

Applied Computer Graphics Program

Assessment Report
Academic Year 2006 - 2007

Summary Report and Evaluation

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Applied Computer Graphics Program Assessment Report Fall 2007

1 Introduction

In an endeavor to provide the Applied Computer Graphics (APCG) graduates with a strong education and a positive experience at CSU, Chico as well as to provide high-quality preparation for entering the workforce, the APCG Program continues to assess the program learning outcomes and to poll the graduating students, and to use what we learn from this feedback to improve the program. The assessment tools used in the program also help provide the students with clear goals and feedback within courses. With the use of these tools the students are exposed to a set of rubrics in the freshmen core courses that lead to additional and expanded sets of rubrics in more senior core courses, helping form a cohesive and logical linkage within and between courses. The program also utilizes a senior exit survey to help assess the program and the program outcomes to help further refine the curriculum and assist the students.

Upon completion of the baccalaureate degree, students in the Applied Computer Graphics (APCG) major are expected to have achieved a series of program outcomes as listed in Table 1.1.

Table 1.1 – APCG Program Outcomes

#	Program Outcome	Label
1	Recognize and evaluate critical and aesthetic issues within computer graphics and the mixed media.	Issues
2	Apply aesthetic judgments and critical thinking skills to art and graphics related issues.	Aesthetic
3	Demonstrate mastery of specific technical, conceptual and critical abilities within computer graphics and the mixed media.	Abilities
4	Demonstrate proficiency with industrial applications to visual communication related technologies.	Proficiency
5	Communicate effectively in written format on research and creative issues.	Written
6	Communicate effectively in oral format on research and creative issues.	Oral
7	Apply critical thinking and aesthetic judgments in critiquing mixed media and computer graphics productions.	Critiquing
8	Function on multi-disciplinary teams.	Teams
9	Work collaboratively and individually with an understanding of the production process utilized in industry-standard studios.	Process
10	Demonstrate a sense of professionalism through creative and intellectual independence.	Professionalism

Table 1.2 shows the link between the program learning outcomes and the required core courses for the APCG program including when the learning outcomes are introduced, practiced and demonstrated in the program. The table also shows the outcomes that were assessed in the 2006-2007 academic year and in which course the assessment occurred. The Applied Computer Graphics Program has been steadily adding to its assessment tools over the past several years to help measure the program learning outcomes. In the 2006-2007 academic year, program learning outcome measurement rubrics were added to a variety of core courses for the program.

Assessment rubrics were utilized for both direct student feedback as well as program learning outcome assessment in the freshmen core courses APCG 112 *Digital Photography* and APCG 117 *Concept Design and Storyboarding*, and the core junior core course APCG 330 *3-D Computer Modeling*.

The APCG Program, through these program outcome assessments and through the senior exit survey, hopes to improve the curriculum to enhance the students' educational experience and help prepare them for successful careers.

Table 1.2 – Mapping Core APCG Courses to Program Outcomes

Course Title	Course	Outcome									
		Issues	Aesthetic	Abilities	Proficiency	Written	Oral	Critiquing	Teams	Process	Professionalism
		1	2	3	4	5	6	7	8	9	10
Computer Assisted Art	110	I	I	I	I	I				I	
Digital Photography	112	I	P	P	P			I			
Concept Design and Storyboarding	117	I	P	P	P	P	P	I	I	I	
2-D Digital Animation	240	I	P	P	P		P	I	I	I	
3-D Computer Modeling	330	P	P	P	P	P	P	P	P	P	I
3-D Character Modeling	331	P	P	P	P		P	P		P	P
Computer Animation	340	P	P	P	D			P	P	P	P
Advanced Animation Pre-Prod	345	P	P	P		D	D	D	P	P	
Advanced Animation Production	445	D	D	D	D			D	D	D	
Advanced Animation Post-Prod	545	D	D	D	D		D	D	D	D	D
Portfolio	491						D	D			D
Writing (Communication Criticism/ Software Engineering)	CDES 303 / CSCI 330					D					
Programming (Intro Comp Science/ Programming and Algorithms I)	CSCI 101 / CSCI 111	I									

I = Introduced, P = Practiced with Feedback, D = Demonstrated at the Mastery Level

 Assessed AY 2006/2007

2 Program Outcomes Assessment

For the 2006-2007 academic year, the Applied Computer Graphics Program implemented an assessment plan for four (4) of the ten (10) program outcomes. These program outcomes, Aesthetics, Abilities, Oral Communications and Teams, were assessed in core freshmen-level courses and core junior-level courses. An assessment rubric was developed for each program outcome corresponding to the assignments in the course. For this summary report and evaluation, each program outcome is addressed including assessment tools, assessment evaluations and assessment improvement plans.

2.1 Outcome #2 – Aesthetics

Outcome #2 – Apply aesthetic judgments and critical thinking skills to art and graphics related issues.

2.1.1 Assessment Tool

The Aesthetics rubric (Appendix A) was used for the required freshman-level *Digital Photography* (APCG 112) course and junior-level course *3-D Computer Modeling* (APCG 330). The evaluations using the corresponding rubric were conducted on multiple assignments in each course using combined student self-evaluation and instructor evaluation.

The Aesthetics rubric contains a collection of attributes germane to specific assignments in each course covering aesthetics elements such as collaboration, principles of design, value, size, space, posing, lighting, composition, and textures.

2.1.2 Assessment Evaluation

For this assessment the target of 2.0 (Acceptable) was chosen to evaluate the results. The average scores for each rubric element and associated statistics are shown in Table 2.1.1 for APCG 112 and Table 2.1.2 for APCG 330.

For APCG 112 the value and posing elements were at or above the targeted value of 2.0 (Acceptable). All other elements were within a single standard deviation of the target. The aesthetic elements of size, space and lighting were only slightly below the targeted value. The elements of collaboration and principles of design were lower (1.6 and 1.7 respectively).

For APCG 330 all average values for aesthetic elements were slightly below the targeted value of 2.0 (Acceptable), but well within a single standard deviation of the targeted value.

Table 2.1.1 – Aesthetics Results – APCG 112

		Assessment Rubric Elements						
Course	Statistic	Collaboration	Principles of Design	Value	Size	Space	Posing	Lighting
APCG 112	Average	1.6	1.7	2.0	1.9	1.8	2.1	1.9
	Min	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Std	0.9	0.9	0.9	0.9	1.0	0.9	0.9
	Count	43.0	43.0	43.0	43.0	43.0	43.0	43.0

Target value for all rubric elements was 2.0.

Table 2.1.2 – Aesthetics Results – APCG 330

		Assessment Rubric Elements		
Course	Statistic	Composition	Lighting	Textures
APCG 330	Average	1.8	1.8	1.7
	Min	0.0	0.0	0.0
	Max	3.0	3.0	3.0
	Std	0.8	0.7	0.7
	Count	2056.0	2056.0	2056.0

Target value for all rubric elements was 2.0.

2.1.3 Assessment Improvement Plan

Considerations to improve the Aesthetic in APCG 112 include:

- Additional examples of work from industry showing the implementation of the aesthetics with class discussion.
- Provide timely feedback on the aesthetic throughout the term with class discussion on means to improve the aesthetic elements.

