

Interactive Arts & Media Assessment Report AY17-18

Summary

IAM sought to learn about student performance in both key foundational courses and in select capstone experiences. In 3D Composition for Interactive Media, students successfully followed instructions and protocols, with lighting abilities being slightly less strong. External industry reviewers who played the Large Team Game's game praised the game's sound and its narrative choices while offering the most pointed critiques for the game's art and animations, which the reviewers described as needing significant improvement to be presentable for attaining an entry-level position at major game studios. Additionally, the reviewers offered valuable advice about expectations for graduates seeking entry-level positions at major game studios. The department curriculum committee voiced that engaging more Animation students in Large Team might help bring more conceptual expertise to the games' visuals and that, while the assessment of hard skills is important, they are also interested in assessing soft skills, as they are a major emphasis of the team courses (see Appendix A).

I. Major Degree Programs

Animation BA

- Computer Animation
- Traditional Animation

Computer Animation BFA

Traditional Animation BFA

Game Art BA

Game Design BA

- Game Development
- Game Sound Design

Programming BA

- Application Programming
- Game Programming

Programming BS

- Application Programming
- Game Programming

Interaction Design BA

Music Technology BS

Social Media and Digital Strategy BA

II. Degree Programs and Learning Outcomes Assessed AY17-18

Interaction Design BA

- Demonstrate facility with interaction design patterns and methodologies as they relate to interactive art and media disciplines
- Develop interactive work using a variety of computational tools, technologies and processes to express ideas and solve design problems

Game Art BA

1. Use a variety of workflows and software packages to create sophisticated visual concepts and game/simulation assets, including characters, environments, props and visual effects, and integrate those assets into a game engine.
2. Implement a wide range of 2D and 3D visual styles to realize a strong creative vision and design for a game or simulation.
4. Utilize research skills and strategies to conceptualize and produce game art assets for games and simulations.

Game Design BA: Sound Design

- 3. Apply theoretical concepts of sound design to games, real-time environments and simulations.
- 5. Collaborate effectively with other sound designers and artists as well as within interdisciplinary teams.

Game Design BA: Game Development

- 5. Integrate theory, analysis and production techniques in the creation of games for entertainment, learning, social connection and other purposes.
- 6. Contribute to the creation of games while working in interdisciplinary teams using appropriate game development techniques based on an understanding of multiple design methodologies

Game Programming BA

- 3. Exhibit proficiency in understanding and applying the principles of play-centered theory in the creation of games.
- 6. Exhibit the professional behaviors, work habits, soft skills and self-discipline necessary to succeed in the global marketplace, including practice in team-based collaboration, time management and meta-cognition.

Applicable Universal Learning Outcomes

- Career Readiness
- Collaboration
- Creativity

III. Assessment 1: Scripting for Web and Mobile I (36-1420): Interaction Design BA

Method

For midterm assignments in Scripting for Web and Mobile, students created mock websites, using a template provided. Students were given by the instructor a maximum of 10 points for the summative criteria of Completion, Organization, and Quality and were also given qualitative feedback (See Appendix B for full assignment criteria). The work of 18 students was assessed.

Results

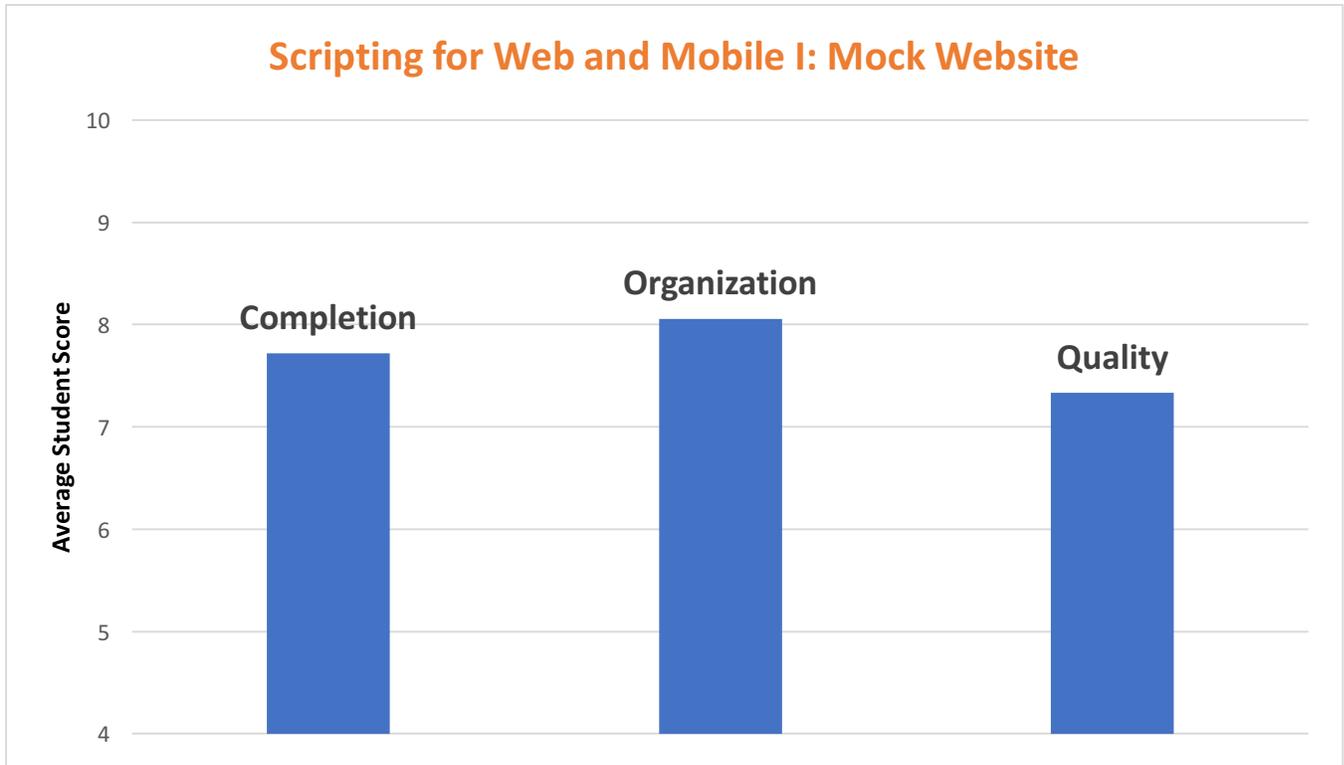


Figure 1: Scripting for Web and Mobile I Midterm Scores. N= 18

Notable and/or Repeated Comments

- “This is a high-quality document, as you've incorporated the task list without treating it like a checklist.”
- “Nutshell is, if a number can be calculated instead of hard-coded, try to calculate!”
- “I really think you can go very far in this medium if you want to—you are getting the details quite sharp, which is to say, the important parts.”
- “You have potential here, but the details need work.”
- “Class time is like band practice: it is important to see how the notes should sound and how to work past the confusing elements in the score. Alone time is when you study the notes, tune the instrument, and fumble around until it all makes sense.”

