2013-2014 ANNUAL ASSESSMENT REPORT

Part 1: Background Information

B1. Program name: [_____BS in Computer Science____]

B2. Report author(s): [____Mary Jane Lee___]

B3. Fall 2012 enrollment: [___430____]

Use the *Department Fact Book 2013* by OIR (Office of Institutional Research) to get the fall 2012 enrollment: (http://www.csus.edu/oir/Data%20Center/Department%20Fact%20Book/Departmental%20Fact%20Book.html).

B4. Program type: [SELECT ONLY ONE]

Х	1. Undergraduate baccalaureate major
	2. Credential
	3. Master's degree
	4. Doctorate: Ph.D./E.D.D.
	5. Other, specify:

Part 2: Six Questions for the 2013-2014 Annual Assessment

Question A (Q1): Program Learning Outcomes (PLO) Assessed in 2013-2014.

Q1.1. Which of the following program learning outcomes (PLOs) or Sac State Baccalaureate Learning Goals did you assess **in 2013-2014**? (See 2013-2014 Annual Assessment Report Guidelines for more details). [CHECK ALL THAT APPLY]

/ L	1	
	1. Critical thinking (WASC 1) [*]	
	2. Information literacy (WASC 2)	
	3. Written communication (WASC 3)	
Х	4. Oral communication (WASC 4)	
	5. Quantitative literacy (WASC 5)	
	6. Inquiry and analysis	
	7. Creative thinking	
	8. Reading	
Х	9. Team work	
	10. Problem solving	
	11. Civic knowledge and engagement – local and global	
	12. Intercultural knowledge and competency	
	13. Ethical reasoning	
	14. Foundations and skills for lifelong learning	
	15. Global learning	
	16. Integrative and applied learning	
	17. Overall competencies for GE Knowledge	
	18. Overall competencies in the major/discipline	
	19. Others. Specify any PLOs that were assessed in 2013-2014	
	but not included above:	

a.
b.
с.

* One of the WASC's new requirements is that colleges and universities report on the level of student performance at graduation in five core areas: critical thinking, information literacy, written communication, oral communication, and quantitative literacy.

Q1.1.1. Please provide more detailed information about the PLO(s) you checked above:

Computer science student learning outcomes or PLOs are abilities a B.S. Computer Science graduate should possess at the time of graduation. The selection of our nine PLOs is guided by the Computing Accreditation Commission (CAC) of ABET, Inc., the accrediting body for computer science programs. Our PLOs are listed below.

At graduation, a B.S. Computer Science student should be able to:

- (a) Apply fundamental knowledge of mathematics, algorithmic principles, computer theory, and principles of computing systems in the modeling and design of computer-based systems that demonstrate an understanding of tradeoffs involved in design choices.
- (b) Analyze a problem, specify the requirements, design, implement, and evaluate a computer-based system, process, component, or program that satisfies the requirements.
- (c) Apply design and development principles in the construction of software systems of varying complexity.
- (d) Use current skills, techniques, and tools necessary for computing practice.
- (e) Function effectively as a member of a team to accomplish a common goal.
- (f) Understand professional, ethical, legal, social, and security issues and responsibilities; analyze the impact of computing on individuals, organizations, and society both locally and globally.
- (g) Write effectively.
- (h) Give effective oral presentations.
- (i) Recognize the need for, and the ability to engage in, continuing professional development.

For each PLO, the faculty identified a set of measurable performance criteria or indicators in upper division core courses. The PLOs and their performance criteria/indicators are provided in Appendix A. Assignments, exam questions, surveys, rubrics, etc. were developed to evaluate these performance criteria. Outcomes (a) through (d) address the theoretical concepts, technical knowledge, and skills necessary for our B.S. graduates to be successful upon graduation. Outcomes (e) through (i) address non-technical characteristics or abilities the Department expects graduates to have, i.e., effective oral and written communication skills, teamwork, life-long learning, and ethical, legal responsibilities.

In 2012-2013, the Department assessed PLOs (a) through (d). This year, 2013-2014, we assessed PLO (e) Team work and PLO (h) Oral presentation. We also worked on closing the loop in areas where the established percentage of students meeting or exceeding criteria was below our minimum threshold of 75%. For 2014-2015, we plan to assess PLOs (f), (g), and (i) and close the loop in areas of deficiency to complete our three-year assessment cycle. PLOs (e) and (h) and their performance criteria are listed below.

PLO (e) Function effectively as a member of a team to accomplish a common goal.

- e-1. Cooperate and collaborate as a team member.
- e-2. Communicate and listen. Keep teammates informed.
- e-3. Face conflicts and resolve differences
- e-4. Contribute equally as a participant in the project.

PLO (h) Give effective oral presentations

- h-1. Use an effective presentation style and delivery (e.g., speak clearly and with confidence, attract and hold the attention of the audience, maintain eye contact, and use clear, appropriate visual aids.)
- h-2. Use appropriate vocabulary and accurate technical terms and phrases. Consistently follow correct rules of standard English.
- h-3. Provide a well-organized and clear technical presentation of sponsor's problem, design of software solution, the highest priority feature and its functionality, and key testing issues.
- h-4. Articulate project-related issues, e.g., difficulties encountered and how they were dealt with, and lessons learned.

Q1.2. Are your PLOs closely aligned with the mission of the university?

X	1. Yes
	2. No
	3. Don't know

Q1.3. Is your program externally accredited (except for WASC)?

Х	1. Yes
	2. No (If no, go to Q1.4)
	3. Don't know (Go to Q1.4)

Q1.3.1. If yes, are your PLOs closely aligned with the mission/goals/outcomes of the accreditation agency?

X	1. Yes
	2. No
	3. Don't know

Q1.4. Have you used the *Degree Qualification Profile* (DQP)^{*} to develop your PLO(s)?

	1. Yes
Х	2. No, but I know what DQP is.
	3. No. I don't know what DQP is.
	4. Don't know

* **Degree Qualifications Profile (DQP)** – a framework funded by the Lumina Foundation that describes the kinds of learning and levels of performance that may be expected of students who have earned an associate, baccalaureate, or master's degree. Please see the links for more details:

http://www.luminafoundation.org/publications/The_Degree_Qualifications_Profile.pdf and http://www.learningoutcomeassessment.org/DQPNew.html.

Question B (Q2): Standards of Performance/Expectations for EACH PLO.

Q2.1. Has the program developed/adopted **EXPLICIT** standards of performance/expectations for the PLO(s) you assessed in **2013-2014 Academic Year**?

Х	1. Yes, we have developed standards/expectations for ALL PLOs assessed in 2013-14.
	2. Yes, we have developed standards/expectations for SOME PLOs assessed in 2013-14.
	3. No (If no, go to Q2.2)
	4. Don't know (Go to Q2.2)
	5. Not Applicable (Go to Q2.2)

Q2.1.1. If yes, what are the desired levels of learning, including the criteria and standards of performance/expectations, especially at or near graduation, for **EACH PLO** assessed in 2013-2014 Academic Year?