Considerations to improve the Aesthetic in APCG 330 include:

- Addition of smaller focused assignments to practice the aesthetic prior to employing them in larger, more comprehensive assignments.
- Addition of critiquing assignments to practice recognition of the aesthetic elements and their contribution to overall works prior to employing them in larger more comprehensive assignments.
- Additional examples of work from industry showing the implementation of the aesthetic with class discussion.
- Provide timely feedback on the aesthetic throughout the term with class discussion on means to improve the aesthetic elements.

2.2 Outcome #3 – Abilities

Outcome #3 – Demonstrate mastery of specific technical, conceptual and critical abilities within computer graphics and the mixed media (Abilities)

2.2.1 Assessment Tool

The Abilities rubrics (Appendix B) were used for the required freshman-level *Concept Design and Storyboarding* (APCG 117) course and junior-level *3-D Computer Modeling* (APCG 330). The evaluations using the corresponding rubric were conducted on various assignments in each course using combined student self-evaluation and instructor evaluation.

Conceptual and critical abilities covered and practiced in each course including: conveying story, conveying emotion, audience hook, continuity, creative use of tools and concepts and critical thinking were measured in both courses. Additionally technical abilities of utilizing industry tools (Modeler and Layout) were measured in APCG 330.

2.2.2 Assessment Evaluation

For this assessment the target of 2.0 (Acceptable) was chosen to evaluate the results. The average scores for each rubric element and associated statistics are shown in Table 2.2.1 for APCG 117 and Table 2.2.2 for APCG 330.

For APCG 117 all of the measured elements were at or within a single standard deviation of the targeted value of 2.0 (Acceptable). Conveying story and continuity were at the targeted value.

Conveying emotion and audience hook were slightly below the targeted value at 1.9, but well within a single standard deviation.

For APCG 330 all average values for abilities elements were slightly below the targeted value of 2.0 (Acceptable), but well within a single standard deviation of the targeted value.

Table 2.2.1 – Abilities Results – APCG 117

Course	Statistic	Assessment Rubric Elements			
		Show or Convey Story	Show or Convey Emotion	Audience Hook	Continuity
APCG 117	Average	2.0	1.9	1.9	2.0
	Min	0.5	0.5	0.5	1.0
	Max	2.8	2.8	2.6	2.8
	Std	0.4	0.5	0.4	0.4
	Count	109.0	109.0	55.0	54.0

Target value for all rubric elements was 2.0.

Table 2.2.2 – Abilities Results – APCG 330

Course	Statistic	Assessment Rubric Elements			
		Modeler	Layout	Creativity	Critical Thinking
APCG 330	Average	1.8	1.7	1.8	1.8
	Min	0.0	0.0	0.0	0.0
	Max	3.0	3.0	3.0	3.0
	Std	0.8	0.7	0.8	0.7
	Count	2056.0	2056.0	2056.0	2056.0

Target value for all rubric elements was 2.0.

2.2.3 Assessment Improvement Plan

Considerations to improve the Abilities in APCG 117 include:

- Addition of smaller focused assignments to practice the abilities prior to implementing them in larger, more comprehensive assignments.
- Additional examples of work from industry showing the implementation of the abilities.
- Provide timely feedback on the abilities throughout the term with class discussion on means to improve the abilities.

Considerations to improve the Abilities in APCG 330 include:

- Additional examples of work from industry showing the implementation of the abilities.
- Provide timely feedback on the abilities throughout the term with class discussion on means to improve the abilities.

2.3 Outcome #6 – Oral Communications

Outcome #6 – Communicate effectively in oral format on research and creative issues (Oral Communications)

2.3.1 Assessment Tool

The Oral Communications rubric (Appendix A) was used for the required junior-level course APCG 330 *3-D Computer Modeling* and a subset of the overall rubric (also Appendix A) was used for the required freshman-level APCG 117 *Concept Design and Storyboarding*. The evaluations using the corresponding rubric were conducted on multiple oral presentations in the semester for each course using combined student self-evaluation and instructor evaluation.

2.3.2 Assessment Evaluation

For this assessment the target of 2.0 (Acceptable) was chosen to evaluate the results. The average scores for each rubric element and associated statistics are shown in Table 2.3.1 for 2006-2007 academic year and Table 2.3.2 for the previous academic year.

For APCG 117 all of the measured elements were at or within a single standard deviation of the targeted value of 2.0 (Acceptable). Voice (volume, enunciation, speed) and poise were at the target score. Hesitations, distracting mannerisms, maintaining eye contact, body language, and overall rating were slightly below the goal yet within a single standard deviation of the goal. Maintaining eye contact was the lowest rated element (1.7). This element had the lowest average in the previous academic year, but showed improvement rising to 1.7 from 1.5.

For APCG 330 all average values for oral communications elements were within a single standard deviation of the targeted value of 2.0 (Acceptable). Only the averages for hesitation, maintaining eye contact and body language were slightly below the targeted value with all three of these elements within a single standard deviation of the target. All average scores improved from the prior year's average score with body language improving the most, rising from 1.6 (the lowest score in the previous academic year) to 1.9 this academic year.

The additional discussion of presentation techniques, the additional discussion of the rationale for improving presentation skills, the expanded use of example presentations, along with more timely feedback appear to have helped improve the average oral communications scores for both courses.

Table 2.3.1 – Oral Communications Results 2006-2007 Academic Year

		Assessment Rubric Elements										
Course	Statistic	Organization & Structure	Content & Knowledge	Visual Aids & Neatness	Voice volume, enunciation, speed	Hesitations, other voice habits	Distracting mannerisms	Maintaining eye contact	Poise	Body language	Presentation Length	Overall Rating
APCG 117	Average				2.1	1.8	1.9	1.5	1.8	1.7		1.9
	Min				1.2	1.1	1.1	0.3	0.7	0.7		1.2
	Max				2.9	2.8	2.7	2.4	2.8	2.8		2.9
	Std				0.4	0.4	0.3	0.5	0.4	0.5		0.5
	Count				33.0	33.0	33.0	33.0	33.0	33.0	33.0	33.0
APCG 330	Average	1.9	1.9	2.0	1.9	1.7	1.8	1.7	1.8	1.6	1.7	1.8
	Min	1.1	1.3	1.5	1.1	1.0	1.2	1.0	1.2	0.7	0.5	1.2
	Max	2.9	2.9	2.9	2.8	2.3	2.2	2.4	2.8	2.3	2.3	2.9
	Std	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4
	Count	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0

Table 2.3.2 – Oral Communications Results 2005-2006 Academic Year

		Assessment Rubric Elements										
Course	Statistic	Organization & Structure	Content & Knowledge	Visual Aids & Neatness	Voice volume, enunciation, speed	Hesitations, other voice habits	Distracting mannerisms	Maintaining eye contact	Poise	Body language	Presentation Length	Overall Rating
APCG 117	Average				2.0	1.9	1.9	1.7	2.0	1.8		1.9
	Min				1.2	0.4	1.1	0.5	0.7	1.0		0.8
	Max				2.8	2.8	2.8	2.6	2.8	2.8		2.8
	Std				0.3	0.4	0.3	0.4	0.4	0.4		0.4
	Count				106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0
APCG 330	Average	2.2	2.2	2.2	2.0	1.8	2.0	1.9	2.0	1.9	2.4	2.0
	Min	1.3	1.6	1.1	0.8	0.9	1.2	1.1	1.1	1.2	0.8	1.4
	Max	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Std	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
	Count	197.0	46.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	148.0	197.0

2.3.3 Assessment Improvement Plan

To continue achieving the goals for oral communications in both APCG 117 and APCG 330, we will continue to:

- Discuss effective presentation techniques.
- Discuss why effective presentation skills are important and pertinent to both academic and vocational careers.
- Show videos of professionals in the field presenting similar oral presentations with accompanying discussion.
- Provide timely feedback on presentations throughout the term with class discussion on means to improve presentations.