IV. Assessment 2: 3D Composition for Interactive Media (36-2370): Game Art BA

Method

To assess the below Program Outcomes from the Game Art BA, focus was given to 3D Composition for Interactive Media.

- Use a variety of workflows and software packages to create sophisticated visual concepts and game/simulation assets, including characters, environments, props and visual effects, and integrate those assets into a game engine.
- Implement a wide range of 2D and 3D visual styles to realize a strong creative vision and design for a game or simulation.

For their final project, students imported their completed Interiors into Unity and lit their scene. The presentation of the final project was intended to tell the story of how each scene was created (see Appendix C for full assignment expectations and criteria). The instructor assessed student work, using criteria such as students successfully applying textures, adding lighting, and pushing the artistry of the scene, among others. Over FA17 and SP18, the work of 26 students was assessed.

Results

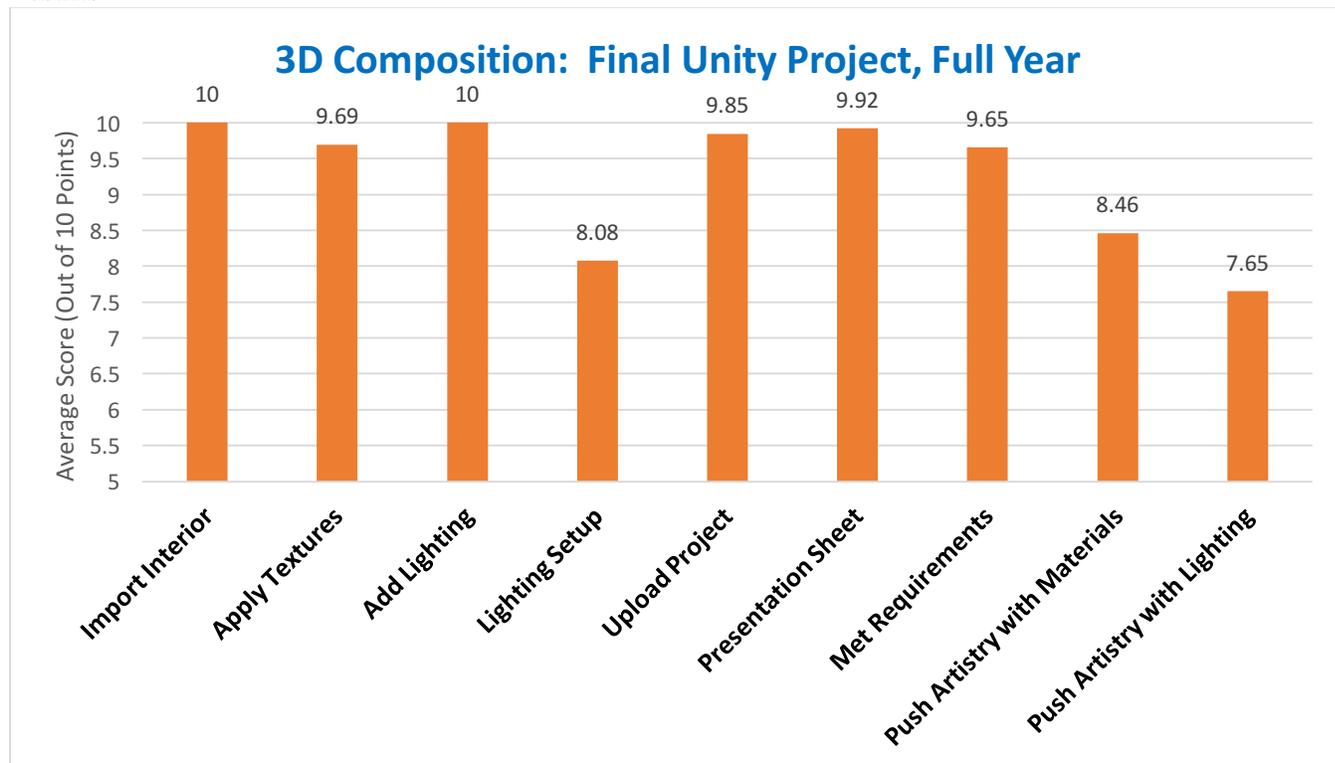


Figure 2: 3D Composition, Final Unity Project. N= 26

Notable and/or Repeated Comments

- “Good work this semester, a huge improvement from before. Your scene turned out well. Continue to model and texture to grow in your skills.”
- “The room itself is too good to suffer from poor lighting.”

Upon discussing the results, the Department Curriculum Committee agreed that lighting was appropriate as the area in which students had the least relative strength at this point in the program.

Moving Forward

- Faculty might discuss the appropriateness of lighting being the area in which students had the least relative success.

V. Assessment 3: Large Team Game Studio (36-3998)

Method

The capstone course of Large Team Game Studio was utilized to assess Program Outcomes in all concentrations of the Game Art BA, Game Design BA, and Game Programming BA. In Large Team Game Studio, students work across two semesters to create a playable video game by the end of the Spring. Students from several majors and concentrations; including Game Art, Game Development, Game Sound Design, and others; work to create the game. Two outside professionals, one a designer and one an artist, from major game studios were contacted to review the game and provide feedback. The reviewers utilized a rubric with 14 criteria split into three categories (Game Art, Sound Design, and Game Design) and a scale of 1 to 5 with 1 being poor and 5 being excellent (see Appendix D) developed by the course instructors.

Prior to playing the game, each reviewer spoke with the course instructors and department leadership to discuss the rubric and the assessment activity. During this meeting, one of the course's instructors mentioned that an obstacle of the course is coordinating and getting on the same page with design and evaluation. One of the external reviewers voiced that his own cohort while in school could have used more help with project management. Additionally, it was mentioned that students often struggle with scope and that it is difficult to have all students have equal buy in.

