerably less expensive, however have not been available in sufficient time and quantity. Bookstore interaction with students has been expressed by many of our students.
2. Are there sufficient college and departmental computer labs available to support this program?	Yes | **No**	We need more computer labs; labs/classrooms have become increasingly impacted at key times (AM) by other non CTIS programs. Availability is a real issue.
3. Are the library and media resources provided by the college sufficient to support up-to-date program instruction?	Yes | **No**	Safari U - establishing eTextbooks for current course. We also need updated software licenses.
4. Are adequate services provided in compliance with program needs for meeting health and safety guidelines?	**Yes** | No	Yes – computer labs are straightforward to maintain
5. Are the custodial services to this program in compliance with program needs for meeting health and safety guidelines?	**Yes** | No	Yes - computer labs are straightforward to maintain
6. Are accommodations for students with disabilities adequate, including alternative media, testing, and tutorial?	**Yes** | No	Yes – media center is ADA compliant (as is FGA).
7. Are general tutorial services adequate?	Yes | **No**	We have limited assistance for basic skills offered in our KCI/CTIS open. Online students have not access these on-campus resources.
8. Are academic counseling and advising services available and/or adequate to support students enrolled in the program?	**Yes** | No	Yes

9. Do students have access to and can they effectively use appropriate information resources?	Yes | **No**	There are resources within the library and media center. However, online students typically do not use these resources. In addition, many students do not receive training on how to effectively use online technology.
10. Specifically related to distance learning, do you have appropriate faculty support services and/or effective training for faculty teaching online?	Yes | **No**	There are significant concerns that with on-going budget cuts support in this area will be impacted, although we could use more training in developing effective course materials rather than just CMS training.
Marketing & Outreach		
11. What impact do you feel the college catalog, class schedule, and online schedule of classes have on marketing your program? Does the marketing accurately reflect your program, requirements, and services available?	Limited - information on the college website is not an effective marketing tool for increasing enrollment, rather listing information about courses. We need to have an effective email/messaging tool (constant contact) for outreach and active student engagement, like De Anza has. Schedule timelines driven by printed catalog – so it is not always the most current information (FGA media could be more marketing linked)	
12. What impact does the college or departmental website have on marketing your program?	**Student internship outreach – is not database driven**	
13. Is there any additional assistance from marketing that would benefit your program? If yes, explain.	Email marketing tools – such as support for constant contact and direct email / database marketing to grow and expand interest around our programs – especially for lightly filled courses where better outreach could build both WSCH and productivity.	
14. If you were to collaborate with the Outreach staff, what activities would be beneficial in reaching new students?	Outreach needs to be electronic – lightweight, fast, and interactive	
Programs, clubs, organizations, and special activities for students		

15. List the clubs that are designed specifically for students in this program. Describe their significant accomplishments.		The students have organized a local Association of Computing Machinery (ACM), which has about 60 members. The effort has been mostly student-driven. There are untapped possibilities in having students compete both locally and nationally. The division has provided an opportunity for Foothill ACM students to meet with the San Jose State Computing club. Joint activities should be further encouraged. Since a good portion of COIN students are distance education, participation in student clubs has not been active.	
16. List any awards, honors, scholarships, or other notable accomplishments of students in this program.		Student Web site design will be chosen by the Foothill De Anza Police department and the student will work with the FHDA police to implement the site.	
Summary of Planning Goals and Action Plans			
17. What are your goals with respect to support services and how will those goals be measured?		Increase effectiveness of email / database communication.	
18. Are additional resources needed to accomplish your support services goals? If yes, identify the resource, as well as the purpose and rationale for each resource.			
Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**	
Faculty Office Computer Refresh	Operations planning and putting access into action.	The District implementation schedule is constrained by the existing process and limited resources, both human and financial, to refresh faculty computers in a timely manner. As a technology education division this is a real concern. It is essential the CTIS faculty systems are refreshed as a high priority given the demands our curriculum and student needs place upon us.	