2.4 Outcome #8 – Teams

Outcome #8 – Function on multi-disciplinary teams (Teams)

2.4.1 Assessment Tool

Collaborative multi-disciplinary teams are utilized in a large number of APCG courses and throughout industry. The assessment of this program learning outcome was implemented in both the freshman-level APCG 117 *Concept Design and Storyboarding* and junior-level core APCG 330 *3-D Computer Modeling* this academic year. The Teams assessment rubric is found in Appendix D. The evaluations using the corresponding rubric were conducted on team projects in both courses using combined student self-evaluation and instructor evaluation.

2.4.2 Assessment Evaluation

For this assessment the target of 2.0 (Acceptable) was chosen to evaluate the results. The average scores for the rubric elements and associated statistics are shown in Table 2.4.1 for 2006-2007 academic year.

For APCG 117 all of the measured elements were above the targeted value of 2.0 (Acceptable). Quality of work was the lowest scored element at 2.0 and working with others being the highest rated element at 2.5.

For APCG 330 all average values for the teams elements were within a single standard deviation of the targeted value of 2.0 (Acceptable). Only the averages for problem-solving and quality of work were slightly below the targeted value with both elements within a single standard deviation of the target. All other measured elements were at or above the targeted value.

Table 2.4.1 – Team Results 2006-2007 Academic Year

Course	Statistic	Assessment Rubric Elements										
		Involvement	Participation	Preparation	Working with Others	Attendance	Enthusiasm	Task Completion	Focus on the task	Problem-solving	Quality of Work	Contribution
APCG 117	Average	2.2	2.3	2.2	2.5	2.4	2.2	2.3	2.2	2.3	2.0	2.1
	Min	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
	Max	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Std	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.5
	Count	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
APCG 330	Average	2.1	2.2	2.1	2.2	2.3	2.1	2.1	2.0	1.9	1.8	2.0
	Min	0.3	0.8	0.3	0.5	0.6	0.0	0.5	0.8	0.2	0.5	0.7
	Max	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Std	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.5	0.6	0.5	0.5
	Count	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0	52.0

Target value for all rubric elements was 2.0.

2.4.3 Assessment Improvement Plan

To continue achieving the goals for teams in both ACPG 117 and ACPG 330, we will continue to stress the importance of communications between team members and discuss collaborative strategies and time management.

3 Senior Survey

The senior surveys provide direct information about student plans after graduation, their perceptions about learning and their level of satisfaction with various aspects of their education at CSU, Chico and the Applied Computer Graphics Program. A copy of the college-wide survey instrument is provided in Appendix E with supplemental questions focused on specific issues in the Applied Computer Graphics Program provided in Appendix F.

Surveys were administered to graduating seniors in December 2006 and again in May 2007. A total of 12 of the 16 graduating ACPG seniors completed the surveys. While the survey is intended for students in their final semester, it is often administered in a capstone course (ACPG 545 or ACPG 491) when students are near completion of major requirements.

Detailed survey results are summarized in Appendix C for all respondents. Due to the small number of graduates, surveys administered in Fall 2006 and Spring 2007 are reported together. Further, because the number of responses was small overall in certain programs, the scales used for Educational Satisfaction and Program Outcomes questions were collapsed for purposes of reporting distributions. Appendix E provides a summary of responses to college-wide and program specific supplemental questions by major. Appendices F and G provide summary statistics for the Education Satisfaction questions and the Program Outcomes questions respectively.

3.1 Educational Satisfaction Responses

The survey queried the respondents about “Educational Satisfaction” in questions 15 through 30 with the results summarized in Table 3.1. The survey scale ranged from a score of “1 = Very Dissatisfied” to “5 = Very Satisfied” with the score of 3 being interpreted as “neutral” or “neither.” The mean responses of 4.0 or greater are desirable with responses over 3.0 being considered positive while scores below 3.0 reflecting a degree of dissatisfaction with the corresponding aspect of the student education. The mean responses to the Educational Satisfaction questions show that the graduates are fairly well satisfied with their education at Chico State. The Educational Satisfaction questions with the highest ratings are:

Educational Satisfaction Questions with Highest Means		Mean
Q17	Access to faculty in your department	4.75
Q22	Access to computer facilities	4.67
Q30	Overall experience at Chico State	4.67
Q20	Access to lab facilities and equipment	4.55
Q18	Availability of courses in your department	4.50

The lowest mean educational satisfaction ratings the APCG graduates gave are still well above neutral with only one aspect – career information from your department being directly controllable by the APCG Program. The lowest overall ratings are in the following aspects:

Educational Satisfaction Questions with Lowest Means		Mean
Q28	Quality of GE courses	3.64
Q26	Career information from your department	3.67
Q16	Quality of teaching by other faculty	3.75
Q25	Academic advising from Univ. Advising Office	3.82
Q27	Availability of GE courses	3.92

Table 3.1 – 2006-2007 Educational Satisfaction Mean Responses

Program Outcomes Questions			
Scale: 1=Very Unprepared 5=Very Well Prepared		Mean	N
Q15	Quality of teaching by faculty in department	4.42	12
Q16	Quality of teaching by other faculty	3.75	12
Q17	Access to faculty in your department	4.75	12
Q18	Availability of courses in your department	4.50	12
Q19	Quality of courses in your department	4.17	12
Q20	Access to lab facilities and equipment	4.55	11
Q21	Quality of laboratories and equipment	4.00	12
Q22	Access to computer facilities	4.67	12
Q23	Quality of computer facilities	4.00	12
Q24	Academic advising from your major advisor	4.24	12
Q25	Academic advising from Univ. Advising Office	3.82	11
Q26	Career information from your department	3.67	12
Q27	Availability of GE courses	3.92	12
Q28	Quality of GE courses	3.64	11
Q29	Overall quality of your education	4.33	12
Q30	Overall experience at Chico State	4.67	12

3.2 Program Outcome Responses

The survey queried the respondents about “Program Outcomes” in questions 31 through 43 with the results summarized in Table 3.2. The survey scale ranged from a score of “1 = Very Unprepared” to “5 = Very Well Prepared” with the score of 3 being neutral. The mean responses of 4.0 or greater are desirable with responses over 3.0 being considered positive while scores below 3.0 reflecting a degree of dissatisfaction with the corresponding aspect of the student preparation. The mean responses to the program outcomes questions show that the graduates feel well prepared in most areas. The program outcome questions with the highest ratings are:

Program Outcome Questions with Highest Means		Mean
Q43	Continue learning	4.67
Q44	Recommend major program at CSUC to others	4.67
Q39	Understand and apply professional and ethical principles	4.58
Q41	Use modern tools and technology	4.58
Q35	Function on multidisciplinary team	4.50