Results

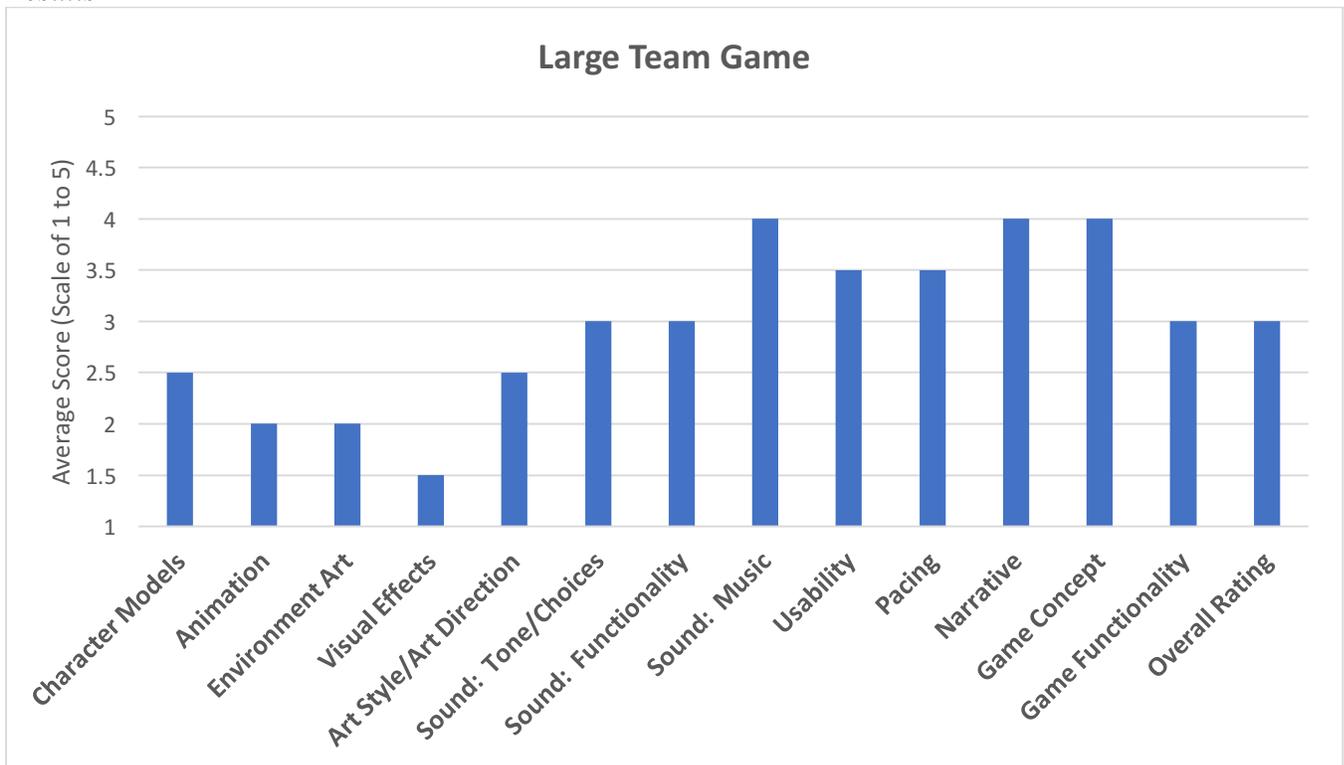


Figure 3: Large Team Game Review Scores.

Criteria, Relative Ranking

| | |
|--------------------|---|
| Sound Design Music | 4 |
|--------------------|---|

| | |
|-----------------------------------|-----|
| Narrative | 4 |
| Game Concept | 4 |
| Usability | 3.5 |
| Pacing | 3.5 |
| Sound Design: Tone/Design Choices | 3 |
| Sound Design: Functionality | 3 |
| Game Functionality | 3 |
| Overall Rating | 3 |
| Character Models | 2.5 |
| Art Style/Art Direction | 2.5 |
| Animation | 2 |
| Environment Art | 2 |
| Visual Effects | 1.5 |

Reviewers wrote very detailed comments, provided in full as Appendix E. Select comments are included below.

Game Art

- For the purposes of character work in the current game industry, it might have been useful to focus on pushing costume design, and perhaps even working from scan data for heads in order to push design and detail further and get more familiarity with a full character pipeline without having to spend too much time on detailed faces which are often the largest timesink. Spending time on polishing, say, two uniforms (male and female body) and then using a few properly textured/baked scan heads for multiple head variations might have improved the quality. As it stands the characters don't seem like they had much time put into them. I wouldn't say any of the character work would be showable to get a job as a character artist. That said, (and speaking from experience) character art roles are one of the hardest to get, so hopefully no one has the expectation that it'll be an easy thing to get right out of school.
- Good choices of when to use animation but not exactly good animations.
- Object animations were passable, but character animations were extremely basic and didn't even have very passable walk cycles. They were functional for the design of the game but if any individual on the team plans to focus on animation as a career, there is a

lot more to do to show off the ability to move characters around with life and believability. I wouldn't say anything from this game would be showable to get an animation job.

- It's okay to have unfinished work. Enviro/prop modelling work is often the largest workflow bottleneck of large team projects (always tons to be done and never enough time). What can be done, though, and needs to be to show the ability of an artist to complete a project is finalizing some room or location, preferably near the beginning of the demo. If the first deck or rooms are complete, the artists can show what they can achieve untethered to design (important- design is capricious and artists pay the price in lost work, they need a fair shake).
- Better prop/shared asset usage - soooo many unique props everywhere and not used often! It's insane you'll never finish it. There needs to be strong planning from the beginning within the level design and art teams to coordinate props needs with gameplay/story needs and get more to completion and instance driven use. This is as much level designs fault as anyone's – it's on them to coordinate gameplay needs.
- Especially on the environment side, there are a lot of modern workflows to gain an understanding of, like modular modeling, trim sheet construction, and more ability to construct a full environment (rather than just modeling props.) A few props to show off are fine, but I'd say the game doesn't show a real understanding of how to construct an interesting environment from a modeling perspective.
- Clear callouts on interactable objects that separate them from the environment are a must. Cheeky placement of interacts is allowed but the environmental storytelling needs to hint at its location in those cases.
- There are definitely some good ideas here, especially for a student project, and I especially liked the surrealness of the memory sequences.

Sound Design

- The voice acting was often much better than I expected. Bravo.
- Music: I didn't notice it, and I mean that as a compliment. The sound helped set the mood and tone for the game, helping ground me in the location and space. It didn't feel repetitive or intrusive and felt consistent in its application.
- The music was probably my favorite part of the game. It carried the tone and feel of the experience throughout, and really helped elevate the game to add a subtle emotional layer to what is effectively a puzzle game with story elements.