Standards of performance and expectations:

For all PLOs, the Department established a minimum expectation that at least 75% of students to meet or exceed performance criteria/indicators. See response to Q1.1.1 for criteria used in assessing PLOs for 2013-2014.

PLO (e) Effective team work was assessed using data from two surveys. The first survey solicited information from students in CSC 191 Senior Project: Part II, the culminating experience required of all majors. CSC 191 students were asked to complete a multiple choice survey on their thoughts, feelings, and experiences as members of project teams. See Appendix B for the survey and Appendix C for student response data for spring 2013 and spring 2014. Each survey question addressed one of the four performance criteria of team work. A particular criterion may have from one to four related questions. Survey responses for each question indicating whether a criterion was met or exceeded were identified. The percentage of responses satisfying criterion. Averages for the two semesters were computed. Finally the overall percentage for the PLO was computed indicating whether students believed that they were effective team members.

The second survey was completed by employers of students who work as interns in a company or state/federal agency during their junior or senior year. Internships provide students with valuable work experience before they complete their B.S. degrees. At the completion of an internship, supervisors were asked to rate an intern's performance in a number of different areas, one of which is the ability to function as a team member. The data for several semesters was considered

PLO (h) Effective oral communication was assessed in Fall 2013 in CSC 191 using a rubric and a survey. Both were completed by faculty evaluators. The rubric (see Appendix D) was used to assess presentation style/delivery and language/vocabulary. Data obtained from faculty evaluations are provided in Appendix E. The survey was used to rate a team's performance on communicating technical content and required students to cover specific technical aspects of their project in their presentations. This evaluation form is provided in Appendix F and faculty evaluation data are given in Appendix G.

Q2.2. Have you published the PLO(s)/expectations/rubric(s) you assessed in 2013-2014?

Х	1. Yes
	2. No (If no, go to Q3.1)

Q2.2.1. If yes, where were the PLOs/expectations/rubrics published? [CHECK ALL THAT APPLY]

Х	1. In SOME course syllabi/assignments in the program that claim to	
	introduce/develop/master the PLO(s)	
	2. In ALL course syllabi/assignments in the program that claim to introduce	
	/develop/master the PLO(s)	
	3. In the student handbook/advising handbook	
	4. In the university catalogue	
	5. On the academic unit website or in the newsletters	
Х	6. In the assessment or program review reports/plans/resources/activities	
	7. In the new course proposal forms in the department/college/university	
	8. In the department/college/university's strategic plans and other planning documents	
	9. In the department/college/university's budget plans and other resource allocation	
	documents	
	10. In other places, specify:	

Question C (Q3): Data, Results, and Conclusions for PLO (e)

Q3.1. Was assessment data/evidence **collected** for 2013-2014?

Х	1. Yes
	2. No (If no, go to Part 3: Additional Information)
	3. Don't know (Go to Part 3)
	4. Not Applicable (Go to Part 3)

Q3.2. If yes, was the data **scored/evaluated** for 2013-2014?

Х	1. Yes
	2. No (If no, go to Part 3: Additional Information)
	3. Don't know (Go to Part 3)
	4. Not Applicable (Go to Part 3)

Q3.3. If yes, what **DATA** have you collected? What are the **results, findings, and CONCLUSION(s)** for EACH PLO assessed in 2013-2014? In what areas are students doing well and achieving the expectations? In what areas do students need improvement?

PLO (e) Team Work

A survey was developed to elicit students' thoughts and perspectives on their experiences as members of project teams. While the lecture and lab instructors for a particular project team may have some idea about how effectively a team member or an entire team performs, it was believed that the perspectives of the students themselves would best reflect the actual team dynamics. The Department utilized the standard form used to elicit student opinions on team work in CSC 191 for this assessment. Thirty-four

students on eight project teams in CSC 191 Senior Project in spring 2013 and 25 students on six teams in spring 2014 completed the individual student survey. The data are provided in Appendices C. Summary data of students' perceptions of team effectiveness are presented in Table 1.

		Responses	Num	per of	Perce	ent of	
	Survey	Indicating	Responses	Satisfying	Responses		Average
Performance Criterion	Question #	Criterion Met	Criterion		Satis	fying	Spring 2013
		or Exceeded			Crite	erion	and
							Spring 2014
			n=34	n=25	Spring	Spring	
					2013	2014	
	1	2, 3, 4	33	22	97%	88%	92.5%
	2	3, 4	28	18	82%	72%	77.0%
e-1. Cooperate and collaborate	9	3, 4	31	19	91%	68%	77.3%
as a team member							
			Criterion	Percentage	91%	76%	82%
	2	2.1	24	1.1	710/	4.40/	57.004
	3	3, 4	24	11	/1%	44%	57.3%
	4	3, 4	31	21	91%	84%	87.6%
e-2. Communicate and listen.	5	3, 4	31	14	91%	56%	73.6%
Keep teammates informed.	6	3,4	34	21	100%	84%	92.0%
			a :. :	D (000/		5 20/
			Criterion	Percentage	88%	67%	73%
	7	3 /	25	10	7406	76%	74 8%
a 2 Francisconflicte and massless	/	5,4	23	19	7470	7070	74.070
e-5. Face conflicts and resolve							
differences.			Criterion Percentage		74%	76%	75%
	8	3, 4	27	19	79%	76%	77.7%
	10	3, 4	31	17	91%	68%	79.6%
e-4. Contribute equally as a			•				
participant in the project.			Criterion	Percentage	85%	72%	78.6%
		Over	all PLO (e)	Percentage	84%	73%	77.2%

Table 1. Assessment Results of Student Perceptions of PLO (e) Team Work

The aggregated results indicate that CSC 191 students believe they are performing well in three out of the four criteria. The score for criterion e-2 (communicate with teammates and listen. Keep them informed.) is 73%, slightly below the Department's minimum due to low scores to question #3 (To what extent has the team talked about how to improve the team's effectiveness?) All other questions were scored at or above 73%.

In addition to our students' self-assessment of team work, all students employed as interns are evaluated by the supervisors. Part of the supervisor evaluation includes an assessment of an intern's ability to function as a team member. Data for spring 2013, summer 2013, fall 2013, and spring 2014 are presented in Table 2.

Rating Term	Outstanding	Above Average	Average	Below Average	Weak	Did Not Observe
Spring 2013 (n=4)		4				
Summer 2013 (n=5)	2	2	1			
Fall 2013 (n=8)	8					
Spring 2014 (n=11)	8	3				
Total	18	9	1	0	0	0

 Table 2. Supervisor Evaluation of Student Interns: Ability to Function as a Team Member

Out of 28 interns participating in CSC 195/195A in spring 2013, summer 2013, fall 2013, and spring 2014, all 28 or 100% were viewed by their supervisors as meeting or exceeding criterion with 64% rated as "outstanding" and 32% as "above average". The positive ratings by supervisors support the earlier results and indicate that our students perform extremely well as team members in the "real world".