VIII. Career and Technical Education Programs	
Response to Labor Market Demand	
1. How does your program meet labor market demand? Cite specific examples and sources.	In 2009, there were 74,083 jobs in the Greater South Bay and Peninsula region in the occupations of computer programmers, computer software engineers (applications), computer software engineers (systems software), computer specialists (e.g., web designers), and multi-media artists and animators (Source: EMSI Complete Employment - 3rd Quarter 2009). It is estimated that their will be a 39% growth in this sector by 2019, which translates to 27,779 new jobs. Combining this figure with expected replacement needs, there will be a demand for 50,029 placements (Source: EMSI Complete Employment - 3rd Quarter 2009). In 2009, there were 27,357 jobs in the Greater South Bay and Peninsula for software publishers, internet publishing and broadcasting, and graphic design services (all of which heavily depend upon COIN areas of curriculum). It is estimated that this sector shall grow by 24%, which translates to 36,001 jobs by 2019. (Source: EMSI Complete Employment - 4th Quarter 2009)
2. Given the number of enrollments projected for the program and necessary to support the program, are there enough openings locally to permit placement of the expected number of graduates?	The department has experience steady growth in WSCH averaging 17% for the period of 06/07 to 08/09. The average class size runs from 25 to 30. Half of our employees are incumbent workers looking to upskill – and half are between jobs – or transitioning in career path – either within CIS, or picking up skills to fill deficiencies which kept them from attaining new positions, or enhancing a resume. As such, the number of new jobs is less a driver for enrollment as is the ability to quickly upskill or fill a deficiency.

3. Has the job market been: declining slowly? steady? growing slowly? growing rapidly? newly emerging?	The job market is still flat, but there is churn, especially in new and higher growth areas, including social media and cloud computing. There will be growth in skill needs as industry moves to HTML 5 and ML messaging for power systems infrastructure. Web 2.0 social networking / social computing – perhaps the biggest shift in Internet and Web technology – the advent of social computing and Web 2.0. Built on an 'open source' ethic and 'made of people', Web 2.0 allows humans to interact with each other, with data, and with applications. Web 2.0 heralds an era where human behavior is organized, amplified, and accelerated through technology mediated social transactions. Web 2.0 is a second negation of Web publishing, more personal than websites, from blogs, to tagging, commenting on Web articles, wiki authoring, and the ability to create and modify content collectively, by a community of individuals. Web 2.0 reinforces and is reinforced by an open source ethic of community built content. Key properties in Web 2.0 include Wikipedia, MySpace and Facebook, Twitter, iTunes (app store) and most of Google tools. Google's business model empathizes purchasing tools from 3rd parties, completing their functionality, giving the tools away (free) to the public, and having community build the content. Key Google tools include Google Maps (GIS), Google Docs, and Google Wave. Web 2.0 is growing large enough, fast enough, and becoming the major Internet contact point for young adults, that it could become a dominant practice within Internet technologies, including social computing (social network analysis), collaboration tools, and developing social technology strategies for businesses, organizations, and social change.	

4. What is the average starting salary a student can expect to make after completing a certificate or degree?	The median hourly earnings for computer programmers is $36.31. (Source: EMSI Complete Employment, Spring 2009). The median hourly earnings for multi-media artists and animators is $26.76. (Source: EMSI Complete Employment - 4th Quarter 2009).	
5. What is the projected average percentage of salary increase in 2 years? 4 years?	Given current market volatility, it is very difficult to forecast, or even expect, significant salary increases over the next 2-4 years.	
Response to Program Credibility/Viability		
6. If advanced degrees are typically needed for career advancement, will the courses required for this program transfer towards completion of the requirements for those degrees?	Most CTIS/COIN students already have advanced degrees. They come for training/re-training. Perhaps as a testament to both the value and credibility of our courses, the majority of our students have recent CS/CIS degrees from local or regional four-year institutions, which either don't offer the courses we do, or not at an affordable rate. Additionally, we believe our project oriented style of instruction is more valuable to these students.	
7. If yes, are the courses in your program aligned and/or articulated with the four-year institutions?	Most of COIN doesn't articulate to four-year colleges as that is not our mission – we give students from four-year schools what they need to succeed in industry, and/or enter a new technology field. Four-year institutions don't have this as a core program focus.	
8. Will this preparation permit students to stay current in their field? Does the program teach basic principles and theory, as well as applications? Is it current? Is it of sufficient rigor to assure the capacity to continue to follow the literature and learn new techniques? Is it of sufficient generality to allow for later shifts in career?	Yes. All COIN courses are reviewed for currency on a semiannual basis – especially as software will update at this pace. COIN course combine foundational knowledge with practical skills and current applications. COIN courses are designed to be challenging enough for the most talented student but offer multiple levels of success for students with various abilities.	