The APCG Program's lowest program outcome ratings (although still positive overall) were for the following questions:

Program Outcome Questions with Lowest Means		Mean
Q37	Communicate technical matters in writing	3.83
Q38	Communicate technical matters orally	3.91

Table 3.2 –2006-2007 Program Outcomes Mean Responses

Program Outcomes Questions		Mean	N
Scale: 1=Very Unprepared 5=Very Well Prepared			
Q31	Apply knowledge to solve problems	4.00	12
Q32	Design and conduct experiments	4.27	11
Q33	Analyze and interpret experimental data	4.08	12
Q34	Design component or system to meet needs	4.00	12
Q35	Function on multidisciplinary team	4.50	12
Q36	Identify, formulate, solve technical problems	4.17	12
Q37	Communicate technical matters in writing	3.83	12
Q38	Communicate technical matters orally	3.91	11
Q39	Understand and apply professional and ethical principles	4.58	12
Q40	Understand contemporary issues facing society	4.25	12
Q41	Use modern tools and technology	4.58	12
Q42	Enter the workplace	4.08	12
Q43	Continue learning	4.67	12
Q44	Recommend major program at CSUC to others	4.67	12

3.3 APCG Specific Questions

The survey queried the respondents about specific APCG issues in the supplemental questions 6 through 12 with the results summarized in Table 3.3. The mean responses of 4.0 or greater are desirable with responses over 3.0 being considered positive while scores below 3.0 reflecting a degree of dissatisfaction with the corresponding aspect of the program. The mean responses to the program outcomes questions show that the graduates feel well prepared in most areas. The program outcome questions with the highest ratings are:

Supplemental Questions with Highest Means		Mean
Q6	How you feel about overall instruction in program	4.25
Q8	How you feel APCG faculty did preparing you for career in industry	4.17

The APCG Program's lowest supplemental ratings (although still positive overall) was for the following questions:

Supplemental Question with Lowest Means		Mean
Q11	Satisfied with program's support in obtaining industrial internship	3.46

For the questions seeking a positive or negative answer, the students overwhelmingly felt that the faculty stressed the importance of a portfolio (91.7%), the students felt the program helped with career placement (83.3%) and felt the program provided sufficient lab time to complete projects (100%).

Table 3.3 – Senior Exit Survey - Supplemental Questions Mean Responses				
Scale: 1=Very Unprepared 5=Very Well Prepared			Mean	N
Q6	Feel prepared to pursue career in Computer Graphics industry		3.75	12
Q8	How you feel APCG faculty did preparing you for career in industry		4.17	12
Q9	How you feel about overall instruction in program		4.25	12
Q11	Satisfied with program's support in obtaining industrial internship		3.46	12
			% Yes	N
Q7	Feel APCG faculty stressed importance of preparing professional portfolio		91.7%	12
Q10	Feel program helped with career placement		83.3%	12
Q12	Sufficient lab time to complete projects		100.0%	12

4 Conclusions

Overall the assessment shows that the students are achieving the program outcomes within the courses at an acceptable level and that the exiting seniors feel prepared and express satisfaction with their educational experience in the Applied Computer Graphics Program and at Chico State.

4.1 2006-2007 Assessment

For the most part, the assessment of the program learning outcomes shows a positive relationship between the targeted goals and the measured results. The program appears to be providing adequate background and tools for the students to succeed at an acceptable level. The improvements noted in the individual program outcomes need be implemented to address the

minor deviation from the target values and the assessment needs to be expanded to encompass more of the courses in the program to further determine the levels of achievement.

The senior survey shows that the graduates express a high degree of satisfaction with their educational experience at Chico State, with noted exceptions primarily outside of the Applied Computer Graphics Program. The graduates indicated that they feel well prepared. The overall high level of satisfaction with their education is seen in the results summarized in Table 3.1. In the response to Question 44: "I would recommend my major program to others" with scores ranging from "1 = Strongly Disagree" to "5 = Strongly Agree," as shown in Tables 3.2, it clearly shows that APCG graduates give a strong endorsement of the program with an average score of 4.67. These endorsements along with the strong positive responses to Questions 29 (Overall quality of your education) and Question 30 (Overall experience at Chico State) show that the graduates of the Applied Computer Graphics Program feel positive about their major and their educational experience with the major at CSU, Chico.

4.2 2007-2008 Assessment Plan

Looking to the future to further improve and enhance the program and educational experience for our students, we will add additional program learning outcomes to the 2007-2008 assessment plan as well as expanding the courses in which these outcomes are measured. Within courses that currently implement the assessment plan, the improvement plans will be implemented and additional assignments will be added to the assessment plan.

For the 2007-2008 academic year the following program learning outcomes will be assessed in specific core APCG courses:

- Outcome #2 – Aesthetic will be assessed in APCG 110, APCG 112, AP CG 117, APCG 240, APCG 330, APCG 331 and APCG 340 (all required for the major) using assignment specific variants of the rubric. The evaluation will be based on both self-evaluation and instructor evaluation.
- Outcome #3 – Abilities will be assessed in APCG 110, APCG 112, AP CG 117, APCG 240, APCG 330, APCG 331 and APCG 340 (all required for the major) using assignment specific variants of the rubric. The evaluation will be based on both self-evaluation and instructor evaluation.
- Outcome #4 – Proficiency will be assessed in APCG 330, APCG 331 and APCG 340 (all required for the major) using assignment specific variants of the rubric. The evaluation will be based on both self-evaluation and instructor evaluation.
- Outcome #5 – Written will be assessed in APCG 345 (required for the major) using assignment specific variants of the rubric. The evaluation will be based on both self-evaluation and instructor evaluation.


- Outcome #6 – Oral will be assessed in APCG 117, APCG 330 and APCG 345 (all required courses for the major) using both self-evaluation and instructor evaluation.
- Outcome #8 – Teams will be assessed in APCG 117 and APCG 330 (both required courses for the major) using both self-evaluation and instructor evaluation.
- Outcome #9 – Process will be assessed in APCG 117, APCG 330, APCG 340 and APCG 345 (all required courses for the major) using both self-evaluation and instructor evaluation.

Table 4.2.1 shows the mapping core APCG courses to program outcomes with the planned assessments for academic year 2007–2008 highlighted.

Table 4.2.1 – Mapping Core APCG Courses to Program Outcomes

Course Title	Course	Outcome									
		Issues	Aesthetic	Abilities	Proficiency	Written	Oral	Critiquing	Teams	Process	Professionalism
		1	2	3	4	5	6	7	8	9	10
Computer Assisted Art	110	I	I	I	I	I				I	
Digital Photography	112	I	P	P	P			I			
Concept Design and Storyboarding	117	I	P	P	P	P	P	I	I	I	
2-D Digital Animation	240	I	P	P	P		P	I	I	I	
3-D Computer Modeling	330	P	P	P	P	P	P	P	P	P	I
3-D Character Modeling	331	P	P	P	P		P	P		P	P
Computer Animation	340	P	P	P	D			P	P	P	P
Advanced Animation Pre-Prod	345	P	P	P		D	D	D	P	P	
Advanced Animation Production	445	D	D	D	D			D	D	D	
Advanced Animation Post-Prod	545	D	D	D	D		D	D	D	D	D
Portfolio	491						D	D			D
Writing (Communication Criticism/ Software Engineering)	CDES30 3/ CSCI 330					D					
Programming (Intro Comp Science/ Programming and Algorithms I)	CSCI 101/ CSCI 111	I									

I = Introduced, P = Practiced with Feedback, D = Demonstrated at the Mastery Level

 Planned Assessed AY 2007-2008

The APCG Program will also continue to have the senior exit survey administered to ascertain the students' perspective on their preparedness and on their educational experience here at Chico State.