In summary, based on these results, senior project instructors will discuss with their CSC 190 and 191 students the importance of improving team effectiveness and review the survey results for team work for 2014-2015 to ensure that the low scores for criterion e-2 are not repeated (which would indicate a potential issue with communication among team members.) The overall very positive results for PLO (e) indicate that our students are able to perform as effective and contributing members of a team.

PLO (h) Effective Oral Communication

Student presentations in CSC 191 Senior Project: Part II were assessed at the end of Fall 2013 semester. All students participated in the presentations. PLO (h) oral communication was assessed using four performance criteria:

- presentation style and delivery
- language and vocabulary
- technical content
- technical-related issues

Four teams consisting of 18 students were assessed by three faculty members for the criteria of presentation style and delivery and language and vocabulary using a rubric. See Appendix D. Faculty evaluation data is provided in Appendix E.

Eight teams of 36 students were assessed by three faculty members for technical content and other project-related issues using the eight-question survey provided in Appendix F. The data is provided in Appendix G.

The summary data for all four performance criteria for oral presentation are presented in Table 3.

Performance Criteria	Responses	# Responses	% Responses
S: Survey question	Meeting/Exceeding	Meeting/Exceeding	Meeting/Exceeding
B: Rubric question	Criterion	Criterion	Criterion
K. Rublic question	Chichon	Chichon	Chichon
h-1. Style and Delivery			
Attract and holds interest (R1)	3.4	11 (n=12)	91.7%
There are notes increst (RT)	- 7	× /	
Speak clearly, distinctly, sufficient volume	3, 4	10 (n=12)	83.3%
$(\mathbf{R}2)$			
Present with confidence an enthusiasm (R3)	3.4	11 (n=12)	91.7%
riesent with confidence an entitusiasin (KS)	-, .	()	,, ,
Maintain eve contact $(\mathbf{R}4)$	3.4	8 (n=12)	66.7%
Wantani eye contact (R4)	3, 1	0 (11-12)	00.170
Use appropriate viewel aids (P5)	3.1	11(n-11)	100%
Use appropriate visual alus (K3)	5,4	11 (II-11)	100%
		Critarian Danaanta aa	96 70/
		Criterion Percentage	80.7%
h 2 Longuage and Vasahulawy			
II-2. Language and Vocabulary	2.4	12(n-12)	1000/
Use appropriate vocabulary and accurate	5,4	12 (II=12)	100%
technical terms and phrases (R6)	2.4	12 (12)	1000/
Consistently follow rules of standard English	3, 4	12 (n=12)	100%
(R7)			
			1000/
		Criterion Percentage	100%
h 3 Tachnical Contant			
II-3. Technical Content	ABC	23(n-23)	100%
Explain now software solves sponsor's	A, D, C	23 (II-23)	100%
problems and satisfies sponsor's needs (52)		22 (22)	05.70/
Describe software as designed (S3)	А, В, С	22 (n=23)	95.7%
			10001
Demonstrate highest priority feature and	А, В, С	24 (n=24)	100%
explain functionality and data required (S4)			
Describe key testing issues (S5)	A, B, C	24 (n=24)	100%
		Criterion Percentage	98.9%
h-4. Project-Related Issues		24 (24)	1000/
Describe difficulties encountered and how	A, B	24 (n=24)	100%
team dealt with them (S6)			
Reflect on senior project experience. What	A, B	24 (n=24)	100%
lessons were learned? (S7)			
		Criterion Percentage	95.4%
Faculty member's overall evaluation of	A, B, C	21 (n=21)	100%
presentation (S8)			
	Δασregate Pe	rcentage for e-1 to e-4	95 2%
	Aggregate i e	reentage 101 c-1 to c-4.	15.270

Table 3. Assessment Results of Faculty Evaluation of PLO (h) Oral Communication

For all four performance criteria, aggregate scores ranged from 87% to 100%. Students excelled in their style and delivery (87%), use of language and vocabulary (100%), and in the technical content of their presentations (98.9%), and project-related issues (100%). In terms of style and delivery, students performed very well in all criteria except for maintaining eye contact.:

- use of visual aids (100%)
- holding the audience's interest (91%)
- speaking clearly and distinctly (83%)
- speaking with confidence and enthusiasm (91%).
- maintaining eye contact (67%)

In terms of criterion h-2, language and vocabulary, students received the highest scores. In terms of h-3 presenting technical content, students also performed extremely well. All student presentations end with a reflection of the difficulties encountered, how they were dealt with, and what lessons were learned. Students were assessed on criterion h-4, project-related issues, using a more restricted response set, (only responses of "A" and "B" were defined as satisfying criterion) than was used in criteria h-1 to h-3 because it is believed that students should be able to clearly and candidly articulate their issues. Results indicate that even with a higher standard, students also performed extremely well (100%) in criteria h-4.

Similar to PLO (e) team work, student interns are evaluated in terms of oral communication and use of presentation tools by their supervisors every semester. Results for interns in spring 2013, summer 2013, fall 2013, and spring 2014 are provided in Tables 4 and 5.

Rating Term	Outstanding	Above Average	Average	Below Average	Weak	Did Not Observe
Spring 2013 (n=4)		1	3			
Summer 2013 (n=5)	2	2	1			
Fall 2013 (n= 8)	2	6				
Spring 2014 (n=11)	7	4				
Total	11	13	4	0	0	0

 Table 4. Supervisor Evaluation of Student Interns: Effective Oral Communication

Table 5.	Supervisor	· Evaluation	n of Student	t Interns:	Appropriate	Use of	Presentation	Tools

Rating Term	Outstanding	Above Average	Average	Below Average	Weak	Did Not Observe
Spring 2013 (n=4)	1					3
Summer 2013 (n=5)	1	1				3
Fall 2013 (n= 8)	1	7				
Spring 2014 (n=11)	5	2	2			2
Total	8	10	2	0	0	8

100% of student interns were evaluated positively by their supervisors in the categories of effective oral presentations and use of appropriate presentation tools.

In summary, students perform extremely well in project presentations in terms of style/delivery, language/vocabulary, and technical information. The one area in need of improvement is maintaining eye contact with the audience. In 2014-2015, senior project instructors will remind students of the importance of eye contact in communication.

Q3.4. Do students meet the expectations/standards of performance as determined by the program and achieved the learning outcomes? [PLEASE MAKE SURE THE PLO YOU SPECIFY HERE IS THE SAME ONE YOU CHECKED/SPECIFIED IN Q1.1].

Yes, our students are generally able to meet the expectations for all criteria the department has articulated for PLO team work. For PLO oral communication, our students exceed expectations for all criteria except maintaining eye contact.

Q3.4.1. First PLO: [Team Work]	
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	1. Exceed expectation/standard
Х	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set
	5. Don't know

Q3.4.2. Second PLO :	[Oral Communication
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	•
X	1. Exceed expectation/standard
	2. Meet expectation/standard
	3. Do not meet expectation/standard
	4. No expectation/standard set
	5. Don't know

Question 4 (Q4): Evaluation of Data Quality: Reliability and Validity.

