ANNUAL PROGRAM ASSESSMENT REPORT

Date: 28 September 2019

I.   Assessment of Student Learning Outcomes

1.   Program Name and Contact Information of Program Assessment Coordinator:
Computer Animation and Game Development, Clarke Steinback (csteinback@csuchico.edu)

2.   Student Learning Outcomes
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. (Aesthetics)
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 professionalism through creative and intellectual independence. (Professionalism)

3.   Course Alignment Matrix:

Mapping CAGD Courses to Program Outcomes

Course Title	Course	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		I		I	I
Concept Design & Storyboarding	117	I	P	P	P	P	P	I	I	I	I
Video Game Design	170	I	P	P	P	P	P	I		I	I
Digital Modeling	230	I	P	P	P	P	P	I		I	I
Digital Animation	240	I	P	P	P		P	I		I	
Motion Capture for Game	325		P	P	P				P	P	
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
Advanced Animation Pre-Prod	345	P	P	P	P	D	D	D	P	P	P
Game Asset Production	373	P	P	P	P	P	P	P	P	P	I
Digital Lighting and Texturing	420		D	D						D	D
3-D Character Rigging	432		D	D						D	
3-D Character Animation	441	P	P	P	P		P	P		P	P
Advanced Animation Production	445	D	D	D	D		D	D	D	D	D
Senior Portfolio	493	D	D	D	D	D	D	D		D	D
Advanced Animation Post-Prod	545	D	D	D	D		D	D	D	D	D

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

Assessed AY 2018-2019

4. **What is your current Assessment Plan**

All Program Outcomes, except #1 Issues, assessed in this cycle using embedded assessments. With use of the embedded assessment the Program intends to continue to assess all Program Outcomes. Outcome #1 has been discussed and assessment rubrics will be considered for the next assessment cycle. The Program continues to expand the courses in which embedded assessment data is collected to include all courses over the next few assessment cycles. The Program also uses the ECC Senior Exit Survey to review 'Satisfaction' and 'Preparedness' that can speak to overall trends which can be used to consider overall and specific goals of the Program but the survey is not tied to the PLOs. This academic year, the Program also invited informal feedback from industry partners in the form of feedback on senior student work and considerations industry has for the overall senior student preparedness for work in industry.

5. **Learning Outcome(s) Assessed in AY 2018-2019:**

   2 Aesthetics
   3 Abilities
   4 Proficiency
   5 Written
   6 Oral
   7 Critiquing
   8 Teams
   9 Process
   10 Professionalism

6. **Assessment Methodology Used:**

For most courses currently providing assessment data, grading rubrics for assignments have rubric elements associated with Program Outcomes. Thus most courses have many grading elements which service as embedded assessment. Embedded assessments were used in assignments for all courses submitting assessment data. CAGD 110, 112, 230 and 345 are core CAGD courses for the entire Program; CAGD 240, 445, 493 and 545 are required in the Animation Production Option; CAGD 325, 330, 331, 340, 420 and 432 are electives for the students graduating in this cycle. All assessed projects and assignments in these courses have rubrics associated with each element in the rubric linking back to a Program Outcome. The rubrics utilized a three (3) point scale – 0, 1, 2 or 3 for evaluating each element in the rubric.

The Program has a shared assessment rubric library which continue to enhance. Rubrics are used in grading as well as in peer evaluation used for presentations and project critiques. The peer evaluation using the assessment rubrics provides additional assessment data beyond that given by the instructor, teaching associates and graders. Peer evaluations account for some of the very large sample sizes in some of the assessment rubric elements, especially when a class 30 or more students uses rubrics that assess multiple facets of some Program Outcomes.

The types of assignments used in the assessment include blog postings, critiques, presentations, papers, assignments, and significant course projects. The grading, and thus, assessment rubrics are published for the students as tools to assist in helping understand assignments and expectation. All rubrics are detailed and phrase-based, using an underlying scale of zero (0) to three (3) reflecting unacceptable to exceptional. Currently the Program has set a benchmark of 70% of students achieving acceptable and exceptional for the aggregated data for each Program Outcome.

In addition to the embedded assessments, the Program does utilize the ECC Graduating Senior Survey (Appendix C) administered to graduating seniors in December and May. The survey contains elements pertaining to Educational Satisfaction and Preparation.   In AY 2018 – 2019 the survey was completed by 19 of the

approximately 50 graduates. The survey is an online instrument intended for students in their final semester; the Program endeavors to solicit student participation in senior courses (CAGD 493 *Senior Portfolio* and CAGD 495 *Advanced Production*).

Two industry partners met with and reviewed senior-level student work in informal settings. The individual students received feedback on their work products, and the industry partners relayed their overall impression as to preparedness of the students.

The use of the embedded assessment provides the program with extensive input as to performance on each of the evaluated Program Outcomes for AY 2018-2019; the embedded assessments also reduces the burden on the faculty in that grading with the rubrics provides assessment data collected in Blackboard Learn that the faculty can then export for the assessment coordinator to use for the Program.

7. **Assessment Results:**

Please describe/report outcomes of assessment. How well did students perform on the assessment task? Feel free to use the table below to report results, adapting the table as necessary, or provide narrative describing the assessment results.

In Academic Year 2018 – 2019, nine (9) of the ten (10) Program Outcomes were assessed in 13 different courses in the Program from each academic level – freshman, sophomore, junior and senior. Appendix A provides a summary of the results from the embedded rubrics for each course in which the rubric was used for AY 2018 – 2019. The Program Outcomes for Issues (#1) was not measured in this assessment cycle. The assessment of each measured Program Outcome is derived from rubrics embedded in grading and critiquing assignments in each assessed course. The aggregate assessment outcome averages (See Table 7.1) indicate that the percentage of students achieving the target valued of 2.0 was more than 70% in all nine (9) measured Program Outcome with the Program goal being 70%. All measured Program Outcomes averaged above 82% of the students achieving the target value in the aggregated data. The average target goal for each Program Outcome was 2.0 and the aggregate assessment data indicates that the Program achieved this goal in all nine (9) measured Program Outcomes. All the results displayed in the table are from embedded assessment rubrics associated with assignments in a mixture of Program core, Option-required and CAGD elective courses. Results for each rubric element in each course are listed in Appendix A with rubric elements used in the assessment tools listed in Appendix B.

Table 7.1 – AY 2018 – 2019 Program Outcome Assessment Aggregates

Student Learning Outcome	Sample and Sample Size	Measure	Average – Scale 0 – 3 Target 2	Percent of Students Achieving Target
2 Aesthetics	5,596	Embedded course rubrics in course assignments.	2.3	88.54%
3 Abilities	3,453	Embedded course rubrics in course assignments.	2.3	82.78%
4 Proficiency	755	Embedded course rubrics in course assignments.	2.3	83.70%
5 Written	890	Embedded course rubrics in course assignments.	2.8	94.58%
6 Oral	622	Embedded course rubrics in course assignments.	2.5	96.33%
7 Critiquing	545	Embedded course rubrics in course assignments.	2.6	92.28%
8 Teams	74	Embedded course rubrics in course assignments.	2.3	83.00%
9 Process	3,886	Embedded course rubrics in course assignments.	2.6	91.27%
10 Professionalism	1,036	Embedded course rubrics in course assignments.	2.6	91.73%

The comparison of the aggregate averages between AY 2017 – 2018 and AY 2018 – 2019 (See Table 7.2) shows some minor fluctuation in average target values for each of the measured Program Outcomes. The Percentage of Students Achieving Targets does also show some variation between the two years with all the current year's percentages at or above the target of 70%.

Table 7.2 – Comparison AY 2017 – 2018 and AY 2018 – 2019

Student Learning Outcome	AY 2016 - 2017			AY 2017 - 2018			Change	
	Sample and Sample Size	Average – Scale 0 – 3 Target 2	Percent of Students Achieving Target	Sample and Sample Size	Average – Scale 0 – 3 Target 2	Percent of Students Achieving Target	Average	Percent of Students Achieving Target
2 Aesthetics	4,448	2.2	82.14%	5,596	2.3	88.54%	0.1	6.40%
3 Abilities	1,987	2.2	82.00%	3,453	2.3	82.78%	0.0	0.77%
4 Proficiency	319	2.5	92.16%	755	2.3	83.70%	-0.2	-8.46%
5 Written	696	2.7	96.34%	890	2.8	94.58%	0.0	-1.75%
6 Oral	126	2.5	97.69%	622	2.5	96.33%	0.0	-1.36%
7 Critiquing	209	2.5	89.65%	545	2.6	92.28%	0.1	2.63%
8 Teams				74	2.3	83.00%	0.0	0.00%
9 Process	2,905	2.7	92.64%	3,886	2.6	91.27%	-0.1	-1.37%
10 Professionalism	608	2.7	98.19%	1,036	2.6	91.73%	-0.1	-6.46%

The Program also utilizes the ECC Graduating Senior Survey for Educational Satisfaction and Preparation feedback from graduating seniors. Only nineteen of the fifty or so graduates responding this academic year to the survey. Appendix A provides a summary of the responses to the ECC Graduating Senior Survey for the Educational Satisfaction and Preparation questions for AY 2018 – 2019.

The survey queried the respondents about "Educational Satisfaction" with the results summarized in Table 7.3. 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 responses of satisfied are desirable with responses of neutral being considered positive while scores of dissatisfied reflecting a degree of discontent with the corresponding aspect of the student education. The responses to the Educational Satisfaction questions show that the graduates are fairly well satisfied with their education at Chico State. Most of the Educational Satisfaction responses well above 70% satisfied with only three satisfactions rates between 50% and 69% with none having a corresponding dissatisfied rate above 16%.

Table 7.3 – Educational Satisfaction AY 2018 – 2019

Educational Satisfaction Responses	AY 2018-2019	
Scale: 1=Very Dissatisfied 5=Very Satisfied	Dissatisfied 1+2	Satisfied 4+5
Quality of teaching by faculty in dept	5.3%	84.2%
Quality of teaching by other faculty	5.3%	68.4%
Access to faculty in your dept	0.0%	89.5%
Availability of courses in your dept	15.8%	52.6%
Quality of courses in your dept	10.5%	84.2%
Access to lab facilities, equipment	5.6%	77.8%
Quality of laboratories, equipment	0.0%	89.5%
Access to computer facilities	10.5%	73.7%
Quality of computer facilities	0.0%	84.2%
Academic advising from your major advisor	5.3%	78.9%
Academic advising from the Advising Office	5.3%	57.9%
Career information from your dept	15.8%	73.7%
Availability of GE courses	0.0%	73.7%
Quality of GE courses	5.3%	73.7%
Overall quality of your education	5.3%	89.5%
Overall experience at Chico State	0.0%	89.5%
Recommend my major program	5.3%	78.9%

The survey queried the respondents about "Preparation" with the results summarized in Table 7.4 for AY 2018 – 2019. The survey scale ranged from a score of "1 = Very Unprepared" to "5 = Very Prepared" with the score of 3 being neutral. The responses of Prepared are desirable with responses of Neutral being considered positive while scores of Unprepared reflecting a degree of concern with the corresponding aspect of the student preparedness. The responses to the Preparation questions provide some gauge as to how well the graduates feel prepared as they leave their undergraduate studies and enter the workforce or continue on with higher education. The responses to the Preparation questions show that the graduates feel fairly well prepared as they exit their undergraduate studies with all combined Prepared and Neutral percentages for the vast majority questions at or above 84% with only 'Understand contemporary issues facing society' having the lowest at 68% Prepared or Neutral yet none feeling Unprepared.   Most questions had a combined Prepared and Neutral percentages for all the questions of 100% with only 'Communicate technical matters in writing ' having 5.3% feeling Unprepared and 84.2% feeling Prepared.