Appendix A – Aesthetics Rubric

Table 5.1 – Aesthetics Rubric – APCG 112

Attributes	Concept	Unacceptable	Marginal	Acceptable	Exceptional
	Value	0	1	2	3
Combination, collaboration of visual elements and principles of design for the image.	Does the image work overall?	Did not take visual elements and principles of design into consideration.	Collaboration of visual elements and principles of design implemented incorrectly.	Collaboration of visual elements and principles of design implemented appropriately.	Superior implementation of collaboration of principles of design and visual elements.
Principles of Design	Choices of principles used to create the image.	Did not take principles of design into consideration.	Utilized 2 or 3 of the principles of design, but not well considered or executed.	Effectively utilized multiple and appropriate principles of design.	Well considered and well executed - effectively utilized multiple and appropriate principles of design.
Value	Did students consider and utilize value appropriately for their subject matter?	Did not take value into consideration.	Value implemented incorrectly or value should have been used.	Value was considered and implemented appropriately.	Superior - value well executed.
Size or Proportion	Did they consider and utilize size or proportion appropriately for their subject matter?	Did not take size or proportion into consideration.	Size or proportion implemented incorrectly or size or proportion should have been used.	Size or proportion was considered and implemented appropriately.	Superior - size or proportion well executed.
Space	Did they consider and utilize space appropriately for their subject matter?	Did not take space into consideration.	Space implemented incorrectly or space should have been used.	Space was considered and implemented appropriately.	Superior - space well executed.
Posing (Expression and Body Language)	Does the pose make a powerful statement about attitude and personality of the subject?	No consideration to characterization of subject	Unable to effectively present characterization of subject.	Characterization was considered and implemented appropriately of subject .	Characterization of subject was well executed.

Lighting	Did they consider and utilize lighting appropriately for their subject matter?	Did not take lighting into consideration	Lighting implemented incorrectly or lighting should have been used.	Lighting was considered and implemented appropriately.	Superior - lighting well executed.
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Table 5.2 – Aesthetics Rubric – APCG 330

Attributes	Concept	Unacceptable	Marginal	Acceptable	Exceptional
	Value	0	1	2	3
Composition	Did the student utilize composition principles to create the scene?	Little to no consideration for determining an appropriate composition for the scene.	Seemingly aware of the arrangement of subject matter within image.	Placement of subject matter and camera supports the overall aesthetic of the scene.	Placement of subject matter and camera clearly and effectively supports the construct of the scene as well as energizes the conceptual meaning.
Lighting	Did the student consider and utilize lighting appropriately for the scene?	Did not take lighting into consideration.	Lighting implemented incorrectly or alternative lighting should have been used.	Lighting was considered and implemented appropriately.	Superior - lighting well executed.
Textures	Did the student consider and utilize textures appropriately for scene?	Did not take textures into consideration.	Textures implemented incorrectly or alternative textures should have been used.	Textures were considered and implemented appropriately.	Superior - textures well executed.

Appendix B – Abilities Rubric

Table 5.3 – Abilities Rubric – APCG 117

Attributes	Not accomplished	Poor	Weak	Okay	Good	Excellent	Perfect
Value	0	1	2	3	4	5	6
Show or Convey Story	Not accomplished	Poor	Weak	Okay	Good	Excellent	Perfect
Show or Convey Emotion	Not accomplished	Poor	Weak	Okay	Good	Excellent	Perfect
Audience Hook	Not accomplished	Poor	Weak	Okay	Good	Excellent	Perfect
Continuity	Not accomplished	Poor	Weak	Okay	Good	Excellent	Perfect

Table 5.4 – Abilities Rubric – APCG 330

Attributes		Unacceptable	Marginal	Acceptable	Exceptional
Value		0	1	2	3
Modeler	How well and skillfully was Modeler used?	Only basic modeling skills are evident in the scene.	Models appear to have been constructed with appropriate tools.	The models are well executed and appropriate for the scene.	The models are exceedingly well created and functional for the scene.
Layout	How well and skillfully was Layout used?	The scene shows no or limited use of layout; the scene appears to be thrown together.	Basic layout skills are evident from the render including some antialiasing, and lighting and camera effects.	Layout tools were used well to produce a quality render of the scene, including appropriate antialiasing, and lighting and camera effects.	Layout tools were used flawlessly to produce a superior render of the scene with clear planning and skillful used of all appropriate tools.
Creativity	Does the scene show creative use of the composition, tools and layout?	The scene lacks creativity or a re-implementation of another scene.	The scene shows some creative thinking that works for the scene.	Displays creative thinking with original concepts or implementations that works well in its totality.	The scene is very clever with original concepts and implementation; creatively designed that shows creativity that works and is not just weird but exciting and fresh.

<p>Critical Thinking - Content, Aesthetics, and Creativity.</p>	<p>Was the scene considered and constructed to convey meaning and utilize an effective combination of aesthetic elements and creativity?</p>	<p>The scene shows little evidence of thought regarding content and the elements and principles of art and design.</p>	<p>The scene accomplishes the assignment adequately, yet shows a lack of planning and little evidence that an overall composition was thought out and executed.</p>	<p>The content of the scene is meaningful. The scene shows application of the principles of design while using one or more elements effectively and shows an awareness of using the space adequately.</p>	<p>The content of the scene is thoughtful and meaningful. The scene shows an awareness of the elements and principles of design, chose a color scheme carefully, and used space effectively.</p>
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Appendix C – Oral Communications Rubric

Table 5.4 – Oral Communications Rubric – APCG 117 and 330

Attributes	Unacceptable	Marginal	Acceptable	Exceptional
Value	0	1	2	3
Organization & Structure	Not possible to understand presentation due to absence of structure.	Difficult to follow presentation due to erratic topical shifts and jumps.	Most information presented in logical order which is easy to follow	All information is presented in a logical, interesting, and novel sequence, which is easily followed.
Content & Knowledge	No grasp of information. Unable to answer questions about the subject.	Uncomfortable with information. Capable only of answering rudimentary questions.	At ease with content and able to elaborate and explain to some degree.	Demonstration of full knowledge of the subject with explanations and elaboration.
Visual Aids & Neatness	No visual aids.	Occasional use of visual aids, however they barely support text or presentation. Several misspellings and/or grammatical errors on visual aids.	Visual aids are related to text and presentation. Minor misspellings and/or grammatical errors on visual aids.	Text and presentation are reinforced by the use of visual aids. Negligible misspellings and/or grammatical errors on visual aids.
Voice volume, enunciation, speed	Unintelligible	Voice hard to hear, words slurred or voice trails off, spoke too slow or too fast, monotone with little emphasis	Voice clearly heard, words clearly enunciated, did not speak too slowly or too rapidly	Voice projected very well, clear enunciation, did not speak too slowly or rapidly
Hesitations, other voice habits	Presentation full of hesitations, ums, ahs, etc.	Some hesitations, ums, ahs, etc.	Clear, continuous presentation, perhaps a few ums, ahs, etc.	Superior presentation, free of ums, ahs, etc.
Distracting mannerisms	Presentation full of distracting mannerisms such as giggling or chewing gum	Some distracting mannerisms	No distracting mannerisms	Superior presentation
Maintaining eye contact	No eye contact with audience at all	Poor eye contact, looking down or at screen significant portion of time	Maintained eye contact other than quick glances at screen	Maintained eye contact with all segments of the audience