Q4.1. How many PLOs in total did your program assess in the 2013-2014 academic year? [___]

Q4.2. Please choose **ONE ASSESSED PLO** as an example to illustrate how you use direct, indirect, and/or other methods/measures to collect data. If you only assessed one PLO **in 2013-14**, YOU CAN SKIP this question. If you assessed MORE THAN ONE PLO, please check **ONLY ONE PLO BELOW EVEN IF YOU ASSESSED MORE THAN ONE PLO IN 2013-2014**.

1

	1. Critical thinking (WASC 1) ¹
	2. Information literacy (WASC 2)
	3. Written communication (WASC 3)
Х	4. Oral communication (WASC 4)

5. Quantitative literacy (WASC 5)
6. Inquiry and analysis
7. Creative thinking
8. Reading
9. Team work
10. Problem solving
11. Civic knowledge and engagement – local and global
12. Intercultural knowledge and competency
13. Ethical reasoning
14. Foundations and skills for lifelong learning
15. Global learning
16. Integrative and applied learning
17. Overall competencies for GE Knowledge
18. Overall competencies in the major/discipline
19. Other PLO. Specify:

Direct Measures

Q4.3. Were direct measures used to assess this PLO?

Х	1. Yes
	2. No (If no, go to Q4.4)
	3. Don't know (Go to Q4.4)

Q4.3.1. Which of the following DIRECT measures were used? [Check all that apply]

V	1 Constants and is the distribution of the second sec
Λ	1. Capstone projects (including theses, senior theses), courses, or experiences
	2. Key assignments from other CORE classes
	3. Key assignments from other classes
X	4. Classroom based performance assessments such as simulations, comprehensive
	exams, critiques
	5. External performance assessments such as internships or other community based
Х	projects
	6. E-Portfolios
	7. Other portfolios
	8. Other measure. Specify:

Q4.3.2. Please provide the direct measure(s) [key assignment(s)/project(s)/portfolio(s)] that you used to collect the data. [WORD LIMIT: 300 WORDS]

Oral communication was assessed directly by faculty observation of student presentation using a survey and a rubric. Supervisor evaluation of student interns were also used in this assessment.

Q4.3.2.1. Was the direct measure(s) [key assignment(s)/project(s)/portfolio(s)] aligned directly with the rubric/criterion?

X	1. Yes
	2. No
	3. Don't know

Q4.3.3. Was the direct measure (s) [key assignment(s)/project(s)/portfolio(s)] aligned directly with the PLO?

Х	1. Yes
	2. No
	3. Don't know

Q4.3.4. How was the evidence scored/evaluated? [Select one only]

	1. No rubric is used to interpret the evidence (If checked, go to Q4.3.7)
	2. Use rubric developed/modified by the faculty who teaches the class
	3. Use rubric developed/modified by a group of faculty
Х	4. Use rubric pilot-tested and refined by a group of faculty
	5. Use other means. Specify:

Q4.3.5. What rubric/criterion was adopted to score/evaluate the above key

accimmonte/	projectal	portfolio? [Solast one only]	
assignments/	projects/	portiono? [Select one only]	

	1. The VALUE rubric(s)
	2. Modified VALUE rubric(s)
X	3. A rubric that is totally developed by local faculty
	4. Use other means. Specify:

Q4.3.6. Was the rubric/criterion aligned directly with the PLO?

Х	1. Yes
	2. No
	3. Don't know

Q4.3.7. Were the evaluators (e.g., faculty or advising board members) who reviewed student work calibrated to apply assessment criteria in the same way?

Х	1. Yes, for faculty evaluations
	2. No
	3. Don't know

Q4.3.8. Were there checks for inter-rater reliability?

Х	1. Yes, for faculty evaluations
	2. No
	3. Don't know

Q4.3.9. Were the sample sizes for the direct measure adequate?

Х	1. Yes
	2. No
	3. Don't know

Q4.3.10. How did you select the sample of student work (papers, projects, portfolios, etc)? Please briefly specify here:

All students in CSC 191 Senior Project: Part II for Fall 2013 were evaluated for the technical content and project-related issues criteria of PLO (h). One-half of this group was assessed for presentation style/delivery and language/vocabulary due to scheduling issues.

Indirect Measures

Q4.4. Were indirect measures used to assess the PLO?

	1. Yes
Х	2. No (If no, go to Q4.5)

Q4.4.1. Which of the following indirect measures were used?

1. National student surveys (e.g., NSSE, etc.)
2. University conducted student surveys (OIR surveys)
3. College/Department/program conducted student surveys
4. Alumni surveys, focus groups, or interviews
5. Employer surveys, focus groups, or interviews
6. Advisory board surveys, focus groups, or interviews
7. Others, specify:

Q4.4.2. If surveys were used, were the sample sizes adequate?

1. Yes
2. No
3. Don't know

Q4.4.3. If surveys were used, please briefly specify how you select your sample? What is the response rate?

All students working as interns during spring 2013, summer 2013, fall 2013, and spring 2014 were evaluated by their supervisors.

Other Measures

Q4.5. Were external benchmarking data used to assess the PLO?

	1. Yes
Х	2. No (If no, go to Q4.6)

Q4.5.1. Which of the following measures was used?

1. National disciplinary exams or state/professional licensure exams
2. General knowledge and skills measures (e.g., CLA, CAAP, ETS PP, etc)
3. Other standardized knowledge and skill exams (e.g., ETS, GRE, etc)
4. Others, specify:

Q4.6. Were other measures used to assess the PLO?

	1. Yes
Х	2. No (Go to Q4.7)
	3. Don't know (Go to Q4.7)

Q4.6.1. If yes, please specify: [_____]

Alignment and Quality

Q4.7. Please describe how you collected the data? For example, in what course(s) (or by what means) were data collected? How reliable and valid is the data? [WORD LIMIT: 300 WORDS]

Every semester, student teams in CSC 191 are required to give oral presentations of their senior project during the last two weeks of the semester. All team members are required to have a speaking part in the presentations. Three to four faculty members have regularly volunteered to evaluate these presentations. They used a rubric to evaluate style/delivery and language/vocabulary. They used another survey to evaluate technical content and project-related issues. Because these faculty members have participated several times in the past in evaluating presentations and have discussed the standards for evaluation, we believe the data is reliable and valid.

Q4.8. How many assessment tools/methods/measures in total did you use to assess this PLO? [___3_] NOTE: IF IT IS ONLY ONE, GO TO Q5.1.

The three assessment tools used are:

- a rubric used by faculty to evaluate presentation style/delivery and language/vocabulary used
- a rating form used by faculty to grade a student's ability to present technical information and project-related issues
- a rating form used by supervisors to evaluate interns

Q4.8.1. Did the data (including all the assignments/projects/portfolios) from all the different assessment tools/measures/methods directly align with the PLO?

Х	1. Yes
	2. No
	3. Don't know

Q4.8.2. Were ALL the assessment tools/measures/methods that were used good measures for the PLO?