Table 7.4 – Preparation AY 2018 – 2019

Senior Exit Survey - Preparation Responses	AY 2018-2019	
Scale: 1=Very Unprepared 5=Very Well Prepared	Unprepared 1+2	Prepared 4+5
Apply knowledge to solve problems	0.0%	89.5%
Design and conduct experiments	0.0%	77.8%
Analyze and interpret experimental data	0.0%	83.3%
Design component or system to meet needs	0.0%	84.2%
Function on multidisciplinary team	0.0%	84.2%
Identify, formulate, solve technical problems	0.0%	78.9%
Communicate technical matters in writing	5.3%	84.2%
Communicate technical matters orally	0.0%	84.2%
Understand and apply professional, ethical principles	0.0%	89.5%
Understand contemporary issues facing society	0.0%	68.4%
Use modern tools and technology	0.0%	89.5%
Enter the workplace	0.0%	84.2%
Continue learning	0.0%	84.2%

The informal verbal feedback from our industry partners of senior-level student work was grouped into categories of career paths - animation, modeling, game design, game programming and game producer. The initial informal feedback had no suggested improvements in the modeling, game design, game programming or game producer realms. In the animation domain, the feedback recommended animators to have additional drawing experience and practice, more use of reference work, more direction to learn to act-out their animation sequences and more practice in game animation.

8. Analysis / Interpretation /Dissemination of Results

How do the assessment data you have collected and evaluated inform the program or department's understanding of student learning? How were the results shared with the following stakeholders: faculty, students, campus stakeholders, external stakeholders, other?

Overall the aggregate assessment results demonstrate the achievement of the Program Outcomes within the courses and assignments assessed. The aggregated averages for each of the measured outcomes achieved the target of 2.0 or higher on the 3-point scale for all measured outcome. Using the objective of 70% of the students achieving the targeted 2.0-level, each of the measured Program Outcomes achieved this goal. These aggregate assessment results show the Program as a whole achieving the targets and goals for the nine (9) measured Program Outcomes.

Although the embedded assessment data does show the Program attaining the goals with considerations to improve the minor variations observed this year, the Program's continued forced reliance on under-paid part-

time faculty with very high workloads does create concern for the Program. Maintaining motivation for these lecturers continues to be a challenge in the current environment. The Faculty's investment and buy-in to the Program and assessment are critical, and the faculty and Program need to be valued to assist in not only assessment but also the continued quality of teaching and student success.

As in prior years the ECC Graduating Senior Survey, the overall Educational Satisfaction is good though overall satisfaction and low dissatisfaction in AY 2018 – 2019 even with the continued crowded classrooms, significantly overworked faculty all influencing the quality of education. The cohort surveyed in AY 2018 – 2019 experienced very large lab-classroom and very limited open lab availability for all of their time in the Program. As in prior years, the two lab-classrooms are each in use for scheduled classes some 47 hours per week leaving little time to utilize the equipment outside of course time. The limited lab-classroom space and faculty is also reflected in the student partial satisfaction in courses available in the Program. Beyond not having sufficient faculty to offer additional sections of courses and new courses as the students indicate desiring, the Program does not have the physical space for any additional courses. The Interim-Dean recognizing the issue has started implementing a plan to adjust College recourses based upon the space usage study the prior year. Thus the Program has received additional space for an new lab-classroom deployed in AY 2019 - 2020. This additional space for the new lab-classroom is of great benefit to the students and the Program. The equipment and other resources to utilize the new space required cannibalizing and reorganizing the existing lab-classrooms as no additional equipment resources were obtained for the new space. For AY 2019 - 2020 the Program is using and has scheduled the new space for classes which will benefit the students, though with the continued growth of the Program the new space does not provide much open time for students to use the equipment outside of classes. To accommodate the Program's growth, the, now three, lab-classrooms are each used approximately 42 hours per week. Without the new space the Interim-Dean has allocated to the Program, we would not be able to adequately service our students.

The negative inflection in Satisfaction regarding the Program's availability of courses was noted prominently in last year's Senior Exit Survey and continues to be the lowest Satisfaction element of the survey compared to the overall satisfaction with the Program. The Program will need to hire appropriate numbers of qualified and explore expanded use of the already heavily impacted space as well as alternatives such as more web-based course components. The Program will once again request additional tenure-track and lecturer faculty to increase the number of sections and to reduce class sizes; this cohort of graduating students faced limited availability of courses throughout their time in the Program and the underlying reason for this issue has yet to be addressed completely.

In the area of Preparation, the exit survey showed all 13 areas of Preparation being nearly 100% Prepared or Neutral with only one area having a single individual feeling Unprepared in the area of writing. These results indicate the graduating seniors felt prepared by the Program and their experience here in the Program as they move into the workforce.

Overall the results of the embedded Program Outcome assessment data and the Senior Exit Survey show the program is meeting the targets and goals, and the seniors have a positive experience and overall feel prepared to move forward in their careers.

Regarding the informal feedback from some industry partners, in AY 2019 - 2020 the Program's curriculum committee will consider the input as they work on the already in the works update to the curriculum. As the updates are formulated, we will solicit feedback on the proposed changes from a variety of industry partners. The Program will also endeavor to offer a new course in game animation as suggested in the feedback. The Program will involve other and greater numbers of industry partners in reviewing student work and provide input on curricular changes.

The results of the assessment is distributed to and discussed with the faculty in faculty meetings. Other stakeholders (students, alumni and employers) will be provided the data through web publications.

9. Closing the Loop: Planned Program Improvement Actions

How will the assessment data and their evaluation be used to improve and/or maintain the program? Address items a, b, c, d and/or e <u>only if they apply to this report cycle</u>, not all items would necessarily be addressed.

a) Planned curriculum changes for improved learning outcomes.

For example, revising pedagogy, courses, assignments, curricula, or other learning support mechanisms.

In response to industry input on senior-level work, we will endeavor to implement a prototypic game animation course this next academic year, and we will solicit feedback on other planned updates to the overall curriculum. No change in the curriculum is planned or anticipated due to the embedded assessment results. Ongoing updates to the curriculum and pedagogy are expected to continue broadening the use of high-impact practices, flipping the classroom and moving lectures online such as endeavoring to update high DFW-rate courses and address the need for additional sections to accommodate the growing student population.

b) Planned Revision of Measures or Metrics (if applicable)

A possible revision of a measure might be to recommend a change in the assignments that are evaluated for program assessment, or the number of assignments examined, and by whom. A metric revision might be for program faculty to decide to change the "bar" for acceptable performance.

The faculty will discuss means to increase the completion of senior surveys, and expand our initial outreach to industry for feedback. With limited recourses the Program has not completed the start of an Industry Advisory Group and will focus on even a small start of this group in AY 2019 - 2020. The Program Curriculum Committee will review the Course to Program Outcome Matrix and will consider updating the Program's Learning Outcomes for courses, specifically starting with core freshman-level courses to articulate the outcomes of these courses to their follow-on courses in an effort to maintain cohesion within the Program. The faculty for several classes have also implemented grading/assessment rubrics in the past year and in the upcoming year will start reporting back the assessment data now that they have successfully tested their rubrics.

c) Planned Revisions to Program Objectives or Learning Outcomes (if applicable)

After examining the assessment data it might be appropriate to revise one or more of the Program Objectives or Student Learning Outcomes.

No change in the currently measured Program Outcomes is planned or anticipated.

d) Changes to Assessment Schedule (if applicable)

Do the results create a need for change in your assessment schedule? Is so, please describe.

No change in the assessment schedule is planned or anticipated.

e) No Change Being Made

Indicate why the results do not call for more change at this time (for example, results indicate Benchmark is being met or exceeded). If results do not compel change or the change necessary cannot be made at this time, or other circumstance, please explain.

Although continued evolution of the assessment along with looking at the coupling of outcomes between courses in the Program, no change in the assessment plan or schedule are anticipated.

10. Information for Next Year

What learning outcome(s) are you examining next year and who will be the contact person?

The Program anticipates surveying via embedded assessments in the next academic year for each of the ten (10) Program Outcomes:

1 Issues
2 Aesthetics
3 Abilities
4 Proficiency
5 Written
6 Oral
7 Critiquing
8 Teams
9 Process
10 Professionalism

Clarke Steinback, the only tenure-track faculty in the Program will again be charged with collecting and assembling the assessment data, and thus he will continue to be the contact person for assessment.

II. Appendices (please include any of the following that are applicable to your program)

A. Assessment Data Summaries (Details that elaborate on item 6, above.)
Data Summaries for embedded rubrics

Course		PO	Element	Average	STD	N	Percent of Students Achieving
CAGD	110	2	Animation	1.8	0.84	80	61.3%
CAGD	325	2	Animation	2.1	0.25	31	100.0%
CAGD	110	2	Color/Value	1.9	0.69	678	74.2%
CAGD	110	2	Composition	2.2	0.71	513	83.8%
CAGD	331	2	Concept Design	2.7	0.54	48	95.8%
CAGD	345	2	Continuity - Visual	2.8	0.36	13	100.0%
CAGD	330	2	Critical Thinking - Aesthetics and Creativity	2.3	0.70	128	85.2%
CAGD	420	2	Critical Thinking - Composition, Content, and Aesthetics.	2.2	0.63	9	88.9%
CAGD	420	2	Critical Thinking - Content and Aesthetics	1.9	0.54	10	80.0%
CAGD	112	2	Depth of Field	2.8	0.53	61	95.1%
CAGD	112	2	Exposure	2.6	0.51	61	98.4%
CAGD	240	2	Key Poses	1.9	0.66	56	75.0%
CAGD	325	2	Key Poses	1.4	0.87	30	43.3%
CAGD	112	2	Lighting and Exposure	2.7	0.53	58	96.6%
CAGD	240	2	Personality	1.8	0.75	56	73.2%
CAGD	325	2	Personality	2.2	0.78	30	76.7%
CAGD	330	2	Rendering	2.3	0.81	128	84.4%
CAGD	345	2	Script Formatting and Completion	1.9	0.65	27	77.8%
CAGD	110	2	Sharpness	2.1	0.71	675	83.0%
CAGD	112	2	Source Images	2.8	0.51	57	96.5%