Poise	Clearly unsure, nervous, confused	At times appears unsure nervous, confused	Composed at all times	Exudes/convey confidence
Body language	Immobile, hands in pockets, or blocked screen	Did not always indicate how material on the screen was related to presentation	Consistently used gestures to coordinate oral and visual presentation	Excellent use gestures to provide emphasis
Presentation Length	Far too short or too long.	Somewhat too short or too long.	Acceptable length.	Presentation meets specifications exactly.
Overall Rating	Unacceptable	Marginal	Acceptable	Exceptional

Appendix D – Teams Rubric

Table 5.5 – Team Rubric – APCG 117 and 330

Attributes	Unacceptable	Marginal	Acceptable	Exceptional
Value	0	1	2	3
Involvement	Took little pride or interest in own tasks related to the project.	Seemed preoccupied with other assignments, classes, work, etc.	Offered encouragement to other group members.	Assisted other group members.
Participation	Seemed bored with or uninterested in conversations about the project.	Listened to others; on some occasions, made suggestions.	Participated in discussions about the project.	Provided many cogent ideas for the development of the project.
Preparation	Rarely or sporadically prepared for group activities with assignments and required group materials.	Sometimes prepared for group activities with assignments and required group materials.	Usually prepared for group activities with assignments and required group materials.	Almost always prepared for group activities with assignments and required group materials.
Working with Others	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Usually listens to, shares with, and supports the efforts of others. Does not cause "waves" in the group.	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.
Attendance	Attendance record is haphazard and inconsistent; may be absent or late.	Gives the impression of wanting to be somewhere else; may be absent or late; does not inform others of anticipated absence or lateness.	Usually present; informs others if absences or lateness is anticipated.	Outstanding attendance record; always present and prepared for group work.
Enthusiasm	Disinterested in assigned duties and shows no enthusiasm.	Performs duties with little enthusiasm.	Performs assigned duties with sporadic enthusiasm.	Eager to perform assigned duties.
Task Completion	Rarely completes tasks on time; requires someone to follow up with them all of the time.	Completes some tasks on time; needs to be checked on often.	Completes most tasks on time; needs only occasional reminders.	Completes tasks on time without reminders.

Focus on the task	Rarely focuses on the task and what needs to be done. Lets others do the work.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Consistently stays focused on the task and what needs to be done. Very self-directed.
Problem-solving	Does not try to solve problems or help others solve problems. Lets others do the work.	Does not suggest or refine solutions, but is willing to try out solutions suggested by others.	Refines solutions suggested by others.	Actively looks for and suggests solutions to problems.
Quality of Work	Provides work that usually needs to be checked/redone by others to ensure quality.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides high quality work.	Provides work of the highest quality.
Contribution	Team member did less work than others.	Team member did almost as much work as others.	Team member did an equal share of the work.	Team member did a full share of the work or more.

Graduating Senior Survey

College of Engineering, Computer Science, and Construction Management
CSU, Chico

Dear Graduating Senior,

The College of ECC has developed the enclosed survey to give you a forum for letting us know what you think of your experience at CSU, Chico, and to help us to continually improve the curriculum and services we offer. We care a great deal about the programs and your feedback is essential to helping us provide the highest quality education we can deliver. Thank you in advance for your time and attention to this survey.

We hope the years you have spent with us have enriched your life and provided you with the foundation for a successful career. Please stay in touch!

With best wishes, The College of ECC Faculty



1. Major

- | | | |
|-------------------------------|-------------------------------|-------------------------------|
| <input type="checkbox"/> APCG | <input type="checkbox"/> CMPE | <input type="checkbox"/> ME |
| <input type="checkbox"/> CE | <input type="checkbox"/> CSCI | <input type="checkbox"/> MECA |
| <input type="checkbox"/> CIS | <input type="checkbox"/> EE | <input type="checkbox"/> MFGT |
| <input type="checkbox"/> CM | | |

2. Graduation date

- Semester Year 200
- | | |
|---------------------------------|--------------------------------|
| <input type="checkbox"/> Spring | <input type="text" value="5"/> |
| <input type="checkbox"/> Summer | <input type="text" value="6"/> |
| <input type="checkbox"/> Fall | <input type="text" value="7"/> |
| | <input type="text" value="8"/> |

3. Did you come to Chico State as a...

- First-time freshman Transfer

4. How many semesters did you attend Chico State?

- 1-3 4-6 7-9 10-12 13+

5. What is your overall GPA?

- | | |
|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Below 2.25 | <input type="checkbox"/> 3.00 - 3.24 |
| <input type="checkbox"/> 2.25 - 2.49 | <input type="checkbox"/> 3.25 - 3.50 |
| <input type="checkbox"/> 2.50 - 2.74 | <input type="checkbox"/> 3.51 - 3.74 |
| <input type="checkbox"/> 2.75 - 2.99 | <input type="checkbox"/> 3.75 - 4.00 |

6. If you had an internship, co-op, or job related to your major while in school, how valuable was the experience?

- Did not have internship, co-op, or job
 Very valuable
 Valuable
 Somewhat valuable
 Not valuable

7. If you were involved in any student/professional society, activities, or clubs, how valuable was the experience?

- Was not involved in societies, activities, or clubs
 Very valuable
 Valuable
 Somewhat valuable
 Not valuable.

8. Immediately after graduating are you planning to...

- | | | |
|------------------------|------------------------------|-----------------------------|
| Attend graduate school | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Begin working | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

If you are **NOT** planning to work full-time, or if you have not begun looking for a job, please skip to Question 13.

9. How many job offers have you received?

- None One Two Three Four +

10. Do you currently have a job offer that you are likely to accept?

- Yes No

If 'Yes,' please provide:

Company name _____

Your job title _____

Starting annual salary

- | | |
|--|--|
| <input type="checkbox"/> Less than \$30K | <input type="checkbox"/> \$51-60\$ |
| <input type="checkbox"/> \$30-40K | <input type="checkbox"/> \$61-70K |
| <input type="checkbox"/> \$41-50K | <input type="checkbox"/> \$71K or more |

11. If you interviewed through the campus Career Planning & Placement Office, how helpful was it?

- Did not interview through campus office
 Very helpful
 Helpful
 Somewhat helpful
 Not helpful

12. If you found a job that you are likely to accept, how did you find it?

- Campus Career Planning & Placement Office
 Faculty/department referral
 Online posting
 Mailed resume
 Personal connections
 Other: _____

13. Did you take a comprehensive exam (FE, CMfgT, MFT or other) for your discipline?

- No, did not take
 Yes, and passed
 Yes, and did not pass
 Yes, and waiting for results

14. If you took a comprehensive exam, did you also attend a review course to prepare you for the exam?

- Yes No

If 'Yes,' how valuable was the course?