Game Design

- Introduction sequence was very strong, giving clear identity to gameplay elements and the layout/nature of the ship. Then delved appropriately into more complex but easy to understand minigames.
- All power interacts for doors/controls were black in overall object color (same as many doors/walls) and featured a blue light, similar to the dominant enviro art theme - this is super bad. It hides the importance of the gameplay object and allows it to fall into the background, but it must stand out - objects should have a color display not used anywhere else in the enviro art and feature a bolder overall art style to stand out.
- The gameplay needs more work done to develop its visual language.

- Reliance on UI is bad. Players should be able to discern gameplay valuable objects from sight across the map.
- Developing and enforcing a gameplay language can be difficult, it may be helpful to have designers construct a bible for this featuring definitions of all gameplay objects, their distinct uses and visual elements. If environment art is blue in tone overall, a great background color choice, then all gameplay interactives have to be something else. For example: green for power, yellow for notepads, so on.
- Not bad quick little story with memorable and distinct characters that tied well into gameplay elements.
- I did enjoy the general banter and dialogue, as well as the memory exploration which added more depth to the game, and a more sense of human connection to the mission I was trying to accomplish.

General Comments

- There are now tons of schools pumping out kids for games and the standards are going up up up. We now look for students who already have a native understanding of workflows, pipelines, and smart asset construction for games on top of talent and ability to make production ready assets immediately on hire. Small issues that used to be forgiven are now becoming larger dings against candidates. Substance Painter is a powerful tool, but it can also be a crutch and impart a real negative effect. It's understandable not every prop is given this attention but some must be brought up to a finished level. It sounds like a lot to ask students to display all these facets of game dev, but a triple A studio will. If a team can display the same abilities of a pro team working together those students will get snapped up because we can just plug and play them onto the production floor. Producers at these mega publishers are cut-throat SOBs. Ubi, Bethesda, Epic, EA, Activision, Microsoft...we all get thousands of candidates world wide any given year anymore for extremely limited junior positions as a large amount of art and asset production is getting outsourced, these positions are constricting further.
- Overall some good ideas here, and for a student project is fairly solid from a gameplay/design/programming/audio perspective (other than the bug I ran into and lack of save functionality.) From an art/animation perspective though, it's fairly lacking and there'd be a lot more to do in order for any students interested in art or animation careers to have something that might help them get a foot in the door in a game studio.

Moving Forward

- As the majority of critiques related to Game Art, it is worth faculty discussing ways to incorporate the feedback provided, in the capstone courses and likely throughout the applicable programs. The department might note that reviewer commentary focuses more on design choices than technical abilities, per se.
- While plans were made to do a similar activity with Indie Team Game Studio (36-3995), the activity didn't materialize Spring 18. Now that this activity was done for Large Team Game Studio and proved fruitful, it should be easier to take this assessment approach with Large Team Game Studio and Indie Team Game Studio, as is helpful in the future.

VI. Assessment 7: CVFX: Compositing II (24-3209)

Method

In CVFX: Compositing, the instructor assessed students Final Projects, using a rubric with nine criteria (see Appendix F). Available scores going back to Fall 2015 were aggregated. Additionally, students' self-evaluations from Spring 2018 were analyzed for helpful trends. The work of 12 students was assessed during Spring 2018, and the composite scores from Fall 2015 to Spring 2018 includes 64 students.

Results

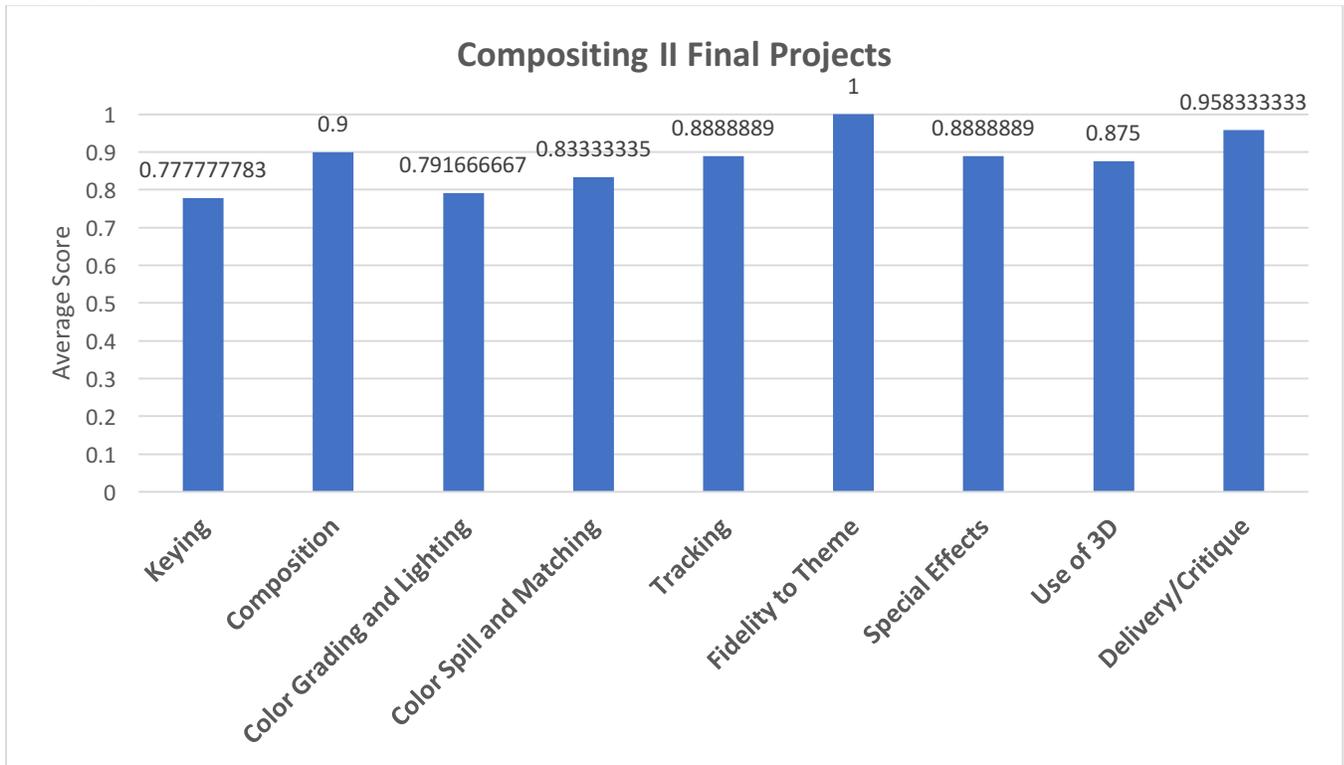


Figure 4: Compositing II Final Project Scores. N= 12.