CAGD	240	2	Staging	2.2	0.74	168	82.7%
CAGD	110	2	Story	2.6	0.67	515	91.7%
CAGD	345	2	Storyboard Panels	1.9	0.47	26	92.3%
CAGD	110	2	Texture	1.9	0.66	678	74.2%
CAGD	330	2	Texturing	2.0	0.80	128	71.1%
CAGD	420	2	Texturing	1.9	1.22	10	60.0%
CAGD	240	2	Timing/Spacing	1.7	0.70	113	65.5%
CAGD	112	2	Visually Compelling/Composition	2.3	0.58	61	93.4%
		2 Average		2.2	0.66	4,448	82.1%
CAGD	345	3	Audio	2.4	0.49	13	100.0%
CAGD	112	3	Blending Images Together	2.3	0.64	58	89.7%
CAGD	345	3	Camera Angles and Movement	2.6	0.49	13	100.0%
CAGD	325	3	Camera Composition	1.9	0.47	31	83.9%
CAGD	112	3	Digital Darkroom	2.4	0.72	173	89.0%
CAGD	331	3	Edge Loops	1.4	0.64	48	41.7%
CAGD	331	3	Form and Proportions	2.1	0.90	72	76.4%
CAGD	420	3	Form and Proportions	2.0	0.89	10	60.0%
CAGD	330	3	High-Poly Modeling	2.3	0.96	49	81.6%
CAGD	330	3	Lighting	2.2	0.88	127	81.1%
CAGD	420	3	Lighting	2.2	0.99	19	68.4%
CAGD	330	3	Low-Poly Modeling	2.5	0.81	128	85.9%
CAGD	330	3	Map Baking	2.8	0.48	127	95.3%
CAGD	112	3	Merging Images	2.4	0.64	56	91.1%
CAGD	325	3	Mocap Animation	2.1	0.72	30	80.0%
CAGD	373	3	Modeling & Overall Geometry	2.4	0.53	38	97.4%
CAGD	331	3	Overall Geometry	1.8	1.06	73	52.1%
CAGD	420	3	Overall Geometry	2.0	1.18	10	70.0%
CAGD	112	3	Project Guidelines	2.3	0.57	175	94.9%
CAGD	330	3	Shader Networks	2.3	0.91	128	81.3%
CAGD	420	3	Shader Networks	2.6	0.50	9	100.0%
CAGD	325	3	Technical Import	2.5	0.76	30	83.3%
CAGD	373	3	Texture Creation and Baking	2.2	0.68	38	89.5%
CAGD	331	3	Textures	1.8	0.85	25	68.0%
CAGD	420	3	Textures Maps	2.1	0.57	9	88.9%
CAGD	110	3	Translation	2.0	0.82	161	73.3%
CAGD	330	3	UV Mapping	2.2	0.70	128	84.4%
CAGD	331	3	UV Mapping	2.3	0.95	73	78.1%
CAGD	373	3	UV Mapping	2.2	0.74	38	78.9%
CAGD	420	3	UV Mapping	2.4	0.94	19	89.5%
CAGD	330	3	Virtual Sculpting	2.3	0.67	79	88.6%
		3 Average		2.2	0.75	1,987	82.0%
CAGD	345	4	Animatic	2.2	0.62	24	95.8%
CAGD	373	4	Asset Creation and Poly Count Utilization	2.4	0.64	12	91.7%
CAGD	345	4	Character Sheets	2.5	0.50	13	100.0%
CAGD	345	4	Continuity	2.8	0.42	26	100.0%
CAGD	345	4	Document Consistency	3.0	-	13	100.0%
CAGD	240	4	Principles of Animation	1.4	0.73	56	50.0%
CAGD	373	4	Scene Cohesiveness	2.7	0.57	38	94.7%
CAGD	373	4	Texture Creation, Baking, and Exporting	2.8	0.37	12	100.0%
CAGD	373	4	UV Layout, Organization, and Atlasing	2.8	0.43	12	100.0%
CAGD	112	4	Visually Compelling	2.2	0.62	113	89.4%
		4 Average		2.5	0.49	319	92.2%
CAGD	493	5	Blog Content	2.5	0.50	211	100.0%
CAGD	345	5	Content	2.8	0.49	25	96.0%
CAGD	373	5	Description	3.0	-	12	100.0%

CAGD	345	5	Formatting	2.7	0.46	26	100.0%
CAGD	345	5	Grammar & Spelling	2.6	0.49	39	100.0%
CAGD	345	5	Grammar and Style	2.9	0.32	25	100.0%
CAGD	112	5	Reflective Commentary/Analysis	2.5	0.64	49	91.8%
CAGD	345	5	Reflective Commentary/Analysis	2.6	0.56	25	96.0%
CAGD	373	5	Reflective Commentary/Analysis	2.4	0.71	36	86.1%
CAGD	493	5	Reflective Commentary/Analysis	2.9	0.34	15	100.0%
CAGD	345	5	Sources and Evidence	2.8	0.37	25	100.0%
CAGD	345	5	Title, Genre, Logline	2.4	0.88	26	73.1%
CAGD	112	5	Write-up	2.4	0.59	57	94.7%
CAGD	112	5	Writing Conventions: Formatting, Grammar, and Spelling	2.9	0.33	49	100.0%
CAGD	345	5	Writing Conventions: Formatting, Grammar, and Spelling	3.0	0.20	25	100.0%
CAGD	373	5	Writing Conventions: Formatting, Grammar, and Spelling	3.0	-	36	100.0%
CAGD	493	5	Writing Conventions: Formatting, Grammar, and Spelling	2.9	0.25	15	100.0%
		5	**Average**	**2.7**	**0.42**	**696**	**96.3%**
CAGD	345	6	Body language	2.0	0.55	13	84.6%
CAGD	373	6	Body Language	2.1	0.28	12	100.0%
CAGD	345	6	Distracting mannerisms	3.0	-	13	100.0%
CAGD	345	6	Hesitations, other voice habits	2.8	0.36	13	100.0%
CAGD	345	6	Maintaining eye contact	2.8	0.36	13	100.0%
CAGD	373	6	Maintaining Eye Contact	2.9	0.28	12	100.0%
CAGD	345	6	Poise	2.3	0.46	13	100.0%
CAGD	373	6	Poise	2.3	0.43	12	100.0%
CAGD	345	6	Voice volume, enunciation & speed	2.1	0.47	13	92.3%
CAGD	373	6	Voice Volume, Enunciation & Speed	2.9	0.28	12	100.0%
		6	**Average**	**2.5**	**0.35**	**126**	**97.7%**
CAGD	112	7	Commentary	2.2	0.93	92	76.1%
CAGD	112	7	Critique Posts	2.9	0.56	91	96.7%
CAGD	345	7	Textual Content	2.5	0.57	26	96.2%
		7	**Average**	**2.5**	**0.69**	**209**	**89.6%**
CAGD	373	9	3D and Game Software Organization	2.8	0.43	12	100.0%
CAGD	493	9	Blog Post & Progress	3.0	-	211	100.0%
CAGD	420	9	Camera & Rendering	2.1	0.97	19	78.9%
CAGD	325	9	Camera & Rendering	2.9	0.49	31	93.5%
CAGD	331	9	Camera, Lighting, & Rendering	2.6	0.79	72	91.7%
CAGD	345	9	Document Submission	2.6	0.62	13	92.3%
CAGD	373	9	Environment Composition, Interaction, and Aesthetic	2.8	0.43	12	100.0%
CAGD	345	9	File Naming and Format	2.7	0.76	27	88.9%
CAGD	112	9	File Structure	2.8	0.48	117	96.6%
CAGD	112	9	File Structure & Layer Organization	2.6	0.49	58	100.0%
CAGD	373	9	File Structure and Formats	2.5	0.64	38	92.1%
CAGD	373	9	File Structure, Naming, and Working Files	3.0	-	12	100.0%
CAGD	330	9	File Structures and Formats	2.8	0.50	128	96.1%
CAGD	331	9	File Structures and Formats	2.7	0.79	73	84.9%
CAGD	420	9	File Structures and Formats	2.9	0.51	29	93.1%
CAGD	325	9	File Structures and Formats	2.9	0.36	61	96.7%
CAGD	110	9	File Submission	2.9	0.42	673	96.9%
CAGD	240	9	File Submission	2.8	0.61	169	95.9%
CAGD	373	9	Game Scene Post-Processing	2.8	0.60	12	91.7%
CAGD	112	9	Online Post	3.0	0.33	93	98.9%
CAGD	330	9	Scene Organization	2.6	0.76	127	88.2%

CAGD	331	9	Scene Organization		2.9	0.40	24	95.8%
CAGD	373	9	Scene Organization		2.7	0.61	38	92.1%
CAGD	420	9	Scene Organization		2.7	0.46	10	100.0%
CAGD	110	9	Task Management		2.4	0.78	514	86.2%
CAGD	240	9	Task Management		1.9	0.75	169	73.4%
CAGD	373	9	Unity Importation		2.2	0.86	38	81.6%
CAGD	112	9	Web Gallery		2.7	0.65	116	92.2%
CAGD	420	9	Weekly Progress		2.3	0.67	9	88.9%
		9 Average			2.7	0.56	2,905	92.6%
CAGD	345	10	Organization		2.8	0.51	25	96.0%
CAGD	493	10	Organization		3.0	-	211	100.0%
CAGD	493	10	Professionalism - Blog		2.7	0.44	15	100.0%
CAGD	373	10	Professionalism - Blog Post		2.8	0.43	12	100.0%
CAGD	112	10	Professionalism - ePortfolio		2.6	0.53	49	98.0%
CAGD	345	10	Professionalism - ePortfolio		2.7	0.47	25	100.0%
CAGD	373	10	Professionalism - ePortfolio		2.6	0.55	36	97.2%
CAGD	112	10	Usability and Accessibility: Site Navigation, Text Elements, Layout, and Color		2.7	0.56	49	95.9%
CAGD	345	10	Usability and Accessibility: Site Navigation, Text Elements, Layout, and Color		2.8	0.37	25	100.0%
CAGD	373	10	Usability and Accessibility: Site Navigation, Text Elements, Layout, and Color		2.4	0.64	36	91.7%
CAGD	493	10	Usability and Accessibility: Site Navigation, Text Elements, Layout, and Color		3.0	-	15	100.0%
CAGD	112	10	Visual Communication		2.5	0.58	49	95.9%
CAGD	345	10	Visual Communication		2.8	0.40	25	100.0%
CAGD	373	10	Visual Communication		2.8	0.43	36	100.0%
		10 Average			2.7	0.42	608	98.2%
		Grand Average			2.5	0.57	11,298	89.5%