- Very valuable
 Valuable
 Somewhat valuable
 Not valuable

Educational Satisfaction Questions

At Chico State, how satisfied were you with the...

	Very Dissatisfied				Very Satisfied
15. Quality of teaching by faculty in your department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Quality of teaching by other faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Access to faculty in your department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Availability of courses in your department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Quality of courses in your department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Access to laboratory facilities and equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Quality of laboratories and equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Access to computer facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Quality of computer facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Academic advising from your major advisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Academic advising from the University Advising Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Career information from your department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Availability of General Education courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Quality of General Education courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. The overall quality of your education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Your overall experience at Chico State	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Program Outcomes Questions

Based on your educational experience here at Chico State how well prepared are you to...

	Very Unprepared				Very Well Prepared
31. Apply knowledge of math, science, engineering, or technology to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Design and conduct experiments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Analyze and interpret experimental data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Design a component or system to meet desired needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Function on a multidisciplinary team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Identify, formulate, and solve technical problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Communicate technical matters in writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Communicate technical matters orally	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Understand and apply professional and ethical principles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Understand contemporary issues facing society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Use modern tools and technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Enter the workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Continue learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree				Strongly Agree
44. I would recommend my major program at CSU, Chico to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p><u>Supplemental Questions</u> Please locate the supplemental questions on the sheet provided. Enter your responses to the right.</p>	Q1. (A) (B) (C) (D) (E)	Q6. (A) (B) (C) (D) (E)	Q11. (A) (B) (C) (D) (E)
	Q2. (A) (B) (C) (D) (E)	Q7. (A) (B) (C) (D) (E)	Q12. (A) (B) (C) (D) (E)
	Q3. (A) (B) (C) (D) (E)	Q8. (A) (B) (C) (D) (E)	Q13. (A) (B) (C) (D) (E)
	Q4. (A) (B) (C) (D) (E)	Q9. (A) (B) (C) (D) (E)	Q14. (A) (B) (C) (D) (E)
	Q5. (A) (B) (C) (D) (E)	Q10. (A) (B) (C) (D) (E)	Q15. (A) (B) (C) (D) (E)

Thank you for completing the survey, and please stay in touch with us!

Graduating Senior Survey – Supplemental Questions 2006-07



College of Engineering, Computer Science, and Construction Management, CSU Chico

Major: APCG CE CIS CM CMPE _CSCI EE ME MECA MFGT

College Supplemental Questions

Please answer these on the scantron form !!!!

- | | A. | B. | C. | D. | E. |
|---|------------------------------|--------------------------|----------------|-----------------------|-------------------|
| Q1. How satisfied are you with the department support you received while enrolled at Chico State: | A. very dissatisfied | B. somewhat dissatisfied | C. neutral | D. somewhat satisfied | E. very satisfied |
| Q2. How often did you meet with someone in the University Advising Office? | A. more than once a semester | B. once a semester | C. once a year | D. occasionally | E. never |
| Q3. How often did you meet with your major (departmental) advisor? | A. more than once a semester | B. once a semester | C. once a year | D. occasionally | E. never |

CSU, Chico is considering a new graduate program, a Master of Science in Engineering/Technical Management. The degree would be based on recent changes that have been, or are expected to be, enacted by national engineering professional societies for partial fulfillment of requirements for obtaining an engineering license. The Chico degree would be an interdisciplinary program not tied to any particular type of engineering.. It is anticipated that the degree would be open to non-engineering BS degree holders and could be completed in two semesters. Upon completion of the proposed degree graduates would be expected to:

- Understand elements of project and asset management.
- Understand business, public policy and administration fundamentals.
- Understand the role of leader and leadership principles and attitudes.

Your responses to the following questions will help in the development of such a program.

Q4: If this program currently existed, how likely would you be to enroll in the MSEM program shortly after completing your BS degree?

- | | |
|----|----------------|
| A. | highly likely |
| B. | possibly |
| C. | uncertain |
| D. | unlikely |
| E. | definitely not |

Q5. Assuming that you were to enter this program, what format would you prefer for the course work associated with the MSEM degree?

Appendix F – Supplemental Exit Survey

APCG Supplemental Questions

- Q6. Do you feel you are prepared to pursue a career in the Computer Graphics industry?
 A. very
 B. ~~prepare~~
 C. ~~somewhat~~
 D. ~~prepare~~
 E. ~~somewhat~~
 prepared
- Q7. Do you feel the APCG faculty stressed the importance of preparing a professional portfolio?
 A. yes
 B. no
- Q8. How well do you feel the APCG faculty did in preparing you for a career in the Computer Graphics industry?
 all
 minimally acceptable
 acceptable
 exceptional
 A. not at
 B.
 C. neutral
 D.
 E.
- Q9. How do you feel about the overall instruction in the APCG Program?
 dissatisfied
 somewhat dissatisfied
 somewhat satisfied
 satisfied
 A. very
 B.
 C. neutral
 D.
 E. very
- Q10. Do you feel the APCG Program helped you with career placement?
 A. yes
 B. no
- Q11. How satisfied are you with the APCG Program’s support in obtaining an industrial internship?
 dissatisfied
 somewhat dissatisfied
 somewhat satisfied
 satisfied
 A. very
 B.
 C. neutral
 D.
 E. very
- Q12. Did you have sufficient laboratory time to complete projects?
 A. yes
 B. no

Your responses will be kept confidential. Thank you for completing this survey and please stay in touch with us!

Appendix G – Overall Survey Results

2006-2007 Senior Exit Survey - General Information

Q1 Major		
	Count	% of College
APCG	12	4.70%

Q2 Year and Term of Graduation						
	Fall 2006	Spring 2007	Summer 2007	Fall 2007	Spring 2008	Total
Count	0	11	1	0	0	12
%	0.0%	91.7%	8.3%	0.0%	0.0%	100.0%

Q3 Came to Chico State as a...			
	First-time Freshman	Transfer	Total
Count	4	8	12
%	33.3%	66.7%	100.0%

Q4 Semesters attended Chico						
	1-3	4-6	7-9	10-12	13+	Total
Count	0	4	4	4	0	12
%	0.0%	33.3%	33.3%	33.3%	0.0%	100.0%

Q5 Overall GPA									
	Below 2.25	2.25-2.49	2.50-2.74	2.75-2.99	3.00-3.24	3.25-3.50	3.51-3.74	3.75-4.00	Total
Count	0	1	1	1	3	4	1	1	12
%	0.0%	8.3%	8.3%	8.3%	25.0%	33.3%	8.3%	8.3%	100.0%

Q6 Value of internship, co-op, or job if related to major						
	No internship, co-op, job	Not valuable	Somewhat valuable	Valuable	Very valuable	Total
Count	1	1	1	1	8	12
%	8.3%	8.3%	8.3%	8.3%	66.7%	100.0%

Q7 Value of involvement in societies, activities, clubs						
	Not in societies, activities, clubs	Not valuable	Somewhat valuable	Valuable	Very valuable	Total
Count	5	2	3	1	1	12
%	41.7%	200.0%	300.0%	100.0%	100.0%	100.0%