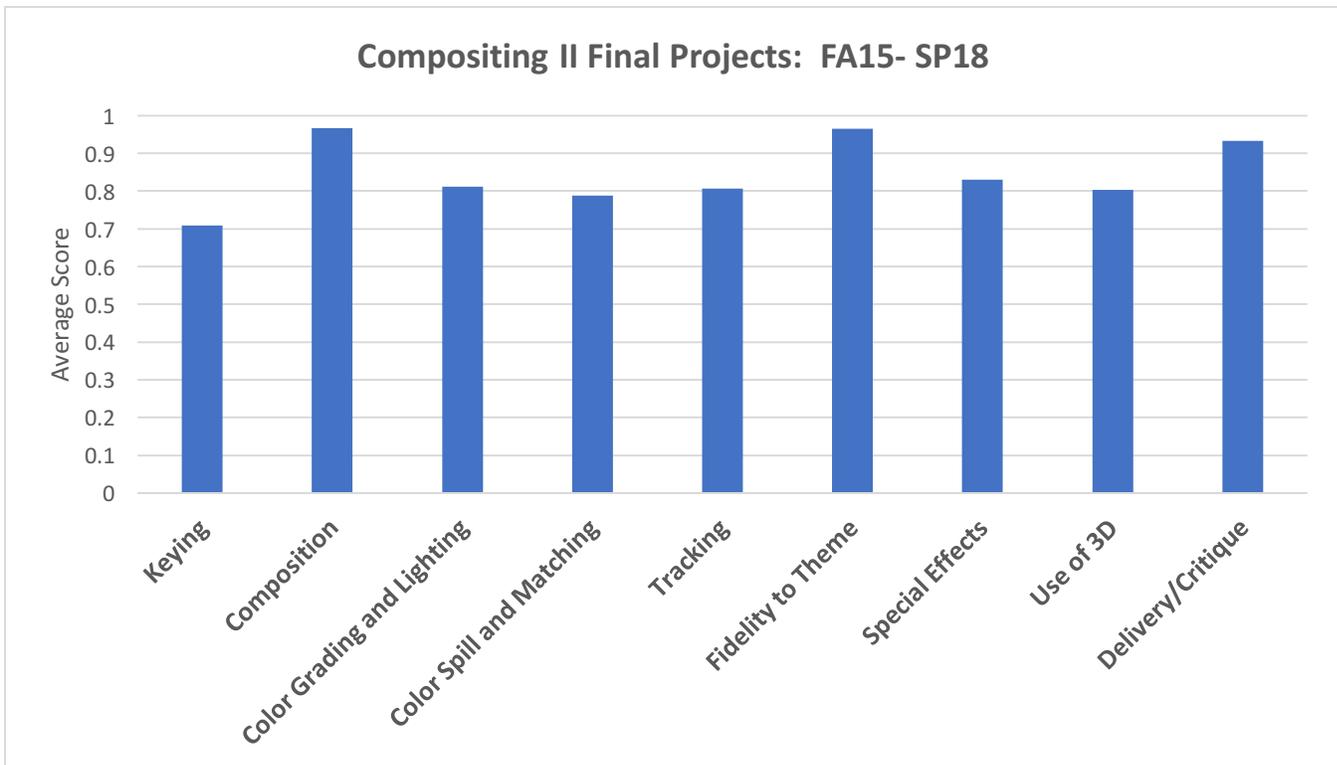


Figure 5: Compositing II Final Project Scores from FA15- SP18. N= 64.

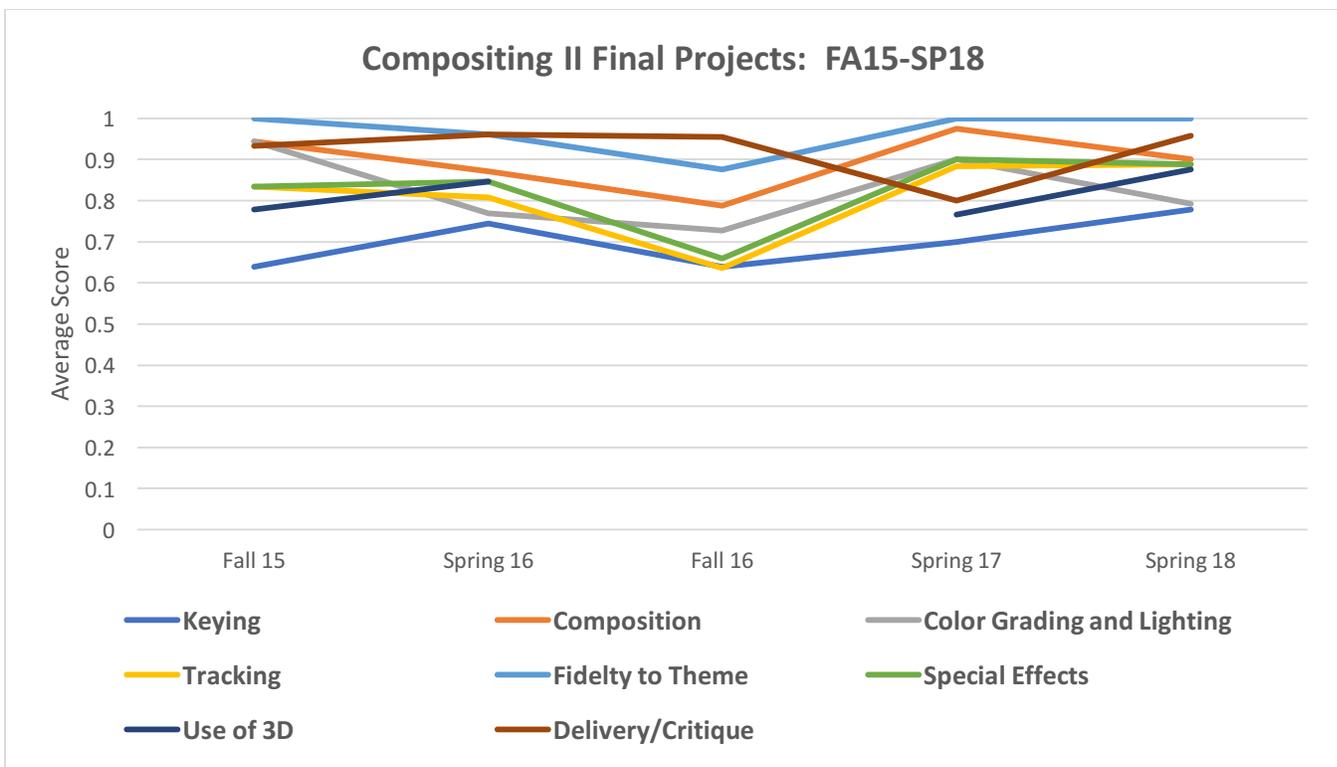


Figure 6: Compositing II Final Project Scores, Over Time. N= 62

Select Comments from Student Self-Reflections

Using the Program, Nuke

- During the early weeks, I really struggled with the primate in nuke.
- I found the 3D camera the most fun thing to do while in Nuke and wish we had touched on it again later down the semester.
- I had a difficult time understanding some of the basic project structures for Nuke.
- I have never felt so challenged as I did working in Nuke. It was definitely an experience I'm glad I learned.
- There [were] many times where Nuke's node-based system was very complicating for me to wrap my head around.