Data Summaries for ECC Graduating Senior Survey

Senior Exit Survey - Educational Satisfaction Responses AY 2018-2019		Dissatisfied 1+2	Neither 3	Satisfied 4+5	Total	Average STDEV
Scale: 1=Very Dissatisfied 5=Very Satisfied						
Quality of teaching by faculty in dept	Count	1.00	2.00	16.00	19	4.37
	%	5.3%	10.5%	84.2%	100.0%	0.87
Quality of teaching by other faculty	Count	1.00	5.00	13.00	19	3.84
	%	5.3%	26.3%	68.4%	100.0%	0.81
Access to faculty in your dept	Count	-	2.00	17.00	19	4.47
	%	0.0%	10.5%	89.5%	100.0%	0.68
Availability of courses in your dept	Count	3.00	6.00	10.00	19	3.63
	%	15.8%	31.6%	52.6%	100.0%	1.04
Quality of courses in your dept	Count	2.00	1.00	16.00	19	4.11
	%	10.5%	5.3%	84.2%	100.0%	0.91
Access to lab facilities, equipment	Count	1.00	3.00	14.00	18	4.33
	%	5.6%	16.7%	77.8%	100.0%	0.94
Quality of laboratories, equipment	Count	-	2.00	17.00	19	4.21
	%	0.0%	10.5%	89.5%	100.0%	0.61
Access to computer facilities	Count	2.00	3.00	14.00	19	4.05
	%	10.5%	15.8%	73.7%	100.0%	1.00
Quality of computer facilities	Count	-	3.00	16.00	19	4.16
	%	0.0%	15.8%	84.2%	100.0%	0.67
Academic advising from your major advisor	Count	1.00	3.00	15.00	19	4.21
	%	5.3%	15.8%	78.9%	100.0%	0.89
Academic advising from the Advising Office	Count	1.00	7.00	11.00	19	3.74

		5.3%	36.8%	57.9%	100.0%	0.85
Career information from your dept	Count	3.00	2.00	14.00	19	3.89
	%	15.8%	10.5%	73.7%	100.0%	1.02
Availability of GE courses	Count	-	5.00	14.00	19	4.16
	%	0.0%	26.3%	73.7%	100.0%	0.81
Quality of GE courses	Count	1.00	4.00	14.00	19	3.89
	%	5.3%	21.1%	73.7%	100.0%	0.79
Overall quality of your education	Count	1.00	1.00	17.00	19	4.21
	%	5.3%	5.3%	89.5%	100.0%	0.77
Overall experience at Chico State	Count	-	2.00	17.00	19	4.53
	%	0.0%	10.5%	89.5%	100.0%	0.68
Recommend my major program	Count	1.00	3.00	15.00	19	4.32
	%	5.3%	15.8%	78.9%	100.0%	1.08

Senior Exit Survey - Preparation Responses AY 2018-2019		Unprepared 1+2	Neither 3	Prepared 4+5	Total	Average STDEV
Scale: 1=Very Unprepared 5=Very Well Prepared						
Apply knowledge to solve problems	Count	-	2.00	17.00	19	4.42
	%	0.0%	10.5%	89.5%	100.0%	0.67
Design and conduct experiments	Count	-	4.00	14.00	18	4.22
	%	0.0%	22.2%	77.8%	100.0%	0.79
Analyze and interpret experimental data	Count	-	3.00	15.00	18	4.06
	%	0.0%	16.7%	83.3%	100.0%	0.62
Design component or system to meet needs	Count	-	3.00	16.00	19	4.11
	%	0.0%	15.8%	84.2%	100.0%	0.64
Function on multidisciplinary team	Count	-	3.00	16.00	19	4.47
	%	0.0%	15.8%	84.2%	100.0%	0.75
Identify, formulate, solve technical problems	Count	-	4.00	15.00	19	4.37
	%	0.0%	21.1%	78.9%	100.0%	0.81
Communicate technical matters in writing	Count	1.00	2.00	16.00	19	4.16
	%	5.3%	10.5%	84.2%	100.0%	0.81
Communicate technical matters orally	Count	-	3.00	16.00	19	4.37
	%	0.0%	15.8%	84.2%	100.0%	0.74
Understand and apply professional, ethical principles	Count	-	2.00	17.00	19	4.58
	%	0.0%	10.5%	89.5%	100.0%	0.67
Understand contemporary issues facing society	Count	-	6.00	13.00	19	4.16
	%	0.0%	31.6%	68.4%	100.0%	0.87
Use modern tools and technology	Count	-	2.00	17.00	19	4.74
	%	0.0%	10.5%	89.5%	100.0%	0.64
Enter the workplace	Count	-	3.00	16.00	19	4.37
	%	0.0%	15.8%	84.2%	100.0%	0.74
Continue learning	Count	-	3.00	16.00	19	4.53
	%	0.0%	15.8%	84.2%	100.0%	0.75

B. Measurement Instruments (Rubrics, Surveys, etc.)
Embedded Rubric Elements
Outcome #2   Apply aesthetic judgments and critical thinking skills to art and graphics related issues. (Aesthetic)

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	
2	3D Construction		You have not met the requirements of the brief in most of the requested elements.	Your 3D modelling displays problems in the creation of efficient geometry through topological waste and/or misuse. Objects may lack a strong sense of presence through struggling forms and uninteresting silhouettes. Your work may struggle to represent the shapes of your research.	You have displayed some good efficiency in the creation of your 3D assets, with limited to no misuse or waste present.You have achieved some positive visual goals outlined in your asset research, and there is a good sense of shape and form in the silhouette of your models.	You have displayed good efficiency in your geometry through the precise topology of your assets. You have achieved most or all of the visual goals outlined by your supporting asset research. Your assets have a strong sense of weight through good shape and form, evident in your model silhouettes.	445 545

2	Aesthetics		The final visual quality of the scene is somewhat poor, not achieving expectation. This may be due to a lack of aesthetic cohesion, poor post processing effects or generally poor aesthetics. It is evident that there is a fair amount more work required to bring this scene up to the visual bar.	The final visual quality of the scene is fair, not achieving expectation. This may be due to a lack of aesthetic cohesion, poorly executed aesthetics. It is evident that there is more work required to bring this scene up to the visual bar. I know that are a lot better than I do	You have done a good job in achieving most of the aesthetic expectations for this assignment. There is room for improvement here still, however, in visual quality, scene cohesion or in the utilization of post processing effects.	You have achieved the expected, high visual bar, laid out in the brief. There is a strong sense of scene cohesion in the utilization of the teams artwork, and there is a good sense of final polish to your project. Well done.	545
2	Animation	Simple animation that shows off the basic functionality of the rig.	Had no animation.	Animation had minor problem. Animation was hard to understand.	Animation was good. Shows off functionality.	Animation was great. Shows off functionality perfectly	110 325
2	Animation Composition		Your compositional work is clearly flawed, with large issues that have gone unremedied to the detriment of your submission.	There has been trouble in achieving the composition goals here, compiling and incorporating your work into the scene, and utilizing feedback effectively. This should be improved on future assignments.	You have done a good job of ensuring your work is incorporated into the final composition, with your work well presented, and feedback clearly utilized.	You have done a very good work in ensuring your content is professionally presented and incorporated into this stage of the video composition. Utilization of feedback is evident here.	445

2	Animation Ready	The proper animation controls and attributes are ready for the animator.	Didn't lock and hide unwanted controls and attributes. Didn't use display layers to hide blendshapes.	Locked and hid some unwanted controls and attributes.. Didn't use display layers to hide blendshapes.	Forgot to Lock and hide one or two unwanted controls and attributes.	The proper animation controls and attributes are ready for the animator.	432
2	Color/Value	Is their enough variety of color and value in your image to create a feeling of dimensionality?	Color is applied thoughtlessly, flat, and/or is distracting from the image.	Color is explored but may seem minimal, blotchy or distracting.	Color enhances dimensionality and readability of the scene with little to no issues.	Color application is clear and intuitive, successfully enhancing illusion as well as mood.	110
2	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 composition 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.	110
2	Concept Design	Did the student utilize concept design appropriately for the 3D model?	Little to no consideration for determining an appropriate design of the 3D model.	Followed the basic concept design for the 3D model. (Followed tutorial only)	Followed the basic concept design with some unique design characteristics for the 3d model.	Used a unique or Exceptional concept design to facilitate a 3D model.	331

2	Continuity - Visual	Was continuity demonstrated throughout all scenes and shots in the animatic?	Continuity throughout is severely lacking and therefore, does not effectively communicate the story.	Continuity within scenes/shots is lacking, disturbing the flow of the story.	Continuity within scenes/shots is evident but could use some improvement.	Continuity within scenes/shots is evident with consistent direction and orientation of character movement and story is followed without getting lost.	345
2	Control Curves Setup	The proper animation controls and attributes are ready for the animator.	Didn't lock and hide unwanted controls and attributes. Didn't use display layers	Locked and hid some unwanted controls and attributes.. Didn't use display layers	Forgot to Lock and hide one or two unwanted controls and attributes.	The proper animation controls and attributes are ready for the animator.	432
2	Critical Thinking - Aesthetics and Creativity	Are all models in the scene appropriate for the concept and arranged in Unity to demonstrate cohesiveness and a communicated meaning and composition?	Little to no consideration for determining an appropriate composition for the scene. The scene did not effectively communicate a story and is unsupportive of the chosen game concept.	Scene composition minimally communicates a story and a likeness to the game concept and contains several inconsistencies/errors along with little relative proportionality and artistic concept, creating an environment that is minimally cohesive.	Scene composition communicates an effective color scheme, story and a likeness to the game concept with most buildings in the scene being proportional and following the same artistic concept with few inconsistencies.	Scene composition communicates a story and a likeness to the game concept with all buildings exhibiting proportionality, following the same artistic concept and are arranged to create a cohesive environment fitting with the overall game concept.	230 330

2	Critical Thinking - Content and Aesthetics	Did the student consider and utilize texturing appropriately for the object?	Project has little creative energy; it does not have any uniqueness or creative aspects.	The assignment provides a minimal amount of evidence that the student attempted to develop an understanding of the project and design challenge or alternative texturing should have been used.	The assignment provides solid evidence that the student attempted to develop an understanding of the project and design challenge, but doesn't stand out from the crowd.	The assignment provides outstanding evidence that the student attempted to develop an understanding of the project and design challenge.	420
2	Depth of Field	Does the photo demonstrate the use of depth of field components to achieve a shallow depth of field while maintaining a clear point of focus?	Shallow depth of field is not present in the photo.	Point of focus is unclear, shallow depth of field is not well demonstrated.	DOF components were utilized but could have been improved to contain a shallower depth of field or a clearer point of focus.	DOF components were utilized to provide excellent shallow depth of field and point of focus, demonstrating understanding of the relationship between aperture, focal length, and distance from the subject.	112
2	Exposure	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 utilized better.	Value was considered and implemented appropriately.	Superior - careful attention to detail, value well executed.	112

2	Key Poses	Secondary action animation was applied to the mocap for the character.	No secondary action in the character. Hands and head are in default poses. Limbs move into the body, needed to add animation layers to help add offsets.	Poor secondary action in the character. Head and hands are in default pose in some clips. Limbs move into the body, needed to add animation layers to help add offsets.	Good secondary action in character. Head and hands have good animation in most clips but need further refinement. Good timing for the head or/ hands could have been added to each clip.	Excellent secondary action in the character in the head and Hands.	240 325
2	Lighting and Exposure	Did they consider and utilize lighting and value appropriately for their subject matter.	Did not take lighting into consideration	Lighting implemented incorrectly or alternative lighting should have been used.	Lighting was considered and implemented appropriately, but could use some improvement.	Lighting well executed.	112
2	Personality	Effectively performance of personality.	Incoherent performance. Poses, no clear understanding of what the character is thinking/doing.	Some actions of the character are overall still vague. Little to no thought put into motives/subtext. Some attention to silhouette but poses are difficult to read.	A clear understanding of personality could use a bit more thought into subtext. Poses are strong but need further refinement.	Convincing performance. Solid poses, movements reads well.	240 325 340
2	Poses		Few poses, no clear understanding to what the character is thinking/doing.	Some attention to silhouette but poses are difficult to read.	Poses are strong but need either refinement or more poses.	Solid poses, scene reads well.	340