9. Does this preparation provide a significant secondary expertise to primary careers? If yes, explain the purpose of the training – is it designed primarily or in part to meet the needs of those already employed for upward mobility, entrepreneurship, or other career upgrade?	COIN courses are designed for two purposes – to provide competencies in Web and Internet technology for students with CIS/CS degrees and employed in computer related technology, as well as a pathway to learn Web technologies for students entering computer science without formal CS/CIS preparation. As such it provides career upgrade, career transition support, as well as advice for community members with entrepreneurship goals.
10. Describe any pre-collegiate or noncredit pathways that exist to direct students into the program?	High school students attend our courses from time to time and usually do very well – we don't have a non-credit program to funnel students in – but it would be effective in aggregation.
11. How does this program prepare students for competitive employment?	COIN courses with project based assignments are designed to bring out the very best in students, and offer feedback to both support and challenge students seeking to test their skills.
Advisory Board	
12. List your advisory board members. The list of advisory board members should include their job titles as well as their affiliations, and an accompanying explanation should make clear that the professionals on this committee represent those within the industry who would hire graduates of a proposed CTE program.	We have had several on-going informal meetings with engineers at Google where we have explored topics including a Google tools and applications certificate. We have also started a number of conversations around energy analytics, and likewise conversations with genomics firms about bioinformatics training for nurses, doctors and health practitioners. **Vikram Chowdiah, PhD – Intel Coporation -** Vikram currently works at Intel Corporation in the Microprocessor validation department. He led the development of a High Performance Computing lab for validating Intel's processor architecture. He has also worked on various aspects of high end server validation. This work entails both hardware and software validation. High-end scientific applications and server operating systems have been validated for the end user based on his work.

	Donna Dulo, MS, MA, MSCIS, MBA – Department of Defense - Donna is a mathematician and computer scientist for the Department of Defense currently heading the Department of Computational Statistics for the US Army in Monterey. **Peter Kellner -** founded 73rd Street Associates in 1990, where he successfully delivered systems for university clinic scheduling, insurance company management, and a turnkey physician office management to more than 500 customers nationwide. Peter is also the founder of the Silicon Valley Code Camp, a free annual conference that draws developers from around the world to discuss, share, and explore new technologies and developmental approaches. Among the technologies he currently is involved with are ASP.NET, Silverlight, Oracle, Java, VOiP, and,SQL Server. **Mahmood Khan, MBA, B.Sc., (*PMP) -** is the President of Global Enterprise Strategy and Implementation (GESI). Prior to forming GESI, he served as a Program/Project Manager-Practice Principal with Hewlett Packard Consulting and Integration. Prior to HP and during the past 20+ years in IT, he has worked at IBM Global Services, start-up Bay Area consulting company, ROLM/Siemens and Wang. Most of his experience has been with large customers in Telecommunication, Financial/Banking and Manufacturing industries to transform enterprise IT, application development, and global operations.	

	Michael Slinn - Mike has over three decades of experience as a hands-on software entrepreneur. Mike focuses on value creation, including business drivers, technology and engineering methodology. Accepted as a software expert in US Federal Court, Mike has opined in cases involving IP and contractual disputes. He has published approximately four dozen articles in industry publications, and has been technical reviewer for dozens of books prior to publication by O'Reilly & Associates & Wrox Press. Mike has written operating systems, compilers, interpreters, graphics systems, desktop applications, scientific and engineering applications, server-side applications, middleware, communication protocols and business plans. Currently he works with Adobe Flex / AIR, Python, Java, C & C++ and dabbles in functional programming. Mike was past Chairman and co-founder of the Silicon Valley Ruby Conference. **Peter F. Young -**Peter is currently a United States Fulbright Scholar and just returned to the Bay Area from his year-long teaching assignment at Belarusian State University's School of Business and Management of Technology. He is an experienced journalist, educator, and digital media practitioner who is an adjunct faculty member teaching interactive & multimedia technologies for San Jose State University, and UC Berkeley's Extension Program. **Allen Rhodes, MS -** currently works as a US Field Service Channel Manager for Apple Inc. His team oversees the third party service providers in the US and Canada who are authorized to repair Apple computers and equipment. This work entails ensuring high customer satisfaction while lowering operational cost by managing all aspects of the Apple Authorized Service Providers, which includes compiling and analyzing detailed report data to determine areas for improvement, which drive designing,	

13. List the dates and number of members attending of your most recent advisory board meetings.	implementing, and measuring changes needed to improve service delivery. The Advisory Board meets quarterly. The last meeting was held during the 09 spring term. **Members Present:** Luis Barreto (CTIS Lab Administrator at Foothill College), Peter Barling (CTIS Instructor), John Berry (CTIS Instructor), Elaine Haight (CTIS Instructor), Jerry Cellilo (CTIS Counselor & Instructor), Vikram Chowdiah (Intel), Ken Seto (CTIS Instructor), Bob Cormia (CTIS Instructor), Donna Dulo (Department of Defense), Mahmood Khan (HP), Evan Lim (CTIS Instructor), Newton Chan (CTIS Instructor), Scott Gever (CTIS Instructor), Mike Murphy (CTIS Instructor), Bhavi Patel (CTIS Admin), Michael Slinn (Software Entrepreneur), Tim Woods (CTIS Division Dean), Mimi Will (CTIS Instructor), and Peter Young (Computer Education).