Х	1. Yes
	2. No
	3. Don't know

Question 5 (Q5): Use of Assessment Data.

Q5.1. To what extent have the assessment results from 2012-2013 been used for? [CHECK ALL THAT APPLY]

	Very	Quite a	Some	Not at	Not
	(1)	(2)	(3)	(4)	(9)
1. Improving specific courses	(-)	(-)	X	(-)	
2. Modifying curriculum				Х	
3. Improving advising and mentoring				X	
4. Revising learning outcomes/goals				X	
5. Revising rubrics and/or expectations			Х		
6. Developing/updating assessment plan				Х	
7. Annual assessment reports	Х				
8. Program review					X
9. Prospective student and family information					X
10. Alumni communication				X	
11. WASC accreditation (regional accreditation)					X
12. Program accreditation	Х				
13. External accountability reporting requirement					X
14. Trustee/Governing Board deliberations					X
15. Strategic planning		Х			
16. Institutional benchmarking					X
17. Academic policy development or modification			Х		
18. Institutional Improvement					X
19. Resource allocation and budgeting				X	
20. New faculty hiring				X	
21. Professional development for faculty and staff				X	
22. Other Specify:					

Q5.1.1. Please provide one or two best examples to show how you have used the assessment data above.

In 2012-2013, the Department assessed the technical content of all upper division core courses. Assessment results identified areas in some core courses where improvements in student learning could be made. For example, the instructor in CSC 138 Computer Networks and Internet, an upper division core course, has been working with the Assessment Committee to explore ways to improve student performance in particular topics over the past year. A reassessment in 2014-2015 will be conducted to close the loop.

Q5.2. As a result of the **assessment effort in 2013-2014** and based on the prior feedbacks from OAPA, do you anticipate making any changes for your program (e.g., course structure, course content, or modification of program learning outcomes)?

	1. Yes
Х	2. No (If no, go to Q5.3)
	3. Don't know (Go to Q5.3)

Q5.2.1. What changes are anticipated? By what mechanism will the changes be implemented? How and when will you assess the impact of proposed modifications? [WORD LIMIT: 300 WORDS]

No changes are anticipated.

Q5.2.2. Is there a follow-up assessment on these areas that need improvement?

X	1. Yes
	2. No
	3. Don't know

Q5.3. Many academic units have collected assessment data on aspects of a program that are not related to program learning outcomes (i.e., impacts of an advising center, etc.). If your program/academic unit has collected assessment data in this way, please briefly report your results here. [WORD LIMIT: 300 WORDS]

NA

Question 6 (Q6). Which program learning outcome(s) do you plan to assess next year?

	1. Critical thinking (WASC 1) ¹	
	2. Information literacy (WASC 2)	
Х	3. Written communication (WASC 3)	
	4. Oral communication (WASC 4)	
	5. Quantitative literacy (WASC 5)	
	6. Inquiry and analysis	
	7. Creative thinking	
	8. Reading	
	9. Team work	
	10. Problem solving	
	11. Civic knowledge and engagement – local and global	
	12. Intercultural knowledge and competency	
Х	13. Ethical reasoning	

Х	14. Foundations and skills for lifelong learning		
	15. Global learning		
	16. Integrative and applied learning		
	17. Overall competencies for GE Knowledge		
	18. Overall competencies in the major/discipline		
	19. Others. Specify any PLOs that the program is going to assess		
	but not included above:		
	a.		
	b.		
	с.		

Part 3: Additional Information

A1. In which academic year did you develop the current assessment plan?

	1. Before 2007-2008
	2. 2007-2008
	3. 2008-2009
	4. 2009-2010
X	5. 2010-2011
	6. 2011-2012
	7. 2012-2013
	8. 2013-2014
	9. Have not yet developed a formal assessment plan

A2. In which academic year did you last update your assessment plan?

	1. Before 2007-2008
	2. 2007-2008
	3. 2008-2009
	4. 2009-2010
	5. 2010-2011
	6. 2011-2012
X	7. 2012-2013
	8. 2013-2014
	9. Have not yet updated the assessment plan

A3. Have you developed a curriculum map for this program?

Х	1. Yes
	2. No
	3. Don't know

A4. Has the program indicated explicitly where the assessment of student learning occurs in the curriculum?

X	1. Yes
	2. No
	3. Don't know

A5. Does the program have any capstone class?

Х	1. Yes
	2. No
	3. Don't know

A5.1. If yes, please list the course number for each capstone class: [____CSC 190 and CSC 191___]

A6. Does the program have ANY capstone project?

X	1. Yes
	2. No
	3. Don't know

A7. Name of the academic unit: [____Computer Science ____]

A8. Department in which the academic unit is located: [____Computer Science ____]

A9. Department Chair's Name: [____Cui Zhang ____]

A10. Total number of annual assessment reports submitted by your academic unit for 2013-2014: [___]

A11. College in which the academic unit is located:

	1. Arts and Letters
	2. Business Administration
	3. Education
X	4. Engineering and Computer Science
	5. Health and Human Services
	6. Natural Science and Mathematics
	7. Social Sciences and Interdisciplinary Studies
	8. Continuing Education (CCE)
	9. Other, specify:

Undergraduate Degree Program(s):

A12. Number of undergraduate degree programs the academic unit has: [___1 __] A12.1. List all the name(s): [____BS in Computer Science___] A12.2. How many concentrations appear on the diploma for this undergraduate program? [___0 ___]

Master Degree Program(s):

A13. Number of Master's degree programs the academic unit has: [___2 ___] A13.1. List all the name(s): [____MS in Computer Science and MS in Software Engineering____] A13.2. How many concentrations appear on the diploma for this master program? [___0 __]

Credential Program(s):

A14. Number of credential degree programs the academic unit has	: [_0	_]
A14.1. List all the names: []			

Doctorate Program(s)

A15. Number of doctorate degree programs the academic unit has: [____0___] A15.1. List the name(s): [_____]

A16. Would this assessment report apply to other program(s) and/or diploma concentration(s) in your academic unit*?

	1. Yes
Х	2. No

*If the assessment conducted for this program (including the PLO(s), the criteria and standards of performance/expectations you established, the data you collected and analyzed, the conclusions of the assessment) is the same as the assessment conducted for other programs within the academic unit, you only need to submit one assessment report.