Nodes

- Learning how to use nodes was helpful when it comes to thinking in a different way.
- I feel that my ability to work on some difficult shots improved and how to use numerous nodes to get better results came from me finally being able to understand node structures.
- My biggest problem was getting lost in the Node trees and forgetting my I did on each node.
- I really enjoyed thinking in nodes.

Tracking

- The camera movement helped me to understand the key aspects of tracking.
- If we could explore further I'd like to get into some advanced tracking so we wouldn't have to throw away some of the hard ideas.

Group Project

- For Composting II, when most people are learning a new program for the first time, a more simple and varied project would be better. We all could have just worked on a couple shots separately then we wouldn't have to get overly ambitious. But I do think working on one big project gave us a look into how a vfx house works, if only just on a small scale.
- I would improve on my own communication with people. I should have been talking more with the people whose shots were next to mine so that I could better match color.
- If I had to go back I would suggest splitting into two groups, that way we have a large group to work with but not too big that communication becomes a problem.

VII. Additional Assessment Activities

Plans were made to draw from embedded activities in Data Design (36-3520) and from Digital Animation Techniques: Current 2D Trends (26-3047) and Intro to Computer Animation (26-1015) in the Animation BA. However, they did not come to fruition this year, so they will be re-approached during AY18-19. In Fall 2018, an assessment activity with Animation might be considered to learn more about Large Team Game comments that pointed to a need to improve students' animation choices.

Appendix A: IAM Department Curriculum Committee 9/26/18 Assessment Results Discussion

(The following notes report on the discussion by the Interactive Arts and Media Department Curriculum Committee of the IAM Spring 2018 assessment activities.)

IAM Department Curriculum Committee Meeting 9/26/18

CVFX: Compositing II

Janell Baxter: The averages seem high. I expected them to be lower in one or two areas.

Joe Cancellaro: For the averages across several years, this makes sense.

Julian Grant: Based on this and what students have done with the Nuke program in Compositing II, we created a Compositing III course so that students have more time with the Nuke program.

Joe: Students are meeting the main course objectives; they're meeting the main pieces. The somewhat lower pieces aren't as much the focus of the course, so by this reasoning, it looks like this is an effective course.

Greg Corness: Comment about more advanced keying happening later on

Julian: We need much more data to do a deep dive. More data would be helpful to look at some of the particulars of the scores.

Alex Damarjian : Students did surprisingly well with critiques. My students usually struggle much more with giving each other critiques.

Julian: Comp 3 is starting SP19; this will give students more experience with Nuke. We want to expand it to more of the program. This will extend students' training to beyond only a 15-week semester.

Large Team Game Studio

Janell: We could use more Effects students on the Large Team to help improve the visual effects.

Julian: Maybe taking some of the outlier students into Studio Collaboration. The effects, though, are different with Cinema effects. They're working with different programs and compositing, which may preclude their involvement.

Janell: I think having their conceptual value will be helpful.

Ron Fleischer: The first four scores that scored the lowest, the visuals, are what take the most time.

-Joe: Sound also takes considerable time

-Brenden: So does narrative

Bill Guschwan: Game Design 1 has the design piece.

-Giving them this early on will be helpful

-The main aspect of this game is giving students a demo, a 3-month demo, but students always want to think about this as a full game rather than a demo. It may be a matter of us changing naming so that students think of this as a demo as well instead of a "game"

Jim Rohn: The numbers are helpful, but they only tell us about 50% of what the course does on the outcomes. The team projects help students to build worldviews, but portfolios are often generated in other courses.

Janell: This is the first time they've been in a team.

Brenden: Bill made project management skills an aspect [missing info]

Bill: I'm interested more in soft skills assessment. With students getting an LAS degree here, I'm worried about if we only go down the path of assessing their games this way and not looking at their soft skills as well.

Tyler: This assessment focuses on the game and hard skills pieces of the program outcomes and doesn't have to be the way we assess the program every year. We can definitely explore the varied skill sets students are intended to learn by taking different approaches at different times.

Bill: I'd be interested to have a game programmer give feedback in the future, to have that be one of the areas of expertise.

Alex: I agree with the reviewer's final point about substance painter. It's an easy fix. I've been speaking with instructors so that early on they will be more proactive about talking with students on those art aspects and digging in rather than only giving generic "nice job" comments.

Appendix B: Scripting for Web and Mobile I (36-1420) Midterm Criteria

- Download and use template provided
- apply box-sizing with a universal selector
- show understanding of margin, padding and border properties, background-image, background-size, and background-position
- Floats: float minimum of 3 elements in a container
- Position: use absolute, fixed, or relative positioning EFFECTIVELY.
- Transition/Animation: use at least once
- Loops: must use a for or while loop
- Conditions: must use an if statement
- DOM: use the document.createElement function
- DOM: use the querySelector and querySelectorAll functions
- Color: must use HEX, RGBA and HSLA at least one time each.
- Documentation: must write comments in CSS, HTML, and JavaScript to explain to me (and you) what is going on.

Appendix C: 3D Composition for Interactive Media Final Unity Assignment Requirements and Criteria

- Presentation sheet that has 3 screen shots of scene inside of Unity with completed lighting and materials applied.
- 1 screen shot of previously created gray box interior un textured from the first project along with some of the best renders of the individual objects created from our other assignments that are also in the interior.
- 1 image of the original reference for the interior. Presentation sheets with name and title of the scene.

The instructor assessed student work, with a maximum of 10 points, for each of the following criteria

1. Did student successfully import their interior into Unity
2. Did student successfully apply textures to materials to their geometry inside of Unity
3. Did student add lighting to their scene inside of Unity
4. Did student Bake lighting with Final Gather turned on
5. Did student use an appropriate lighting setup to achieve their final look.
6. Did student upload their unity project folder.
7. Did student create a presentation sheet for project.
8. Did student have all of the requirements requested for presentation sheet.
9. Student attempted to push the artistry of the scene with their materials.
10. Student attempted to push the artistry of the scene with their lighting.