2	Quality	How well do your drawings read?	Drawings are difficult to understand and/or don't seem to reinforce a Story	Drawings seem to reinforce a story but show technical issues with line quality, perspective and/or value.	Drawings are clean and easy to read/understand.	Line quality, perspective and value are all evident and attended to creating a clear and easy to follow story.	110
2	Rendering	How well and skillfully was camera & rendering tools used?	Did you even pay attention in class?	Did not use production render settings. The render shows limited use or knowledge of render setting tools.	The scene shows an awareness of using rendering tools but has one error.	Rendering settings are well executed. Proper resolutions and antialiasing settings.	230 330 331
2	Script Formatting and Completion	Was the script completed with proper formatting and contain the entirety of the commercial?	Several formatting errors were present and/or the commercial was not represented in its entirety or chronologically followed.	The script contained many formatting errors and/or demonstrated some inconsistencies in content.	The script contained some formatting errors but the entirety of the script was present and in chronological order.	The script demonstrated proper formatting per provided examples and contained the entirety of the commercial in chronological order.	345
2	Source Images	Images that are effectively used in the final composition. Exposure, lighting and composition.	None of the source images are not Implemented correctly.	Exposure, lighting and composition was not well considered or executed.	Exposure, lighting and composition was considered and implemented appropriately with no or few errors.	Superior - careful attention to detail, well executed.	112
2	Staging		Composition is unattended to, minimal use of camera and/or camera is disruptive to the story.	Composition is considered with little to no camera changes and/or considerable compositional issues.	Scenes are staged and delivered in a natural and readable manner consistent with the story.	Each scene is taken into careful consideration, supporting the story artistically as well as visually.	240 340

2	Story	Does the subject matter in your image bring together a cohesive story or do they feel random and unassociated.	composition does not seem to make any effort towards maintaining a narrative.	Subject matter delivers subtle evidence of association and thus an effort towards a narrative.	A narrative is clear expressed in the selection and presentation of the subject matter.	Subject matter and composition work together in a successful union to create an image worthy of a children's book.	110
2	Storyboard Panels	Were the required number of panels present and demonstrating all required content?	More than one storyboard panel was missing and several pieces of required content.	At least one storyboard panel was missing and/or an increasing amount of required content.	Some required content was missing but very little.	The required number of storyboard panels were created, containing all of the required content: scene & shot number, timing, action, and dialogue	345
2	Texture	Did you research and apply appropriate textures to your objects?	No textures or textures are distracting from the objects that they surface.	Textures are missing in portions of the image or have considerable inconsistencies.	Textures reinforce all components of the image with little to no distortion.	A superior exhibition of texturing that is compliant with lighting as well as perspective.	110
2	Texturing	Did the student consider and utilize textures appropriately for scene? Color, specular, reflection, bump, normal and/or displacement.	Did not take textures into consideration or poorly executed	Textures implemented incorrectly or alternative textures should have been used.	Adequate textures were considered and implemented appropriately.	Superior - all textures well executed.	230 330

	Attributes	Description					
2	Timing/Spacing	Does your subject move smoothly or do frames feel choppy and/or left out making the performance difficult to read?	Timing & spacing are choppy or have blank/bad key frames unattended to. Performance is unreadable.	Timing & spacing feel smooth but with performance inconsistencies.	Timing & spacing are well thought and placed yielding a clear, readable performance.	Timing & spacing deliver a completely natural performance absorbing the viewers in the reality of the world created.	240
2	Video Composition		Your work is put together in such a way as to fail to adequately present the animations. Significantrly more work is required here.	The quality of the final work leaves room for a good amount of improvement. Video editing could be polished, and the utilization of the final audio components improved.	The final renders are of a good quality, with some room for improvement on the editing and other aspects of the brief, including audio components.	You have done very good work with the quality of your final renders, including video editing and the inclusion of audio components.	445
2	Video Demo Reel	Created a video showing the functionality of the rig.	"Poorly showed the functionality of the rig in the video or didn't create a video."	Partially (70%) showed the functionality of the rig in the video.	Showed 90% of the functionality of the rig in the video.	Showed all of the functionality of the rig in the video.	432
2	Virtual Scuplting	How skillful on applying a normal maps from using a virtual sculpting software.	No maps was applied to the character model.	Normal map was not executed appropriately. "Detail pass" was unconvincing for the character model.	Normal maps were executed . "Detail pass" was somewhat convincing for the character model.	Normal maps were executed perfectly. "Detail pass" was believable for the character model.	330 331

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

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	

3	Advanced Features for the Rig	Add advanced functions and feature for the vechicle rig	Holy cow! did you even pay attention in class!	Rigged a standard car rig with average doors, steering, and suspension.	Rigged above the standard functions for a car or truck.	Rigged well above the standard functions with advanced features.	432
3	Animation Prinicples		You have failed to display a good understanding of the 12 principles of animation within your work. There are large errors in your motion to the detriment to the scenes you have created, or you work has gone unfinished.	You have failed to display a good understanding of the 12 principles of animation within your work. There are errors in your motion that should have been remedied.	You have done a good job of demonstrating your understanding of the 12 principles of animation. You have managed the majority of errors, and have created a positive sense of urgency with the camera work.	You have done very good work in the application of the 12 principles of animation here. Errors are few, and the camera work is well done.	445
3	Appeal	Do your performance choices feel true to the motives and subtext of your subject matter. Do you use the Principles of Animation creatively to support those choices?	Incoherent performance. Subject shows little readable personality traits.	Poses show some insight into character's intent. Motives, backstory or subtext may feel unexplored.	Performance delivers a clear, consistent and readable sense of motive and thought.	A convincing as well as entertaining performance. Viewers are immersed in the mindset of the character without missing a beat.	240
3	Arm and Hand Setup Rigging	Followed setup for the arms and hands part of the rig.	Holy cow! did you even pay attention in class!	The arms and hands contains many problems and issues with its functionality.	The arms and hands rig contains minor problems and issues with its functionality.	Functionality of the arms and hands is understandable to animator.	432

3	Audio		Little or no attempt to add and time the audio correctly.	Audio is considered, but poorly accomplished or timed.	The audio track matches the scenes and shots well.	The audio track is well accomplished and timed, adding to the story and the emotional impact on the audience.	345
3	Blending Images Together	Blending of visual elements together in a seamless blend.	Blending of visual elements together was not achieved.	Blending of visual elements together ineffectually achieved, allot of inconsistent errors.	Appropriately blending of visual elements together with no or few errors.	Superior - careful attention to detail, well executed.	112
3	Camera Angles and Movement	Are camera angles, shot, and movements used appropriately to effectively communicate the story?	Camera angle and type of shot required is unacceptable to communicate story effectively.	Camera angle and type of shot required is poorly communicated and needs significant improvement.	Camera angle and type of shot required to communicate story is acceptable but could use improvement.	Camera angle and type of shot required to communicate story is well established.	345
3	Camera 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 composition 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.	325

3	Camera Settings and Rendering	How well and skillfully was camera, lighting effects, & rendering tools used?	The render shows no or limited use or knowledge of tools. The scene appears to be thrown together.	Basic skills are evident from the render including some anti-aliasing, and lighting and camera effects.	Tools were used well to produce a quality render of the scene, including appropriate anti-aliasing, and lighting and camera effects.	Tools were used flawlessly to produce a superior render of the scene with clear planning and skillful used of all appropriate tools.	420
3	Digital Darkroom	Did students consider and utilize the tools and techniques in Photoshop appropriately for their project.	Did not use Photoshop techniques in project.	Photoshop techniques were implemented incorrectly or only one Photoshop technique was used significantly.	Photoshop techniques were considered and implemented appropriately but could use some improvement.	Photoshop techniques were well executed. More than one Photoshop technique was demonstrated.	112
3	Edge Loops	Edge loops and flow zones were distributed across the character body and head correctly.	Did not implement edge loops and flow zones across the character model correctly. Lack of detail.	Lacking of detail, from a result of incorrectly placing edge loops and flow zones.	Appropriately applied edge loops and flow zones across the model execpt for one or two instances.	Placement of edge loops and flow zones were well thought-out and executed correctly.	331
3	FK/IK Setup	Was the proper IK Setup used for the legs?	The wrong IK Setup used on all the legs. Needed to use Spring IK	Used some of wrong IK Setup on the legs. Needed to use Spring IK	Missed one wrong FK/IK Setup on the legs and arms	Used the correct FK/IK Setup for the legs and arms	432
3	Form and Proportions	Does the model present basic proportional and body volume relationships appropriately for its subject matter.	Did not take proportions & body volume into consideration. (Model looks nothing like the completed tutorial)	Collaboration of proportions & body volume implemented incorrectly. (Model barely meets the same proportions & volume as the tutorial)	Collaboration of proportions & body volume implemented appropriately. (Model closely mimics the tutorial)	Superior implementation of collaboration of proportions & body volume. (Model goes beyond the tutorial and does it efficiently)	331

3	Functionality of the Rig	Was the tutorial followed? Is the functionality readable by an animator?	Holy cow! did you even pay attention in class!	The Rig contains many problems and issues with its functionality.	The Rig contains minor problems and issues with its functionality.	Functionality of the Rig is understandable.	432
3	Head and Facial Rigging	Followed setup for the head and face	Holy cow! did you even pay attention in class!	The facial rig contains many problems and issues with its functionality.	The facial rig contains minor problems and issues with its functionality.	Functionality of the facial rig is understandable to animator.	432
3	Joint Placement	Was the proper Joint Placement and joint orientation was used?	Holy cow! did you even pay attention in class!	Proper Joint Placement, but incorrect joint orientation was used.	one incorrect Joint Placement, or incorrect joint orientation was used.	Proper Joint Placement and joint orientation was used on the character.	432
3	Leg Setup Rigging	Followed setup for the legs part of the rig.	Holy cow! did you even pay attention in class!	The legs contains many problems and issues with its functionality.	The legs contains minor problems and issues with its functionality.	Functionality of the legs is understandable to animator.	432
3	Level of Difficulty	How simple or complex is the material graph?	too simple in complexity	complexity is simple	Reasonable in complexity	Extremely Complex	420
3	Lighting		Lighting is completely inaccurate and/or inconsistent with the scene.	Lighting is accomplished with considerable inaccuracies and/or lacking shadows.	Lighting and shading is clear and natural with little to no inconsistencies.	A bold use of lighting that reinforces the mood, dynamic and focal point of the image.	230 330 331 420 545