Appendix A. Program Learning Outcomes (PLOs) and Performance Criteria for B.S. in Computer Science Program

At graduation, a B.S. Computer Science student should be able to:

- (a) Apply fundamental knowledge of mathematics, algorithmic principles, computer theory, and principles of computing systems in the modeling and design of computer-based systems that demonstrate an understanding of tradeoffs involved in design choices.
 - a-1. Understand fundamental algorithms and essential data structures.
 - a-2. Understand tradeoffs in the selection of algorithms and data structures.
 - a-3. Understand and apply mathematical transformation and algorithms for 2D graphics.
 - a-4. Understand and use relational databases.
 - a-5. Understand distinctive features of the design of programming languages.
 - a-6. Understand knowledge of abstract machines, languages, and grammar.
 - a-7. Understand and apply logic programming paradigm.
 - a-8. Understand and apply functional programming paradigm.
 - a-9. Demonstrate the ability to calculate performance parameters, such as, circuit propagation delay, memory latency, speedup, etc.
 - a-10. Understand network architecture, layered model, and protocol stacks.
 - a-11. Demonstrate working knowledge of network management, including monitoring, measurement, analysis, and control.
 - a-12. Understand principles of concurrency and tradeoffs in synchronization approaches, analysis, and control.
 - a-13. Understand deadlocks and their solutions.
 - a-14. Understand principles of resource management.
- (b) Analyze a problem, specify the requirements, design, implement, and evaluate a computer-based system, process, component, or program that satisfies the requirements.
 - b-1. Understand and apply modeling and analysis techniques.
 - b-2. Understand and apply requirements engineering process.
 - b-3. Understand and apply design principles.
 - b-4. Understand and apply proper testing techniques.
 - b-5. Understand and apply project management processes and tools.
 - b-6. Demonstrate ability to design and analyze basic and complex hardware components.
 - b-7. Understand and apply error detection and correction, flow control, and congestion control priorities.
 - b-8. Understand and apply synchronization mechanisms to the critical section problem and to the process coordination.
- (c) Apply design and development principles in the construction of software systems of varying complexity.
 - c-1. Understand and use software metrics.
 - c-2. Understand and use object-oriented design.
 - c-3. Understand and use design patterns.
 - c-4. Understand and use verification and validation.
 - c-5. Understand and use documentation standards.
 - c-6. Understand and use semi-formal modeling languages, such as, UML, in requirement specification and design.
 - c-7. Demonstrate ability to development communication protocols and networking applications.

- (d) Use current skills, techniques, and tools necessary for computing practice.
 - d-1. Implement event-driven GUI applications.
 - d-2. Demonstrate competence in using SQL
 - d-2. Demonstrate competence in programming in a variety of programming paradigms.
 - d-2. Demonstrate competence in language scanning and parsing.
 - d-2. Demonstrate the ability to use hardware design simulation tools.
 - d-2. Demonstrate competence in system programming in UNIX/Linux environments.
- (e) Function effectively as a member of a team to accomplish a common goal.
 - e-1. Cooperate and collaborate as a team member.
 - e-2. Communicate and listen; keep teammates informed.
 - e-3. Face conflicts and resolve differences.
 - e-4. Contribute equally as a participant in the project.
- (f) Understand professional, ethical, legal, social, and security issues and responsibilities; analyze the impact of computing on individuals, organizations, and society both locally and globally.
 - f-1. Know, understand, and practice professional codes of conduct (i.e., ACM Code of Ethics and Professional Conduct, IEEE Code of Ethics, ACM/IEEE Software Engineering Code of Ethics and Professional practice.
 - f-2. Understand the need for and use of proper security measures.
 - f-3. Be able to understand the ethical dimensions of a computer solution to a problem.
 - f-4. Understand the moral/ethical issues in resolving conflict.
- (g) Write effectively.
 - g-1. Design a well-organized document which communicates the important points clearly.
 - g-2. Present the information in an effective manner.
- (h) Give effective oral presentations.
 - h-1. Use an effective presentation style and delivery, e.g., attract and hold attention of the audience, speak clearly and with confidence, maintain eye contact, and use appropriate visual aids.
 - h-2. Use appropriate vocabulary and accurate technical terms; consistently follow rules of standard English.
 - h-3. Explain clearly key technical points of your project: how software solves sponsor' problem, design of software, the highest priority feature and its functionality, and key testing issues.
 - h-4. Articulate project-related issues, e.g. , difficulties encountered and how the team dealt with them and the lessons they learned.
- (i) Recognize the need for, and an ability to engage in, continuing professional development.
 - i-1. Demonstrate the ability to identify, evaluate, and utilize opportunities and resources to learn new material not covered in classes.
 - i-2. Demonstrate the ability to recognize continuing education opportunities and the importance of life-long learning to professional success.

Appendix B. Survey of Students' Perspectives on Team Experience

TEAM NAME: _____ MEMBER NAME: _____

Spring 2014 SENIOR PROJECT SURVEY Team Assessment Scoring

Responses represent the closest representation of the team member's opinion and/or feelings. (Score of A is least positive ... Score of 4 the most positive)

1. How would you – in general - describe the team's level of cooperation and the collaboration amongst its members?

- 1. Minimal usually we each do our own thing.
- 2. Average we think we are operating at the level that is required.
- 3. Above average
- 4. Way above average exceptional. Members have gone beyond just the required technical reviews. At times, we have worked in pairs and/or contributed in the review each other's work

2. How well have team members worked together – in general – towards producing quality work in completion of each project phases (e.g. design, coding, documentation, etc.)?

- 1. Not much. We have not really talked about this.
- 2. We have talked about "quality" but I don't feel we really know what specifically we should do.
- 3. Most of us have revised our work because of quality concerns.
- 4. Specific issues relating to quality are identified for most of the major work we do.
- **3.** To what extent has the team talked about how to improve the team's effectiveness in general and/or in relation to specific work (this could include meetings, collaborative and/or individual work, etc.)?
 - 1. I can't say that we have talked very much about this
 - 2. We did talk about this a few times but never had much follow through
 - 3. We do talk about this quite a lot and occasionally have made some changes
 - 4. We have made this a regular part of our meetings with the results being mostly positive
- 4. To what extent have members been kept informed about various aspects of the project's work (this could include decisions, meetings, work assignments, requests from sponsor, faculty adviser and/or seminar adviser, contact with team members, etc.)?
 - 1. Communication has consistently been a big problem especially effecting critical aspects of the team's work.
 - 2. Lapses occur, not all the time, but they are somewhat common.
 - 3. There have been some lapses, but most of the time communication has been full, open and spontaneous.
 - 4. Communication has always been full, open and spontaneous nothing held back.

- 5. Assuming that you have had thoughts and unexpressed feelings and opinions about the project and the effectiveness of the team, how have you felt about expressing these feelings and opinions?
 - 1. My feeling was that we should just do the work and not bring up these kinds of issues so I never felt free to express my feelings and opinions
 - 2. It depends on the situation so at times I was reluctant to express my feelings and opinions
 - 3. Most of the time I felt free to express my feelings and opinions
 - 4. I felt completely free to express my feelings and opinions.

6. How does the team deal with alternative viewpoints presented by team members?

- 1. Alternative viewpoints are never raised
- 2. Most are disregarded or ignored
- 3. A lot are listened to
- 4. Most are given thought and consideration

7. How does the team – in general - deal with conflict and difference as well as violations of team "rules"?

- 1. Avoids discussion of the conflict and the differences
- 2. Recognizes the conflict and the differences but moves quickly on to other topics
- 3. Faces the conflict and the differences but does not manage it well
- 4. Faces the conflict and the differences openly and resolves the differences

8. To what extent do you feel that you are perceived by the other team members as an equal contributor and participant in the project?