14. What have been the major outcomes of your advisory board meetings? Of those outcomes, which have been acted upon, and what is your plan of action with regard to other outcomes discussed?	Focus on service industries related to testing, and emerging industries. Conversations with industry leaders in social media and interactive technologies have reinforced the intentions of our faculty to incorporate curriculum with Web 2.0 content and focus, and additionally cloud computing. The Advisory Board provides feedback and industry perspectives related to CTIS program development and direction. As a result of our last meeting, it was recommended that: In addition to the technical skills, employers are looking for people with… → People skills → Teamwork skills → Reading, writing and presentation skills → Judgment skills → Strong understanding of ethics and personal responsibility. → Focus on value or "wealth" creation. Students should be prepared to face global competition. There seems to be an EDD (Education Deficiency Disorder) in the United States. USA is great for innovation but many good jobs are going outside. The group has also discussed exploring new program in emerging areas such as: \

	[1] Data Center Virtualization - Grid computing as a utility is driving a new set of data center economics that is fundamental to the shift we are seeing in many other areas, some detailed below. For example, companies like 3Tera offer tools which allow complex web applications to be built, deployed and managed using visual tools on massive utility computing grids. This will fundamentally change how future data centers will used as well as the underlying cost structure of deploying and managing web applications. **[2] Cloud Computing Platforms -** Amazon has Amazon Web Services, Facebook has their F8 platform, Google has recently released their App Engine, IBM has announced their "Blue Cloud" and Microsoft is also rumored to be readying their cloud service. Web applications are increasingly using so-called cloud computing services in order deploy and scale applications. Building on data center virtualization technologies (like VMware & Citrix), we are now witnessing the emergence of utility computing as a commodity. **[3] Agile Web Development -** The incredible success of rapid development environments like Ruby on Rails, Python Django and even the Zend PHP Framework indicates the importance of not just the underlying dynamic language, but the supporting application framework as well. These next generation web development frameworks consolidate best practices and enable community support in unprecedented ways, and offer great opportunities. **[4] Social Computing -** While the recent interest in companies like MySpace, LinkedIn and Facebook is intriguing, more important are the implications to both consumer and enterprise business models. The 'social graph' is quickly becoming an important concept and computing data structure, as well as issues of privacy and liability. As Google pushes forward with Open Social and Facebook makes their F8 platform Open Source (sort of), social computing expertise is becoming vital.

Program Accreditation	
15. Is this program subject to approval by specialized state, regional, or national accrediting agencies?	No
16. What is the program's accreditation status?	N/A
17. Indicate recommendations of the most recent accreditation evaluation of the program and corrective actions taken or planned. Most recent accreditation report and all additional pertinent documentation and explanations should be available on site for consultant review.	N/A
18. Provide a brief analysis of student performance on licensure or board exams on first attempt.	N/A
19. What indicators does your program use to determine success of our students after completion?	We lack a tracking mechanism for following students after course or program completion. The nature of our marketing efforts (which lack 1:1 correspondence) prevent us from tracking data.
20. Does your program survey employers for satisfaction of our students who have earned a degree/certificate? Provide brief analysis of employer satisfaction.	N/A
21. Does the department's analysis of labor market demand, advisory board recommendations, and accreditation status (if applicable) reflect the data?	N/A
22. Have any/all issues been identified in the program plan and are they adequately addressed with appropriate action plans? Explain.	The key issues are hiring additional faculty to rebuild the computer applications and interactive media programs. Additionally, faculty need time (release time) to develop new programs in social media/networking and cloud computing.
Summary of Planning Goals and Action Plans	