3	Low-Poly Modeling	Did students provided enough detail to show overall form, from the original high poly model with good topology.	Too many errors in topology flow and form the original high poly model. Did you even pay attention in class? Overall models are too simplified, needed to add more detail to the models.	Errors in topology flow and doesn't provided enough detail to show overall form. Broken edges, didn't delete unwanted vertexes. Used too many triangles and/or ngons.	Appropriately modeled in quads and triangles with a few errors in topology flow and overall form. Had a few ngons on the models.	Well considered topology flow - modeled in quads and triangles perfectly. Provided enough detail to show overall form, from the original high poly model.	330
3	Map Baking	How well and skillfully was map Baking tools used? Creating a Mesh ID, normal, AO, curvature, and position maps.	No mapping skills are evident on the 3D object.	Missing maps. Or maps appear to have been constructed with lots of errors from the UVs.	The maps are well executed and appropriate for objects with a few errors or a missing map.	The maps are exceedingly well created and functional for the all the 3D objects.	330
3	Merging Images	Merging images together in a seamless blend	Did not use layer masks.	Implemented layer masks inappropriately	Used layer masks appropriately with no or few errors.	Superior - careful attention to detail, layer masks well executed.	112
3	Mocap Animation	Did the student consider and utilize mocap animation appropriately for the movement?	Not original mocap or mocap that is very messy.	Mocap with noticeable foot-slides and pops. Mocap had noticeable pops and bumps to the movements.	Mocap is technically proficient, blended well without noticeable foot slides. Blended well with little noticeable pops and bumps to the movements.	Mocap is creative and clean, adding substance to the piece.	325

3	Modeling & Overall Geometry	How well and skillfully was the modeling tools and geometry used in the scene?	Basic modeling skills were not evident in the scene.	Models appear to have been inefficiently constructed with inadequate geometry	The models are well executed with the proper amount of geometry.	The models are efficiently constructed and appropriate for the scene.	230
3	Objectives	Did you complete all the assignment objectives given? Did you stray from the objectives?	Assignment shows no evidence of following objectives given.	Assignment shows minimal evidence of the objectives taken into consideration.	Assignment objectives feel attended to but weaker in some more than others.	Assignment fulfills all objectives clearly and successfully.	240
3	Overall Geometry	Did students model in quads and used edge loops efficiently.	Did not appropriately model in quads (only 80% of the model is in quads) and used edge loops incorrectly.	Appropriately model in quads (only 90% of the model is in quads) and/or used edge loops insignificantly.	Appropriately modeled in quads (95 to 99% of the model is in quads) and used edge loops efficiently.	Well considered and well executed - modeled in quads (100% of the model is in quads) and used edge loops perfectly.	330 331 420
3	Project Guidelines	Were the rules of the assignment followed correctly, culminating in a final product demonstrating discussed compositional guidelines?	Did not follow the rules of the assignment.	Implemented the rules of the assignment poorly or incorrectly.	The rules of the assignment were followed correctly,but final product could use some improvement.	The rules of the assignment were followed correctly, culminating in a final product that was well executed and demonstrating discussed compositional guidelines.	112

3	Project Pace - Overall Functionality of the Rig	Maintaining a productive pace throughout the project and understanding materials taught.	Holy cow! did you even pay attention in class!	Maintained a slow pace throughout the tutorial and had a hard time understanding materials taught.	Maintained a good pace throughout the tutorial and seemed to understand a good amount of the materials taught.	Tutorial followed to the letter and had a great understanding of materials taught.	432
3	Scene Interaction	Does the Unity scene contain a first person controller to navigate within the scene?	The scene lacks a first person controller.	A first person controller is present but is positioned incorrectly: such as intersecting the ground plane	A first person controller is present but contains some attributes that are distracting such as: movement, sound, bounce, etc...	The scene contains a first person controller to navigate the scene.	230
3	Shader Networks	Did the student consider and utilize shader networks appropriately for the scene?	Did not take shaders into consideration or poorly executed. Alternative shaders should have been used; (Blinn instead of lmabert).	Too many errors implemented incorrectly, alternative shaders should have been used.	Shader networks implemented appropriately with few errors. It is nice and works well, but is very common.	Shader networks implemented and well executed. The shaders networks applied enhanced the scene quality.	330 331 420
3	Shot Composition	Was the composition for each shot well thought out?	Little to no consideration for determining an appropriate composition for the scene.	The scene falls short of the assignment, shows a lack of planning and little evidence of overall aesthetics. Overall scene is too simplified and needed more detail.	Placement of subject matter and camera supports the overall composition of the scene, but lacking elements that would make it standout from the rest.	Placement of subject matter and camera clearly and effectively supports the construct of the scene as well as energizes the conceptual meaning.	325

3	Technical Import	Placement of animations into a game engine.	All animation has not placed into the game engine correctly.	Animation has placed into the game engine correctly with technical problems. The character turns away from the camera at the start of every clip. The character starts to float or sink in the scene as the animation progresses.	Animation has placed into the game engine correctly with some technical problems. The character turns away from the camera at the start of every clip.	All animation has placed into the game engine correctly with no technical problems.	325
3	Texture Arrangement		You have not met the requirements of the brief in most of the requested elements.	Some or all textures require work to make use of their individual properties, to the detriment of assets PBR materials. No or little understanding of the correct utilization of tiling and individual texture/material utilization has been displayed. Your materials may struggle to achieve your research goals.	There is evidence of an understanding of PBR materials through the utilization of individual texture properties. There is also evidence of your understanding on the creation and utilization of tiling and unique UV materials. You have achieved some of the visual goals of your research, but there is room for improvement.	There is clear evidence of a solid understanding of PBR materials through the utilization of individual texture properties. You have conveyed your understanding on the creation and utilization of tiling and unique UV materials through high quality outputs on both fronts. You have clearly achieved a good sense of the visual goals of your research goals.	445 545

3	Textures	Did the student consider and utilize textures appropriately for the scene? Color, specular, reflection, and bump/normal.	Did not take textures into consideration or poorly executed. Only used simple shaders for texturing.	Textures implemented incorrectly or alternative textures should have been used. Used too many simple shaders for texturing.	Adequate textures were considered and implemented. Missing a few key textures (color, spec, and bump maps) on main objects and only used simple shaders for texturing on a few objects.	All textures are applied to the objects to the scene appropriately. Used color, spec, and bump maps.	331
3	Textures Maps	Did the student consider and utilize textures appropriately for the scene? Color, specular, reflection, bump, normal and/or displacement. .	Did not take texture maps into consideration or poorly executed. Textures has little creative energy; it does not have any unique or creative aspects.	Missing textures in several places or errors, textures implemented incorrectly or alternative textures should have been used. Tried to be creative but does not work and does not stand out from the crowd.	Adequate textures were considered and implemented appropriately. Textures look nice and works well, but is not unique; it has a similar look-and-feel that works well, but may not stand out from the crowd.	Diffuse, Spec, Bump/Normal, and displacement map executed correctly with excellent attention to detail.	420
3	Torso Rigging	Followed setup for the torso part of the rig.	Holy cow! did you even pay attention in class!	The torso contains many problems and issues with its functionality.	The torso contains minor problems and issues with its functionality.	Functionality of the torso is understandable to animator.	432
3	Translation		Images have no resemblance to tutorial.	Composition is attended to but brushing is inaccurate or lacks texture.	Image is a definite visual resemblance of source material with little to no errors.	Image not only matches the source but exceeds its overall execution.	110

3	Uniform Spaced Geometry	Used uniform spaced geometry correctly. Geometry was spaced and evenly distributed across the character model.	Did not take uniform spaced geometry into consideration or poorly executed across the model.	Incorrect placement of uniform spaced geometry in certain parts of the model.	Geometry was well spaced and evenly distributed except for one instance or area.	Geometry was well spaced and evenly distributed	331
3	Use of Topology	How skillfully was the topology (edge flow) of the 3d model constructed?	Basic modeling skills were not evident in the scene.	Models appear to have been inefficiently constructed with inadequate topology.	The models are constructed well but contains a few errors in topology.	The models are well executed with great topology (edge flow).	330
3	UV Mapping	How well and skillfully was UV tools used?	No uv mapping skills are evident in the in the scene.	UV maps appear to have been constructed with lots of errors on many objects. Too much overlapping UV's. UVs are not scaled properly to use the 0 to 1 space efficiently.	The UV maps are well executed and appropriate for objects with errors on a few objects. Overlapping UV's or UVs not scaled properly to use the 0 to 1 space efficiently.	The UV maps are exceedingly well created and functional for the all the objects in the scene.	230 330 331 420

			Unacceptable	Marginal	Acceptable	Exceptional	
3	Visual Quality		You have not met the requirements of the brief in most of the requested elements.	Models are not of a high visual quality, or errors are evident. There may be no or little sense of assets as part of the narrative within which they are intended. Aesthetic cohesion between assets may also be a problem here.	Models are of a moderate visual quality. There may be a few, or no errors present. There is some sense of narrative cohesion with the assets place within the project, but this could have been taken further.	Models are of a good or excellent quality. There are no technical issues present in the geometry and materials. There is a clear sense of your assets existing within the physically defined environment and world of the project.	445
3	Weighting	How well done was skinning and paint weighting for the character.	Holy cow! did you even pay attention in class!	Weighting of the Geo to the correct joints is incorrect. Other unwanted joints still effect incorrect areas.	Did a decent job painting weights but, slight movement can be seen in the Geo from unwanted joints.	Skinning and weighting of Geo to joints was executed perfectly.	432
	Outcome #4	**Demonstrate proficiency with industrial applications to visual communication related technologies. (Proficiency)**					
	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	
4	Animatic	Was the animatic created using proper panels, timing, and sound.	The animatic was incomplete, lacking many elements such as required panels, proper timing and sound.	The animatic was complete but lacking most sound and/or proper timing and still contained several textual elements.	The animatic was complete but lacked some elements such as proper timing, some sound and/or still contained a few textual elements.	The animatic was created in its entirety, containing all storyboard panels (sans textual elements), timing, and sound.	345

4	Character Sheets	Are all required character sheets present and effectively communicate character attributes?	No character sheets are present and/or demonstrate minimal effort.	One of the character sheets are missing and/or need significant improvement.	All character sheets are present but need some improvement.	All required character sheets are present and effectively communicate the attributes of the character.	345
4	Continuity		The story's continuity is unclear and sometimes confusing; there are confusing breaks in time, many jump cuts or incongruities in between shots or scenes.	The idea of the story comes across but in terms of continuity, it could have been executed better; there are a few breaks in continuity and some jump cuts.	Continuity is executed well, but there were a few missed opportunities in this regard to make it more effective or there are incongruities between shots or scenes.	Overall, the continuity is executed well; the action is clear, coherent and presented effectively without jump cuts or incongruities.	345
4	Document Consistency	Were the documents organized efficiently and demonstrate consistency among revisions?	Most components of the project were not properly revised to efficiently communicate the story consistently.	Many components of the project were not properly revised to efficiently communicate the story consistently.	Most components of the project were properly revised to efficiently communicate the story consistently but some components of the project were lacking somewhat in revision.	All components of the project were properly revised to efficiently communicate the story consistently (logline, beat sheet, plot summary, script, shot list, storyboards, and animatic).	345