- 1. Completely on the outside, not an equal contributor and participant in the project
- 2. Sometimes, but mostly as a "part-time" contributor and participant in the project.
- 3. Mostly as an equal contributor and participant in the project.
- 4. Mostly as the major contributor and participant in the project.

9. How would you rate team "spirit"?

- 1. Poor. There doesn't seem to be much point in treating the project differently than other class assignments.
- 2. It varies based upon the individual team member's engagement.
- 3. Sort of OK. We seem to get along really well and conversation doesn't seem to be a problem.
- 4. Great. The team enthusiastic and seem to care a lot about the project, the learning and producing a quality product for our sponsor

10. At the moment, do you feel that you could work effectively with your team on another project?

- 1. Not really
- 2. Maybe, but only with some –not all of my current team members
- 3. Yes, if I had to
- 4. An enthusiastic, Yes

4/9/14

Adapted from Using Student Teams in the Classroom, Ruth Federman Stein and Sandra Hurd, Anker Publishing Company, Inc. 2000

Anonymo	us Surv	vey								
TEAM	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
	3	3	3	2	1	4	2	2	4	4
	3	4	3	1	1	4	4	3	4	4
A	3	4	3	1	1	4	4	2	3	3
	1	2	2	3	3	4	2	2	2	2
	3	2	3	1	1	4	2	2	4	4
R	3	3	4	1	1	4	4	2	4	4
D	2	3	3	2	1	4	2	2	4	4
	2	2	3	2	2	4	4	3	4	3
	3	3	4	1	1	4	4	2	4	4
	2	3	3	2	2	3	2	2	3	2
С	4	3	2	2	1	4	4	2	3	4
C	2	3	1	2	2	4	4	2	3	3
	2	2	3	3	2	3	2	3	3	3
	3	3	2	1	3	4	4	2	3	4
	4	4	4	1	2	4	4	1	4	4
	3	3	3	1	1	4	4	3	4	4
D	3	4	3	1	1	4	4	3	3	4
	3	4	3	1	3	4	4	3	3	3
	4	4	3	1	1	3	4	2	4	4
	4	4	3	1	2	4	4	1	4	4
	4	4	3	1	1	3	4	1	4	4
E	4	4	4	1	1	4	2	2	4	4
	4	4	3	2	1	4	4	2	4	4
	4	4	3	1	1	4	4	2	4	4
	4	4	3	2	1	4	3	2	4	4
G	3	3	3	1	1	4	4	2	3	3
	2	3	2	2	2	3	2	3	3	3
Н	2	4	2	3	1	4	4	2	3	3
	3	3	2	2	1	4	4	<u></u>	3	2
	3	1	2	2	2	4	1	1	5	3
т	3	3	2	2	1	4	4	2	4	4
L	2	2	2	2	2	4	4	2	2	4
	2	2	2	1	2	4	4	2	3	2
Δνσ	2.91	3 18	2.79	1 59	1 50	3.85	3 38	2.09	3 44	3 50
St. Dev.	0.83	0.797	0.687	0.657	0.663	0.359	0.954	0.57	0.613	0.663
Counts	0.00	0	0.007	0.007	0.000	0.000	0.201	0127	0.010	0.000
<u>1s</u>	1	1	1	17	20	0	1	4	0	0
2s	10	5	9	14	11	0	8	23	2	3
3s	14	15	20	3	3	5	2	7	15	11
4 s	9	13	4	0	0	29	23	0	17	20
Percent										
1 s	3%	3%	3%	50%	59%	0%	3%	12%	0%	0%
2s	29%	15%	26%	41%	32%	0%	24%	68%	6%	9%
3s	41%	44%	59%	9%	9%	15%	6%	21%	44%	32%
4s	26%	38%	12%	0%	0%	85%	68%	0%	50%	59%
n = 34	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Appendix C. Team Work Survey – Student Data - Spring 2013

Note: For questions 4, 5, and 8, answer 1 is the most positive. For the remaining questions, 4 is the most positive.

	Questi	ons									
Teams / Member	·s 1	2	3	4	5	6	7	8	9	10	Avg.
Al	2	4	2	3	2	4	3	4	3	2	2.90
A2	2	3	2	3	2	3	4	3	2	2	2.60
A3	4	3	3	4	3	4	2	2	3	3	3.10
A4	4	3	4	4	4	4	4	3	4	4	3.80
A5	2	4	3	3	4	4	3	2	4	3	3.20
B1	3	3	2	3	4	4	3	3	2	4	3.10
B2	3	2	3	3	2	4	4	2	3	4	3.00
B3	3	3	3	4	4	4	4	3	4	4	3.60
B4	2	4	3	4	3	4	4	3	3	3	3.30
B5	3	3	4	4	4	4	2	2	4	4	3.40
C1	3	3	2	4	4	4	4	3	4	4	3.50
C2	3	3	2	3	3	3	3	2	4	4	3.00
C3	4	3	2	4	4	4	2	3	4	4	3.40
C4	4	3	2	4	2	4	2	4	4	4	3.30
C5	4	4	3	3	4	4	4	3	4	4	3.70
D1	2	3	2	2	2	3	3	4	3	2	2.60
D2	2	2	2	3	3	4	3	3	3	4	2.90
D3	2	3	3	3	3	3	3	3	4	3	3.00
D4	1	2	2	3	2	2	2	3	2	2	2.10
D5	No sho	W									
D6	No sho	W									
E1	3	2	2	3	2	4	2	3	2	2	2.50
E2	2	2	2	3	2	3	3	2	3	3	2.50
E3	No sho	W									
E4	No sho	W									
E5	No sho	W									
F1	2	3	4	4	3	4	4	3	3	3	3.30
F2	2	3	4	2	2	2	3	3	3	2	2.60
F3	1	2	2	2	2	2	3	4	2	2	2.20
F4	1	2	2	1	2	2	3	4	2	2	2.10
F5	No sho	W									
Fo	No sho	w	2 4	2.1.6	2 00	2.40	2.00	2.0.6	2.1.6	2.12	
Average	2.56	2.88	2.6	3.16	2.88	3.48	3.08	2.96	3.16	3.12	
Standard Deviation	0.96	0.67	0.76	0.80	0.88	0.77	0.76	0.68	0.80	0.88	
<u></u>	3	0	0	1	0	0	0	0	0	0	
$\frac{2s}{2}$	10	14	14	3	11	4	6	6	6	8	
38	7	14	1	12	6	5	11	14	9	6	
48	5	4	4	9	8	16	8	5	10	11	
Percent	25	25	25	25	25	25	25	25	25	25	
1s	12%	0%	0%	4%	0%	0%	0%	0%	0%	0%	
2s	40%	28%	56%	12%	44%	16%	24%	24%	24%	32%	
3s	28%	56%	28%	48%	24%	20%	44%	56%	36%	24%	
4s	20%	16%	16%	36%	32%	64%	32%	20%	40%	44%	
n = 25	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Team Work Survey – Student Data - Spring 2014