23. What are your 4-year goals based on areas identified in the Career and Technical Education section of the program plan and how will those goals be measured?	Four-year goals include rebuilding the CAST program, upgrading COIN to include social media, adding Internet course content related to cloud computing, and evolving Web markup courses to include HTML 5, XHTML, and integration of Semantic Web content. Institutions of higher education have a social obligation to offer individuals an opportunity to improve their lives through better education. It is essential that despite current economic conditions, we find creative and innovative means to increase **access and awareness** so that underserved populations have the ability to begin a path of self-improvement. In addition to raising access and awareness, we must endeavor to remove all possible barriers that stand in the way of student success and persistence. Multiple studies have shown that an institution's constant pursuit of **excellence in teaching and learning** has a tremendous positive effect upon student success and persistence. The development of clear strategic objectives that guide institutional objectives can lead to better program development and student learning outcomes. In addition to clear learning outcomes, there is significant research that observes students' early and frequent interaction with institutional faculty and staff can lead to higher retention levels. High levels of interaction lead to greater feeling of academic competence along with an improved sense of self-efficacy. All operations should be grounded in this philosophy.

		The development of **workforce readiness and communication** is fundamental need in order to improve our community. When students enter or re-enter the workforce, their newly acquired skills make them more productive, while enhancing their individual earning potential and fueling local economic growth. In order to improve and promote **program effectiveness, planning and assessment –** it is necessary to seek ways to identify, collect, and evaluate meaningful data that could lead to improved instruction and higher academic quality. We will work closely with the Office of Curriculum and Instruction to identify existing (and new) data sources that might be utilized for better program development and decision making. From a project management perspective, we shall endeavor to (1) improve institutional methods of identification, servicing, and progress tracking for career technical education students; (2) improve career and academic counseling resources for CTE students focusing on student program selection and student retention; (3) research and implement an ePortfolio system for CTE student career planning and workforce preparation; (4) create a scalable, multidisciplinary Workforce Literacy Skills Program; (5) create a new model for inter-organizational CTE resource and service coordination; and (6) create a new pathways model for internship and job placement opportunities leading to higher wage and high demand areas.	
24. Are additional resources needed to accomplish career and technical education goals? If yes, identify the resource, as well as the purpose and rationale for each resource.			
Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**	

IX. Resource Planning: Personnel, Technology, Facilities, and Budget	
Faculty	
1. How does your PT/FT ratio impact the program?	Negatively. At present, we have no full time faculty to lead the Department.
2. What staffing needs do you anticipate over the next four years. (Consider: retirements, PDL, reassigned time, turnover, growth or reduction of the program)	Based on upcoming retirements and reassigned time, we have real need for at least one if not two full-time faculty. We need some 'new blood' to invigorate the program.
Classified Staff	
3. What staffing needs do you anticipate over the next four years. (Consider: retirements, PDL, reassigned time, turnover, growth or reduction of the program)	Because most of our classes are online and students provide their own equipment and software, our most important classified need is servers and server admin.
Technology and Equipment	
4. Are the existing equipment and supplies adequate for meeting the needs of the instructional program?	Students are required to buy expensive software bundle packages. Negotiate student prices and unbundle Regional Economy of scale for software negotiation. Our hardware in labs on campus are not up-to-date.
5. Do you have adequate resources to support ADA needs in your physical and/or online courses and classrooms?	**No.** The division as a whole has been and will continue to be looking to better identify barriers opposing student success.
6. Is the technology used in your distance education courses appropriate to the nature and objectives of your courses? Please explain how it is appropriate or what changes are underway to make it appropriate. Explain.	Adequate. Planned re-evaluation of appropriate CMS, etc. yearly by the college. (e.g., COOL committee)
Technology & Equipment Definitions	
• **Non-instructional Equipment and Supplies:** includes equipment for "office use" that is non-instructional and that is not used in a lab or classroom – it includes non-programmatic equipment for individual instructors and staff, such as a desktop computer for office use. Desktop technology (computers, printers, scanners, faxes) and software requests are processed through your Dean or Director.	
• **Instructional Equipment and Supplies:** includes technology, software, and supplies used in courses or labs, including occupational program equipment. Instructional program equipment requests are prioritized by the department and then by the Dean or Director.	
• **Durable Equipment and Furniture:** includes non-instructional, non-technology equipment (chairs, tables, filing cabinets, vehicles, etc.) necessary to improve the operational functioning of the program/department.	