Appendix D: Large Team Game Studio Rubric

Aiku Assessment Rubric

| | 1 (Poor) | 2 | 3 | 4 | 5 (Excellent) | Comments |
|--------------------------------------|----------|---|---|---|---------------|----------|
| Game Art | | | | | | |
| Character Models | | | | | | |
| Animations | | | | | | |
| Environment Art | | | | | | |
| Visual Effects | | | | | | |
| Art Style/Art Direction | | | | | | |
| Sound Design | | | | | | |
| Sound Design: Tone/Design Choices | | | | | | |
| Functionality | | | | | | |
| Music | | | | | | |
| Game Design | | | | | | |
| Usability | | | | | | |
| Pacing | | | | | | |
| Narrative | | | | | | |
| Game Concept | | | | | | |
| Game Functionality | | | | | | |
| Overall Rating | | | | | | |

How long did you play the game?

Additional comments:

Appendix E: Large Team Game Studio Full Feedback

GAME ART

Character Models (3 and 2)

- 1) Inconsistent detailing - hands especially have bad seams and there is little/no skin detail apparent while clothing and tattoo can have high detail
Characters are distinct and clear in appearance (good) - more clothing/elements should be used to hint at their job though
- 2) There seems to be a basic understanding of character modeling, but not much detail or design to them. For the purposes of character work in the current game industry, it might have been useful to focus on pushing costume design, and perhaps even working from scan data for heads in order to push design and detail further and get more familiarity with a full character pipeline without having to spend too much time on detailed faces which are often the largest timesink. Spending time on polishing, say, two uniforms (male and female body) and then using a few properly textured/baked scan heads for multiple head variations might have improved the quality. As it stands the characters don't seem like they had much time put into them.

I wouldn't say any of the character work would be showable to get a job as a character artist. That said, (and speaking from experience) character art roles are one of the hardest to get, so hopefully no one has the expectation that it'll be an easy thing to get right out of school. But if any individuals have plans to go into character work in the future, I think there's a lot more to do to catch up to contemporary practices, pipelines, and standards.

Animation (2 and 2)

- 1) Very few things animated and the ones that did were relevant to gameplay and eye catching, so good choices of when to use animation but not exactly good animations.
- 2) Object animations were passable, but character animations were extremely basic and didn't even have very passable walk cycles. They were functional for the design of the game but if any individual on the team plans to focus on animation as a career, there is a lot more to do to show off the ability to move characters around with life and believability. I wouldn't say anything from this game would be showable to get an animation job.

Environment Art (2 and 2)

- 1) Inconsistent level of detail across enviro and prop model art. Some models textured, some appear to have solid colors, texel density inconsistent. Some bolts are modeled and shouldn't not be, they should be detail work done in painter.
Some models/props have details modeled into their mesh, others are blocky and

unfinished. Seams, texture seams everywhere.

Inconsistent levels of detail are a big issue, lacks polish and can kill the vibe of the demo. Its okay to have unfinished work. enviro/prop modelling work is often the largest workflow bottleneck of large team projects (always tons to be done and never enough time) what can be done though and needs to be to show the ability of an artist to complete a project by finalizing some room or location, preferably near the beginning of the demo. If the first deck or rooms are complete the artists can show what they can achieve untethered to design (important- design is capricious and artists pay the price in lost work, they need a fair shake)

Some solid work on some small props.

Break up tiling of enviro art kits and textures with decals.

Better prop/shared asset usage - soooo many unique props everywhere and not used often! Its insane you'll never finish it. There needs to be strong planning from the beginning within the level design and art teams to coordinate props needs with gameplay/story needs and get more to completion and instance driven use. This is as much level designs fault as anyones - its on them to coordinate gameplay needs. There are so many tables in here, but really you only need 3 or so - a standard table, desk, and workbench. Use texture swaps and masking to have damaged versions or richer variations within the 3 and so on. Im seeing way too many types of crates. Crates are perfect for texture swaps, color shifts, decal logos, masked paint styles, and numerous other cheap ways can give a single crate model near infinite variations. I'm seeing in the enviro art portfolios that toolkits where built with lego pieces but i'm not feeling it in the world and the inconsistent nature of some assets is hurting this too.

A lot of props feel unfinished, things like walls and other props that feature prominently *a wall can be a hero prop!* dont have enough detail and feel out of place with some of the smaller interior dressing props.

Cryo pods looked good and felt good as a stylized hero prop, but next to the realistic metals on many other props they clashed with inconsistent stylings.

- 2) There were some decent models (some props, some doors, etc.) but I was very surprised not to see more wall panels, floor grates, and other things to break up the large swaths of continuous unbroken space a little more.

-There's a number of places where round surfaces (cylinders, etc.) are way too low poly. Polygon limits are very high these days and generally not the main cost, so I wouldn't expect to see so many semi-octagonal looking cylinders, especially ones that are directly in your face, or, say, the fusion plant thing.

-Textures seem fairly low resolution as well, and I saw a fair amount of bake errors and

incorrect normals on things.

-Same as with character art, there's a lot more to be done if anyone wants pieces that are showable to get work. Especially on the environment side, there are a lot of modern workflows to gain an understanding of, like modular modeling, trim sheet construction, and more ability to construct a full environment (rather than just modeling props.) A few props to show off are fine, but I'd say the game doesn't show a real understanding of how to construct an interesting environment from a modeling perspective.

Visual Effects (1 and 2)

- 1) Not great.
- 2) Again, doesn't feel like much to speak of here. Effects were functional, chromatic aberration screen space stuff was decently used to highlight moments, and sparks flew here and there, but FX didn't really stand out to me as something that it seemed anyone spent much time on.

-Would be nice to have more FX or something to transition between memory and real space. This would have been the potential to showcase some fun FX work.

Art Style/Art Direction (2 and 3)

- 1) I couldn't tell for sure if the game was supposed to be stylized or realistic. Inside the simulation its appropriate for props and art to be more solid shaded but outside in the ship and inside in the sim sometimes it felt mixed and inconsistent.

This ties into game design usability too - and both are accountable: Gameplay lends itself to be stylized overall, so callouts can be done visually - think mirrors edge. The enviro hunt nature of the game still requires fair player feedback. Clear callouts on interactable objects that separate them from the environment are a must. Cheeky placement of interacts is allowed but the environmental storytelling needs to hint at its location in those cases.

More mise en scène - only some spots had it in the crew rooms/break areas, produce more environmental storytelling to hint at gameplay needs. Collaborate with narrative and design for strong links. Some desks showed tons of open food cans and told the crew members story. When there is a damaged pipe or piece of equipment lay out tools and a manual to tell the story of an attempted repair. A note about a kitchen fire and a spent extinguisher can help make a cheeky power interact stand out more.