4	Narrative Conveyance		You have failed to convey any sense of a cohesive narrative in your work, with animation that has little to no sense of urgency and emotion.	You have failed to maintain a positive adherence to the script and storyboards in your animation, and have not advanced them through the medium of 3d animation. There is also no notable sense of emotion within your work.	You have for the most part maintained a positive connection between your work and the original source material. You have a solid sense of narrative conveyance, and the emotion of the scene is also present.	You have done very good work in achieving the narrative goals of the original source material. Emotion and urgency are well presented within your animation here, and the narrative of the storyboards have been not only translated, but enhanced within the 3d medium.	445
4	Principles of Animation	The integration, look or style of your animation as it pertains to the Principles of Animation.	Lack of effort to produce a visually unified or stunning piece.	Some evidence of the Principles of Animation being integrated.	Principles of Animation are utilized consistently presenting a solid design.	Design is unique and well crafted as well as consistent throughout the entirety of the piece.	240 340
4	Storytelling		No broad entertainment value.	Several confusing parts; plot is unclear; communication of story lacks focus or energy.	Some mistakes in plot line but mistakes are minor; some parts of the story lack focus.	The storyline of the product is interesting and entertaining; plot is communicated effectively; all elements of story are present.	325

			Unacceptable	Marginal	Acceptable	Exceptional	
4	Visually Compelling	Does the image work overall. Choices of principles of composition used to create the image.	Did not take visual elements or principles of composition into consideration.	Utilized 1 or 2 of the principles of composition or visual elements, but not well considered or executed.	Collaboration of visual elements and principles of composition implemented appropriately with no or few errors.	Superior implementation of collaboration of principles of composition and visual elements.	112

Outcome #5   **Communicate effectively in written format on research and creative issues. (Written)**

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Cou rse
		Value	0	1	2	3	
5	Content		Content was insufficient for composition, lighting, shot selection, dialog and story element.	Majority of content was lacking for composition, lighting, shot selection, dialog and story element.	Some content was lacking for composition, lighting, shot selection, dialog and story element.	Content for composition, lighting, shot selection, dialog and story element was detailed and descriptive.	345
5	Formatting	Was the document formatted and content organized according to assignment instructions?	The assignment was formatted incorrectly.	The document contained several formatting errors, making it difficult to ascertain if the correct information was provided.	The content provided contained some formatting errors.	The document was formatted exactly to assignment instructions making it easy to navigate through the content.	345
5	Grammar & Spelling	Is the document free of grammatical and spelling errors?	The document contains too many grammatical and /or spelling errors and is unacceptable for the assignment.	The document contains several grammatical and/or spelling errors and is distracting to read.	The document contains some grammatical and/or spelling errors but they are negligible.	The document contains no grammatical or spelling errors.	345

| 5 | Grammar and Style | Is the paper written with proper sentence structure and variety, punctuation, grammar and spelling? | Significant errors in sentence structure and variety; many errors in punctuation, spelling and/or capitalization. Errors interfere with meaning, communication, and are distracting to the reader. Proofreading is not evident. | Errors in sentence structure and variety; many errors of punctuation, spelling and/or capitalization. Errors interfere with meaning in places demonstrating that proofreading is not evident. | Effective and varied sentences; some errors in sentence construction; occasional punctuation, spelling and/or capitalization errors. | Each sentence is structured effectively, well-chosen with a variety of sentence styles; virtually free of punctuation, spelling, and capitalization errors. | 345 |
| 5 | Reflective Commentary/Analysis | Is information/analysis well written and supported with appropriate visuals? Are all observations representative of critical thinking and provide practical suggestions for future learning and improvement? | Significant information is missing or incomplete and observations/commentary do not reflect critical thinking or provide practical suggestions for future learning and improvement. | Information is missing or incomplete and observations/commentary minimally reflect critical thinking or provide practical suggestions for future learning and improvement. | Most of the observations/commentary represent growth and include goals for continued learning, needing minimal improvement. | Observation/analysis is well written and supported with appropriately related visuals. All commentary is representative of critical thinking and provides for practical suggestions for future learning and improvement. | 112 230 345 |

5	Sources and Evidence	Does the paper demonstrate appropriate use of sources to support ideas?	Demonstrates an attempt to support ideas but little to no evidence is supplied to reinforce opinions/statements.	Demonstrates an attempt to use credible/relevant sources to support ideas. Some evidence is provided but not enough to develop argument in a unified form.	Demonstrates consistent use of credible/relevant sources to support ideas. Evidence is accurate, well documented, and relevant but incomplete in some areas.	Demonstrates use of high quality, credible, relevant sources to develop ideas. Evidence is accurate, relevant, well integrated, well documented and appropriate.	345
5	Title, Genre, Logline	Were the title, logline, and genre provided for the chosen film?	Title, logline, and genre not provided.	One or more of the requested components are missing.	The title, logline, and genre are present but some components are not appropriate to the title and/or one of these components is not provided.	The title, logline, and genre are present and appropriate for the title.	345
5	Write-up	Description of project - triumphs and pitfalls of the project	No paper.	Poorly written with errors and less than a page.	Written with no or few errors and less than a page.	Written effectively and full length of page.	112
5	Writing Conventions: Formatting, Grammar, and Spelling	Are writing conventions appropriately expressed: sentence construction, grammar, capitalization, punctuation, and spelling?	There are several errors in writing conventions: sentence construction, grammar, capitalization, punctuation, and spelling requiring major editing and revision.	There are many errors in writing conventions: sentence construction, grammar, spelling & punctuation, and ineffective word choice.	The text has some negligible errors in regard to writing conventions.	No or few errors in sentence construction, grammar, capitalization, punctuation, or spelling	112 230 345

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

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	
6	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	230 345
6	Distracting mannerisms		Presentation full of distracting mannerisms such as giggling or chewing gum	Some distracting mannerisms	No distracting mannerisms	Superior presentation	230 345
6	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.	230 345
6	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	230 345
6	Poise		Clearly unsure, nervous, confused	At times appears unsure nervous, confused	Composed at all times	Exudes/convey confidence	230 345
6	Voice Volume, Enunciation & Speed	How well spoken the presentation was executed?	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 to slowly or too rapidly	Voice projected very well, clear enunciation, did not speak too slowly or rapidly	230 345

Outcome #7 **Apply critical thinking and aesthetic judgments in critiquing mixed media and computer graphics productions. (Critiquing)**

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	

7	Commentary	Did the student meet the requirements for the critique responses?	Most if not all of the critique responses were either missing or inadequate.	Several of the critique responses were lacking in detail and insight, falling short of requirements.	Detailed and insightful commentary on most critique but lacking in a few responses.	Detailed and insightful commentary on all critiques per assignment instructions.	112 230
7	Critique Posts	Were a at least two reply posts completed: one for favorite image and one for needing refinement?	No reply posts.	Both reply posts were late.	One reply post was late and/or missing one required reply post.	At least two reply posts were completed on time: one for favorite image and one for needing refinement.	112
7	Textual Content	Does the document contain a detailed description about the composition of the image and how this relates to the viewer?	No textual content is present.	The description is severely lacking in analysis of the image and how it relates to the viewer.	A description is present but lacking somewhat in detail and could have been improved.	The document contains a detailed description about the composition of the image and how it relates to the viewer.	345

| 7 | Weekly Critiques | | You have consistently failed to remain active in weekly critiques, with poor to no note taking during critiques. This culminated in little to no implimentation of feedback from the class and Professor into your production . Critiques are a valuable tool in improving your work, and you should ensure you give this a significant amount of attention in future. | Your constrictive involvement in weekly critiques, note taking during critiques, and the incorporation of that feedback from class and Professor into your production is wanting. Critiques are a valuable tool in improving your work, and you should work to improve this area in future. | You have been involved in weekly critiques, providing feedback and incorporating class and Professor feedback into your own work. Good job. | You have been a positive participant in the weekly crituques, offering constructive feedback to peers while taking class and Professor feedback onboard. All feedback was clearly incorporated it into your work. Well done. | 445 |

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

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Cou rse
		Value	0	1	2	3	

			Unacceptable	Marginal	Acceptable	Exceptional	
8	Team Documentation		You have consistently failed to maintain your managerial documentation. Task allocation has been a long standing problem here, leaving your Professor with little to no understanding of your progerss.	Task allocation has been a problem here, as has maintaining the document as you progress through the project.	Tasks were well allocated into the desired format, but there has been some room for improvement in the maintenance of the document.	Your document was well done, with all goals well outlined initially, maintained consistently through the project to the end. Good work.	445
8	Teamwork	the ability to work in a group environment.	Didn't show up to class or group meetings with little or no contribution to the project.	Was present in class and group meetings, added little contribution to the project.	Was present in class and group meetings, gave a good contribution to the project.	Was reliable and performed a large contribution to the project.	325 545

Outcome #9   **Work collaboratively and individually with an understanding of the production process utilized in industry-standard studios. (Process)**

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	
9	Camera & Rendering	How well and skillfully was camera, lighting effects, & rendering tools used?	The render shows no or limited use or knowledge of tools. The scene appears to be thrown together.	Basic skills are evident from the render including some anti-aliasing, and lighting and camera effects.	Tools were used well to produce a quality render of the scene, including appropriate anti-aliasing, and lighting and camera effects.	Tools were used flawlessly to produce a superior render of the scene with clear planning and skillful used of all appropriate tools.	325 420

9	Camera, Lighting, & Rendering	Was the scene considered and constructed to convey meaning and utilize an effective combination of aesthetic lighting and rendering?	The scene shows little evidence of thought, regarding content and the elements and principles of lighting & rendering.	The scene falls short of the assignment, shows a lack of planning and little evidence of overall aesthetics.	Lighting was considered and implemented appropriately but lacking elements that would make it standout from the rest.	The scene shows an awareness of a effective lighting.	331 420
9	Document Submission	Were all components of the project submitted and submitted with the correct file naming?	Many components of the project were not submitted according to assignment instructions; incorrect file naming and/or missing more than one document.	More than one component of the project was not submitted according to assignment instructions: incorrect file naming and/or missing a document.	Some components of the project were not submitted according to assignment instructions: incorrect file naming.	All components of the project were submitted according to assignment instructions: documents and correct file naming.	345
9	File Naming and Format	Were required file naming and file format followed?	Several file names and file formats were not followed correctly.	More than one file name and/or file format was followed incorrectly.	A file name and/or file format was followed incorrectly.	File naming and file format were followed without error.	345
9	File Organization and Formats	Did students follow instructions in saving their project and images.	Did not follow instructions or file structure. Only one working file.	Partially followed instructions and file structure. Partially working files	Partially followed instructions file and structure. All work files work appropriately.	Instructions and file structure implemented appropriately. All files and images work appropriately.	432
9	File Structure	Implementation of file naming conventions & directory formats.	Did not follow file naming conventions in any form.	More than one file naming convention & directory format was incorrectly implemented.	At least one file naming convention & directory format was incorrectly implemented.	All file naming conventions & directory format were followed correctly.	112