Appendix D. Oral Communication – Presentation Style Rubric

Course

Team

Evaluator

Date

STYLE & DELIVERY						Use One Group Rating or Individual Ratings					
4 – Exceeds Criteria	C – Meets Criteria	a B – Progressing to Criteria 1 – Below Expectations				(c)	(d)	(e)	(f)		
Attracts and holds interest of audience.	Generally maintains interest of audience.	Generally passive & occasionally attracts interest of audience.									
Speaks clearly, distinctly, & with sufficient volume.	Generally speaks clearly and distinctly. Sometimes the voice is not clear, distinct, or have sufficient volume. Most of the time, the voice is not clear or audible.										
Presents material effectively with confidence and enthusiasm.	Exhibits reasonable confidence in the material.	At times, presents material with some tentativeness.	material Does not communicate an interest in material being presented and shows lack of confidence.								
Maintains eye contact throughout presentation.	Maintains eye contact most of the time.	Maintains some eye contact.	Minimal or no eye contact.								
Uses appropriate visual aids (e.g., audio, video, multi- media) that are clear, readable, and aid in better understanding of project.	Generally uses appropriate visual aids.	Visual aids are not clear, readable, or helpful.	No visual aids are used.								
LANGUAGE & VOCABULAR	RY				Ir	ndividu	al Ra	tings			
4 – Exceeds Criteria	C – Meets Criteria	B – Progressing to Criteria	1 – Below Expectations	(a)	(b)	(c)	(d)	(e)	(f)		
Appropriate use of vocabulary. Accurate use of technical terms and phrases.	Generally acceptable use of vocabulary and technical terms and phrases.	Vocabulary is limited. Use of technical terms and phrases less than desirable.	Poor vocabulary and poor or inappropriate use of technical terms and phrases								
standard English.	standard English.	rules of standard English.	standard English.								

Appendix E. Oral Communication – Presentation Style Data

Course: CSC 191 Senior Project: Part II Number of Teams/Students: 4/18 Number of Faculty Evaluators: 3 Semester: Fall 2013

Performance Criteria/Indicators

Scoring: 1 - Below expectations

2 – Progressing to criterion

3 – Meets criterion

4 – Exceeds criterion

	Teams											
Style/Delivery	Cache	Neves	Paradigm	Team 7								
1. Attracts and holds interest of audience.	3 3.6 3	3 3.6 4	3 2.8 3	3 3.5 4								
2. Speaks clearly, distinctly, and with sufficient volume.	3 3.4 2	3 3.2 4	3 2.8 3	4 3.3 3								
3. Presents material effectively with confidence and enthusiasm.	3 3.6 3	4 3.4 4	2 3.5 3	4 3.3 4								
4. Maintains eye contact throughout presentation.	3 3.6 2	4 3.8 3	3 2.5 4	3 2.5 2								
5. Uses appropriate visual aids that are clear, readable,												
and aid in better understanding of the project	3 3 3	3 3 4	3 3 4	4 2 -								
Language and Vocabulary	Cache	Neves	Paradigm	Team 7								
6. Appropriate use of vocabulary. Accurate use of												
Technical terms and phrases.	3 4 3	4 4 3	4 4 3	4 4 3								
7. Consistently follows the rules of standard English,	3 4 3	4 4 3	4 4 3	4 4 3								

Evaluators' Scores

Appendix F. Oral Presentation – Survey To Evaluate Technical Content

TEAM PRESENTATIONS

CSC 191 Senior Project: Part II

PRESENTATION "SPECIFICATIONS":

- □ Presentation should be NO MORE THAN 25 minutes in length.
- \Box No acronyms, no techno-babble.
- □ Objective: to score an **A** in each category listed below.
- Assume you are presenting to your sponsor or potential employer... make it professional.
- \Box Allow some time at the end for questions.

EVALUATION DIRECTIONS:

Given your reaction to the presentations, "GRADE" each of the categories on a scale from A to F. Score of A: EXCELLENCE in form and content of the coverage in that specific category

EXCELLENCE means the presentation was clearly and significantly above what was merely required... what you would expect of a professional presentation to the Chief Executive Officer (CEO) of a large company.

Score of C: competent, understandable coverage in that category

Score of F: the information was not clearly organized and presented and the team needs to do more work.

	EVALUATION SCALE											
CATEGORIES (WHAT TO COVER):		Α	В	С	D	F						
 Identify your SPONSOR and describe the sponsor's BUSINESS. 	Clear						Not Clear					
2. Explain HOW the software SOLVES the sponsor's problem or SATISFIES sponsor's need.	Clear					_	Not Clear					
3. Present and describe the software as DESIGNED.	Clear						Not Clear					
 DEMONSTRATE the highest priority FEATURE and EXPLAIN the functionality and data needed for its implementation. 	Clear						Not Clear					
5. Describe the key TESTING issues.	Clear						Not Clear					
 Describe the DIFFICULTIES encountered during the project and how the team dealt with these difficulties. 	Clear						Not Clear					
 Reflecting on the senior project experience, discuss LESSONS LEARNED. 	Clear						Not Clear					
8. OVERALL EVALUATION OF THE PRESENTATION.	Clear						Not Clear					

Appendix G. Oral Communication – Technical Content Data

Course: CSC 191 Senior Project: Part II Number of Teams/Students: 8/36 Number of Faculty Evaluators: 3						So	corin	g:	C	A lear		В	C		D	Not	F t cle	ar						
Semester: Fall 2013 Performance Criteria/Indicators	Evaluators' Scores Teams																							
How clearly and effectively did the team:	Cache		Neves		s	Paradigm			Team 7			Salient Systems			Sierra			Kham			Intuitive Innovations			
 Identify sponsor and describe sponsor's business. 	Α	A	В	Α	В	В	Α	A	В	Α	A	A	A	A	A	В	В	В	В	A	_	A	A	A
 Explain how software solves sponsor's problem and satisfies sponsor's needs. 	в	Α	A	В	A	В	A	A	В	Α	A	A	Α	A	В	C	A	В	В	A	-	C	A	В
3. Describe the software as designed.	В	A	В	A	A	A	С	A	В	В	C	A	A	С	В	-	A	В	В	C	A	D	C	B
4. Demonstrate highest priority feature and explain its functionality and the data needed for its implementation.	A	В	A	A	A	A	C	A	В	В	C	A	A	A	В	В	A	С	A	В	A	C	C	В
5. Describe the key testing issues.	С	A	A	В	Α	A	С	A	В	С	B	В	В	A	В	В	С	С	c	В	A	C	В	A
Describe difficulties encountered and how the team dealt with them.	С	A	В	В	A	A	В	A	В	A	В	Α	Α	В	C	В	C	С	А	A	A	В	A	A
 Reflect on team's senior project experience and lessons learned. 	в	A	В	A	A	В	A	A	A	A	A	В	A	A	A	A	A	A	A	А	A	A	A	A
8. Evaluator's overall evaluation of presentation	В		В	A	-	A	В	A	В	-	C /	A	A	A	В	A	B	В	В	В	С	С	В	В