• **Note:** It is recommended that divisions perform and maintain an inventory of all their technology and equipment.		
Facilities		
7. Are your facilities accessible to students with disabilities?		Yes
8. List needs for upgrades for existing spaces		The KCI has adequate laboratory space but is often over booked.
9. List any new spaces that are needed		We may need additional laboratory space for lecture/lab activities.
10. Identify any long-term maintenance needs.		Upgrade of computers and replacement of software.
11. Are available general use facilities, such as classrooms, laboratories, and faculty office/work space adequate to support the program? Please explain.		Yes – current facilities are adequate to support the program.
12. Are work orders, repairs, and support from district maintenance adequate and timely? Please explain.		Yes – software technicians respond to trouble tickets and request for maintenance in a timely fashion.
Budget		
13. Are the A-budget and B-budget allocations sufficient to meet student needs in your department?		No – B budgets are significantly depleted due to the state budget difficulties. We have needs to purchase small computer items and additionally provide for short (one-day) workshops for faculty.
14. Describe areas where your budget may be inadequate to fulfill program goals and mission.		Hiring faculty, and providing small computer support item such as software.
15. Are there ways to use existing funds differently within your department to meet changing needs?		No – the funds are completely / practically depleted.
Summary of Planning Goals and Action Plans		
16. What are your goals with respect to resource planning and how will those goals be measured?		Ideally we would provide release time and some new software and equipment
17. Are additional resources needed to accomplish your resource planning goals? If yes, identify the resource, as well as the purpose and rationale for each resource.		
Identified Resource	Purpose	If requesting funding, provide a rationale for how each request **supports one or more college strategic initiative and/or supports student learning.**

X. Final Summary of Goals, Commitments to Action, and Resource Requests

1. Upon completion of this program plan, provide a comprehensive summary of your goals and action plans for the next 4 years.

COIN department has three goals in the next few years. First, rebuild the CAST department with a focus on multimedia and interactive technologies, and integrate Internet design tools including Dreamweaver with Flash. Second, build up the Web markup language program to include HTML 5, further XHTML enhancements, and Semantic Web technology. Third, develop cloud computing technology curriculum and perhaps a Google certificate. Fourth, develop a social computing certificate with one course, 'Social Computing in a Global Context', slated to enter the GE pattern, with the goal of developing a cross disciplinary certificate in social computing. Additionally, COIN will stay abreast of any changes in emerging technologies, such as energy, which might impact Internet computing. As action plans, CTIS will continue to lobby for a faculty to rebuild CAST competencies in multimedia and interactive technology – through adjunct hires if necessary. We must also seek to maintain Web development competency as formats change – meaning faculty professional development – and input from a robust advisory group. Developing a cloud computing practice will begin with identifying industry resources who can both advise and help support our program – possibly Google engineers in education. COIN cloud computing efforts might also be integrated with CIS cloud computing efforts. An action program for the social computing program is to develop a suite of courses in a social computing certificate, including a GE course (mentioned above) and a suite of three courses which will comprise a three course program.

Key Division Priorities:

- Access and awareness
- Excellence in teaching and learning
- Workforce readiness and communication
- Program effectiveness – planning and assessment

Key Departmental Objectives: The Department strives to create a student-centered learning environment that supports:

- Professional development, life-long learning , and transfer education,
- Training incumbent professional workers and technicians and a transitioning workforce,
- Training students in current and emerging developmental techniques and standards, including lifelong learning, as well as, fast skilling in rapidly changing fields.

In order to meet these objectives, the Department shall:

- Maintain and enhance instructor and curricular currency.
- Identify and address factors influencing student drops and late Ws as a strategy for student retention.
- Identify ways to encourage and increase certificate/degree program completion.
- Retire outdated curricula and create new relevant courses.
- Identify problem areas for underrepresented populations.
- Examine and address student equity issues in the areas of retention, success, and non-success.
- Improve our ability to meet current and future industry demands.
- Utilize collaborative technologies to support curriculum and program development.
- Mentor new faculty in utilizing new technologies within their courses.
- Encourage faculty to attend more industry seminars.
- Develop strategic workforce certificates for professional development.
- Increase our industry partnerships through, advisory committee, internships, and workforce program development.
- Work closely with the College marketing department in planning and implementing better promotion for programs.
- Improve institutional methods of identification, servicing, and progress tracking for career technical education students.
- Improve career and academic counseling resources for CTE students focusing on student program selection and student retention.

2. Final Resource Request Summary: **When the program planning and review form is online – the section below will automatically fill in with your responses from each section.**

Note: If you are requesting resources this year, these items have to be included in your current program review. If you want the college to understand your full range of need, then list every current and upcoming resource need in each section above.

Resource	**Purpose**	**Rationale**	**Estimated Cost**

Timothy J. Woods, PhD	December 16, 2009
Supervising Administrator Signature	*Completion Date*