Q8A Plans after graduation: Attend grad school			
	Yes	No	Total
Count	1	9	10
%	10.0%	90.0%	100.0%

Q8B Plans after graduation: Begin working			
	Yes	No	Total
Count	9	1	10
%	90.0%	10.0%	100.0%

Q9 Number of job offers received						
	None	One	Two	Three	Four +	Total
Count	7	2	0	0	0	9
%	77.8%	22.2%	0.0%	0.0%	0.0%	100.0%

Q10A Likely to accept current job offer			
	Yes	No	Total
Count	1	9	10
%	10.0%	90.0%	100.0%

Q10B Current job offer: Starting salary							
	Less than \$30K	\$30-40K	\$31-50K	\$51-60K	\$61-70K	\$71K or more	Total
Count	1	1	1	0	0	0	3
%	33.3%	33.3%	33.3%	0.0%	0.0%	0.0%	100.0%

Q11 Interview at Career Planning Office helpful						
	Did not interview through campus	Not helpful	Somewhat helpful	Helpful	Very helpful	Total
Count	7	2	0	0	1	10
%	70.0%	20.0%	0.0%	0.0%	10.0%	100.0%

Q12 How did you find your job?							
	Career Planning Office	Faculty-dept referral	Online posting	Mailed resume	Personal connections	Other	Total
Count	0	0	4	2	1	1	8
%	0.0%	0.0%	50.0%	25.0%	12.5%	12.5%	100.0%

Appendix H – Survey Responses

Senior Exit Survey - Educational Satisfaction Mean Responses							
Scale: 1=Very Unprepared 5=Very Well Prepared			Dissatisfied 1+2	Neither 3	Satisfied 4+5	Total	Mean
Q15	Quality of teaching by faculty in department	Count	0	2	10	12	4.42
		%	0.0%	16.7%	83.3%	100.0%	
Q16	Quality of teaching by other faculty	Count	1	2	9	12	3.75
		%	8.3%	16.7%	75.0%	100.0%	
Q17	Access to faculty in your department	Count	0	1	11	12	4.75
		%	0.0%	8.3%	91.7%	100.0%	
Q18	Availability of courses in your department	Count	0	1	11	12	4.50
		%	0.0%	8.3%	91.7%	100.0%	
Q19	Quality of courses in your department	Count	0	2	10	12	4.17
		%	0.0%	16.7%	83.3%	100.0%	
Q20	Access to lab facilities and equipment	Count	0	1	10	11	4.55
		%	0.0%	9.1%	90.9%	100.0%	
Q21	Quality of laboratories and equipment	Count	0	3	8	11	4.00
		%	0.0%	27.3%	72.7%	100.0%	
Q22	Access to computer facilities	Count	0	0	12	12	4.67
		%	0.0%	0.0%	100.0%	100.0%	
Q23	Quality of computer facilities	Count	0	3	9	12	4.00
		%	0.0%	25.0%	75.0%	100.0%	
Q24	Academic advising from your major advisor	Count	1	1	10	12	4.24
		%	8.3%	8.3%	83.3%	100.0%	
Q25	Academic advising from Univ. Advising Office	Count	2	2	7	11	3.82
		%	18.2%	18.2%	63.6%	100.0%	
Q26	Career information from your department	Count	2	2	8	12	3.67
		%	16.7%	16.7%	66.7%	100.0%	
Q27	Availability of GE courses	Count	1	1	10	12	3.92
		%	8.3%	8.3%	83.3%	100.0%	
Q28	Quality of GE courses	Count	2	2	7	11	3.64
		%	18.2%	18.2%	63.6%	100.0%	
Q29	Overall quality of your education	Count	0	0	12	12	4.33
		%	0.0%	0.0%	100.0%	100.0%	
Q30	Overall experience at Chico State	Count	0	0	12	12	4.67
		%	0.0%	0.0%	100.0%	100.0%	

Senior Exit Survey - Preparation							
Scale: 1=Very Unprepared 5=Very Well Prepared			Dissatisfied 1+2	Neither 3	Satisfied 4+5	Total	Mean
Q31	Apply knowledge to solve problems	Count	1	3	8	12	4.00
		%	8.3%	25.0%	66.7%	100.0%	
Q32	Design and conduct experiments	Count	0	0	11	11	4.27
		%	0.0%	0.0%	100.0%	100.0%	
Q33	Analyze and interpret experimental data	Count	1	1	10	12	4.08
		%	8.3%	8.3%	83.3%	100.0%	
Q34	Design component or system to meet needs	Count	1	0	11	12	4.00
		%	8.3%	0.0%	91.7%	100.0%	
Q35	Function on multidisciplinary team	Count	0	0	12	12	4.50
		%	0.0%	0.0%	100.0%	100.0%	
Q36	Identify, formulate, solve technical problems	Count	1	1	10	12	4.17
		%	8.3%	8.3%	83.3%	100.0%	
Q37	Communicate technical matters in writing	Count	1	1	10	12	3.83
		%	8.3%	8.3%	83.3%	100.0%	
Q38	Communicate technical matters orally	Count	1	0	10	11	3.91
		%	9.1%	0.0%	90.9%	100.0%	
Q39	Understand and apply professional and ethical principles	Count	0	0	12	12	4.58
		%	0.0%	0.0%	100.0%	100.0%	
Q40	Understand contemporary issues facing society	Count	0	2	10	12	4.25
		%	0.0%	16.7%	83.3%	100.0%	
Q41	Use modern tools and technology	Count	0	0	12	12	4.58
		%	0.0%	0.0%	100.0%	100.0%	
Q42	Enter the workplace	Count	1	1	10	12	4.08
		%	8.3%	8.3%	83.3%	100.0%	
Q43	Continue learning	Count	0	0	12	12	4.67
		%	0.0%	0.0%	100.0%	100.0%	
Q44	Recommend major program at CSUC to others	Count	0	1	11	12	4.67
		%	0.0%	8.3%	91.7%	100.0%	

Appendix I - Major Specific Questions for APCG

Senior Exit Survey - Supplemental Questions							
Scale: 1=Very Unprepared 5=Very Well Prepared			Dissatisfied 1+2	Neither 3	Satisfied 4+5	Total	Mean
Q6	Feel prepared to pursue career in Computer Graphics industry	Count	2	1	9	12	3.75
		%	16.7%	8.3%	75.0%	100.0%	
Q8	How you feel APCG faculty did preparing you for career in industry	Count	1	2	9	12	4.17
		%	8.3%	16.7%	75.0%	100.0%	
Q9	How you feel about overall instruction in program	Count	0	2	10	12	4.25
		%	0.0%	16.7%	83.3%	100.0%	
Q11	Satisfied with program's support in obtaining industrial internship	Count	4	2	6	12	3.46
		%	33.3%	16.7%	50.0%	100.0%	

			No	Yes	Mean
Q7	Feel APCG faculty stressed importance of preparing professional portfolio	Count	1	11	12
		%	8.3%	91.7%	100.0%
Q10	Feel program helped with career placement	Count	2	10	12
		%	16.7%	83.3%	100.0%
Q12	Sufficient lab time to complete projects	Count	0	12	12
		%	0.0%	100.0%	100.0%