9	File Structure & Layer Organization	Implementation of file naming & file structure. Naming layers properly.	Both file naming & structure and naming layers was implemented incorrectly.	Implemented 1 of the file naming & structures or naming layers properly was followed with errors.	One or both file naming & structure and naming layers was correctly followed with few errors.	Both file naming & structure and naming layers was correctly followed.	112
9	File Structure and Formats	Did Students follow instructions (setting project, all required folders and files in their proper locations, and naming conventions) in saving their project and images?	Did not follow instructions or file structure.	Significant errors in file structure and format: file structure, naming, and working files.	Followed instructions and file structure with a few errors: improper naming, missing files/folders, no MEL script file.	Instructions and file structure implemented perfectly: file structure, naming, and working files.	230 325 330 331 420 432
9	File Submission	Did you turn in the requested type of file in the right place and were the compression settings and file name correct?	File submitted in incorrect format or in incorrect folder.	File submitted in correct format and location but with incorrect compression settings.	File submitted correctly but with incorrect filename.	File submitted with all the desired settings accounted to.	110 240 340
9	First Post	Did the student place their first post with renders and report on the discussion board by the designated time?	No first post	Late First Post	First post on time but was missing some of the required information.	First post on time and contained all of the required information (renders and report information).	230

9	Model Export and Import	Were the models exported from Maya in the proper format and successfully imported into Unity?	Models insufficiently exported from Maya and/or imported in Unity incorrectly and/or insufficient to no shader/texture application and no colliders.	Models exported from Maya and imported into Unity with several errors such as file type, scale, texture/shader application, and/or no colliders applied.	Models exported from Maya with some errors such as incorrect file format, scale, and imported into Unity with minimal errors with shader and texture application in Unity scene and/or some colliders are not applied.	Models exported from Maya in correct scale (cm) and file format and correctly imported into Unity along with correct shader and texture application in Unity scene, and colliders are applied to each model with few errors if any.	230
9	Online Post	Was the original discussion post created by the due date?	No original discussion post.	Late original discussion post.	Missing a component of the post.	Original discussion post was on time and contained all required information: final image and metadata.	112
9	Outliner Organized	Is the rig organized inside the outliner.	Unacceptable	Marginal	Acceptable	Exceptional	432
9	Quality of Work	Does the work achieve a level of integrity parallel to industry standards?	Quality of work is subpar or that of a beginning level class.	Work is readable but is evident that more practice is necessary.	Work shows evidence of growth, understanding and development.	Work displays symptoms and/or characteristics synonymous with industry standards.	420 493 545
9	Reply Posts	Did the student provide critiques to all of the posts in their designated group and on time?	No reply posts	Too many late reply posts and/or did not respond to several group members' posts.	Short on reply posts.	All reply posts made on time.	230

9	Scene Organization	Was the scene organized properly in the Outliner and Attribute Editor including naming and grouping of models and materials/textures?	Little to no scene organization implemented and/or missing several required models for the scene.	Minimal scene organization implemented: Didn't name several objects and/or materials/textures. Didn't group enough objects to produce a cleaner scene. Missing more than one model in scene.	Most scene organization elements implemented: Didn't name some objects and/or materials/textures. Could've grouped more objects to produce a cleaner scene. Missing a required a model for the scene.	All scene organization elements implemented: Named all objects and/or materials/textures. Grouped all necessary objects to produce a cleaner scene, all required models in scene.	230 330 331 420
9	Task Management	Is a solid workflow evident? Does the assignment feel complete with sufficient time devoted to its execution?	Project is clearly incomplete.	Work is evident but piece still clearly needs more time for completion.	Successful workflow is apparent. Project feels complete but refinements could still be made.	Assignment looks like a completely finalized piece. All the I's are dotted and T's are crossed.	110 240 340

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
9	Time Management		You have consistently failed to work to your task allocation documentation. This includes missing deadlines and milestones. This is unacceptable, particularly within a team environment.	There has been ongoing issues in achieving the goals of the initial documentation in order to keep the assignment on track. Problem solving through technical/creative issues here is likely a factor, as milestones went unmet.	You have, for the most part, been able to work effectively to meet the goals outlined during the documentation. Problem solving ability with the timeline has been seen, but a revision to working practice be beneficial in honing these skills.	You have done a good job of achieving the initial goals of the timeline documentation. Milestone have been well met, likely due to a good work ethic and solid problem solving abilities. Well done.	445
9	Web Gallery	Implementation & organization of website gallery.	Did not have website gallery.	Several components to the website gallery format were implemented incorrectly.	One website gallery format element was implemented incorrectly.	Website gallery format was followed correctly.	112

Outcome #10   Demonstrate professionalism through creative and intellectual independence. (Professionalism)

	Attributes	Description	Unacceptable	Marginal	Acceptable	Exceptional	Course
		Value	0	1	2	3	
10	Content - Professional	Does the amount of content justify the amount of time allocated?	Very little work exhibited compared to the amount of time allocated.	Amount of work seems acceptable but with an excessive amount of unfinished projects.	A solid bulk of finished work with minimal unfinished pieces.	It is evident that time was spent above and beyond that allocated to create an impressive amount of finished pieces.	493

10	Node Commentary	Was commentary applied to the node structure for the assignment	No documentation in the file	Average to little documentation of the connecting texture nodes within the file with missing commentaries in key areas.com	Good documentation of the connecting texture nodes within the file with a few missing commentaries	Excellent documentation of the connecting nodes within the file.	420
10	Organization		The sequence of information is not logical; paths to information are not evident; the user must backtrack to navigate the site.	The sequence of information is somewhat logical; paths are confusing and flawed; the user need backtrack to navigate to other portions of the site.	The sequence of information is logical; paths to most information are clear and direct; the user can navigate most any where on the site without needing to backtrack.	The sequence of information is logical and intuitive; menus and paths to all information are clear and direct; the user is able to navigate to any where in the site without having to backtrack.	345
10	Organization - Professional	Is your content organized and easy to sift through for a recruiter? Does it quickly display your trade, reel and intent?	Blog is difficult to navigate. Content is sporadic with no reasonable chronology.	Blog exhibits a basic structure but seems to jump around.	The blog is well organized and easy to navigate.	The blog gives the immediate impression of who you are, what you do, and makes your reel readily available in the beginning.	340 493

10	Professionalism - ePortfolio	Is content appropriate for the intended audience and does it relate to the purpose of the assignment?	Content is inconsistent and unsuitable for the intended audience, containing unorganized, unrelated, and inappropriate elements.	Content contains many unprofessional elements, unrelated to the purpose of the eportfolio, that are unorganized, unclear, and somewhat unprofessional.	Most content is professional and appropriately related to the purpose of the ePortfolio. A few elements are unorganized or unrelated.	Content is relevant, well-thought out, professionally executed, and suitable for an academic as well as a wider audience.	112 230 345
10	Slideshow	Did the slideshow contain all of the required information for the presentation?	Unacceptable slideshow presentation. Did not follow assignment instructions.	Slideshow contains minimal information and minimally follows assignment instructions.	Slideshow contains most required information.	Slideshow contains all required information as detailed in the assignment instructions.	230
10	Usability and Accessibility: Site Navigation, Text Elements, Layout, and Color	Is the ePortfolio intuitively organized and the post pleasing to read? Blocks of text and bullet points utilized, font style and type size vary appropriately, text and color palette are suitable and aesthetically pleasing.	The ePortfolio post is overall difficult to read due to inappropriate use of font styles, type size, textual organization, and color palette.	The ePortfolio needs much improvement: unorganized posts, mostly difficult to read due to inappropriate use of font style, type size, long paragraphs, color palette.	The ePortfolio needs some improvement such as: site navigation, use of font style and type size, color palette.	The ePortfolio is intuitively organized and the post is pleasing to read: blocks of text and bullet points utilized, font style and type size vary appropriately, text and color palette are suitable and aesthetically pleasing.	112 230 345

| 10 | Visual Communication | Were all of the required visual elements present and did they work together to create a clear and compelling description that would attract the interest of the audience? | The post was significantly lacking in the required visual elements and/or severely lacked in supporting the clarity of and effectively communicating the project to the audience. | Many of the required visual elements were not present and/or lacked significantly in supporting the clarity of and effectively communicating the project to the audience. | Some of the required visual elements were not present and/or lacked in supporting the clarity of and effectively communicating the project to the audience. | All of the required visual elements were present and supported the communication objective adding to the clarity of and effectively communicating to, the audience. | 112 230 345 |
| 10 | Work Ethic | showed a level of work consistency each week throughout the semester. | Cannot have a consistent pace of work each week throughout the semester | Constantly faltering with levels of work each week. | Show the level of consistency each week with a few times faltering . | Showed a level of consistency throughout the semester. | 493 545 |

Survey Instruments

Number	Question	Scale				
Q15	Satisfaction: Quality of teaching by faculty in dept	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q16	Satisfaction: Quality of teaching by other faculty	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q17	Satisfaction: Access to faculty in your dept	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q18	Satisfaction: Availability of courses in your dept	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q19	Satisfaction: Quality of courses in your dept	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q20	Satisfaction: Access to lab facilities, equipment	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q21	Satisfaction: Quality of laboratories, equipment	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q22	Satisfaction: Access to computer facilities.	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q23	Satisfaction: Quality of computer facilities	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied

Q24	Satisfaction: Academic advising from your major advisor	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q25	Satisfaction: Academic advising from the Advising Office	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q26	Satisfaction: Career information from your dept	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q27	Satisfaction: Availability of GE courses	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q28	Satisfaction: Quality of GE courses	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q29	Satisfaction: Overall quality of your education	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q30	Satisfaction: Overall experience at Chico State	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Q31	Preparation: Apply knowledge to solve problems	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q32	Preparation: Design and conduct experiments	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q33	Preparation: Analyze and interpret data.	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q34	Preparation: Design component or system to meet needs	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q35	Preparation: Function on multidisciplinary team	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q36	Preparation: Identify, formulate, solve technical problems	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q37	Preparation: Communicate technical matters in writing	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q38	Preparation: Communicate technical matters orally.	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q39	Preparation: Understand and apply professional, ethical principles	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q40	Preparation: Understand contemporary issues facing society	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q41	Preparation: Use modern tools and technology	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q42	Preparation: Enter the workplace	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared

Q43	Preparation: Continue learning	Very Prepared	Unprepared	Neutral	Prepared	Very Prepared
Q44	Recommend my major program at CSU, Chico to others	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
CAGD_Q1	Do you feel you are prepared to pursue a career in the Computer Graphics industry?	Very unprepared	Somewhat unprepared	Neutral	Somewhat prepared	Very prepared
CAGD_Q2	Do you feel the APCG faculty stressed the importance of preparing a professional portfolio?	Yes	No			
CAGD_Q3	How well do you feel the APCG faculty did in preparing you for a career in the Computer Graphics industry?	Not at all	Minimally acceptable	Neutral	Acceptable	Exceptional
CAGD_Q4	How do you feel about the overall instruction in the APCG Program?	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied
CAGD_Q5	Do you feel the APCG Program helped you with career placement?	Yes	No			
CAGD_Q6	How satisfied are you with the APCG Program's support in obtaining an industrial internship?	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied
CAGD_Q7	Did you have sufficient laboratory time to complete your projects?	Yes	No			