- 2) There are definitely some good ideas here, especially for a student project, and I especially liked the surrealness of the memory sequences. In some ways it seems that there were some decent attempts at properly scoping the style to fit experience level and timeline, but a few choices would have been helpful to gameplay from an art direction perspective:

-Glowing yellow guide arrow is useful, but would be interesting to see something believable as part of the environment--even lighting strips or signs to feel more immersive.

-Environment could use some more ambient occlusion, either baked or perhaps at least an SSAO solution, especially with such plain architecture, lighting/shadows would help make it more interesting (eg. Mirror's Edge). Color too, if the route is minimalist modeling.

-Without more color breakup it's easy to get lost as multiple rooms/doors look the same

-It'd be more interesting if instead of going black when the power is out, there was backup generator lighting, which would allow for more playing with sense of atmosphere, and not getting lost or needing the radiating circle to tell where you are. Would add more visual interest.

SOUND DESIGN

Sound Design: Tone/Design Choices (3 and 3)

- 1) Good use in feedback situations and helped set the mood tone well. The voice acting was often much better than I expected. Bravo.

Sound Design: Functionality (3 and 3)

- 1) Appropriate.
- 2) Overall the sound design choices were functional and gave me a sense of what I was doing in the game. I do think there is a lot of potential for more atmospheric sounds, though--different styles of machine humming, fans, equipment making ambient noises as a way to attempt to create a greater sense of place so that players have an even clearer sense of when they're in the crew quarters, nav room, kitchen, etc. This would also help with orientation as well.

Sound Design: Music (3 and 5)

- 1) I didn't notice it, and I mean that as a compliment. The sound helped set the mood and tone for the game, helping ground me in the location and space. It didn't feel repetitive or intrusive and felt consistent in its application.
- 2) The music was probably my favorite part of the game. It carried the tone and feel of the experience throughout, and really helped elevate the game to add a subtle emotional layer to what is effectively a puzzle game with story elements.

GAME DESIGN

Usability (3 and 4)

- 1) Introduction sequence was very strong, giving clear identity to gameplay elements and the layout/nature of the ship. Then delved appropriately into more complex but easy to understand minigames.

(art and design accountable) All power interacts for doors/controls were black in overall object color (same as many doors/walls) and featured a blue light, similar to the dominant enviro art theme - this is super bad. It hides the importance of the gameplay object and allows it to fall into the background, but it must stand out - objects should have a color display not used anywhere else in the enviro art and feature a bolder overall art style to stand out.

The gameplay needs more work done to develop its visual language. Cryo station interacts are hard to see or know they are interact-able without the UI highlight to call it out. Reliance on UI is bad. Players should be able to discern gameplay valuable objects from sight across the map. Objects like this should use similar but distinct versions of the power interacts *use the same light color but with a different shape, instead of power rectangles, a concentric circle or triangle, etc

Developing and enforcing a gameplay language can be difficult, it may be helpful to have designers construct a bible for this featuring definitions of all gameplay objects, their distinct uses and visual elements. If enviro art is blue in tone overall, a great background color choice, then all gameplay interacts have need to be something else. For example: green for power, yellow for notepads, so on. I know %0Ù÷unusable power%0Ùª was green but that should be a grayed version of useable power with a lock icon etc or some symbology for it being useable but locked away.

Awkward ADS (aim down sight) usage on tractor gun. Awkward gameplay movement etc with it. It was slow and didn't flow well. Snappier ADS in/outs. This hampers an otherwise fuckin amazing and trippy trevor sequence that was a great use of story driven gameplay and level design (memory simulation aspect.)

On Normas stateroom lock, it's unclear what column of numbers is correct to use for the combination. This is critical player feedback issue..

- 2) Overall the gameplay was fairly self-explanatory. I enjoyed the main energy carrying mechanic, though due to the sameness of the environments I spent more time getting lost on first playthrough than I would have liked. Overall it felt good, my biggest critiques would be:

-First time playing through the drone section, I was pretty disoriented as to where my character was, and didn't fully get that I was supposed to get the keycard, move it to myself with the drone, and then grab it for quite a while. The rooms are a little too big

(too easy to wander, and the bot is so slow), and I would say starting as the drone rather than the player is creatively interesting, but doesn't set up one's orientation to the space very well--maybe if as the drone you saw your player self in person and -then-transitioned to controlling the crane it might help. Overall those rooms in that section are a little too big, and I actually passed right by the keycard on the desk the first time, which left me pretty frustrated as I wandered around quite a bit without much to do. -Doesn't help that there are various small holes the drone can wander through into other rooms. Why can you move here as the player if there's nothing to do? Just increases chance of getting lost, and as there's no real gameplay or interest when you're wandering off the path, there's no real point to allowing it.

-I got stuck multiple times trying to open the lock to Norma's state room. It's possible I didn't grab the latest best build, but unfortunately I didn't get to finish the experience at this stage. Not sure how to repro the bug but it happened to me on two different playthroughs.

Pacing (4 and 3)

- 1) Solid pacing and introduction to gameplay elements with the story arc.

Narrative (4 and 4)

- 1) Not bad quick little story with memorable and distinct characters that tied well into gameplay elements.
- 2) I'm not one to spend much time reading the books I pick up in RPGs, but I did enjoy the general banter and dialogue, as well as the memory exploration which added more depth to the game, and a more sense of human connection to the mission I was trying to accomplish.

Game Concept (5 and 3)

- 1) Clever concept that lends itself well to a quick demo but offers enough depth and diversity to give a strong and various gameplay experience.
Super clever level design power mechanic kudos.
- 2) Overall a good demo from a game design perspective, though it's unclear to me what mechanics might be after you rescue a player. Will it always be managing carrying energy between doors and machines? Because it feels like that's the primary focus here, and if that's true for a 1-3 hour game that seems fine, but if the goal is something longer than that, I think it'd get repetitive.

Game Functionality (4 and 2)

- 1) some notepads have the top text lines out of sight when inspected - must be rotated to be read Workbench with notecards in crew quarters, not all notecards were presented in a readable fashion.

- 2) As mentioned above, not sure I had the best build, but I got stuck at the combo lock twice, so unfortunately couldn't finish the game. Also would have loved the ability to save the game and come back.

OVERALL RATING (3 and 3)

PLAY TIME (3.5 hours and 2 hours)

ADDITIONAL COMMENTS

- 1) There are now tons of schools pumping out kids for games and the standards are going up up up. We now look for students who already have a native understanding of work flows, pipelines, and smart asset construction for games on top of talent and ability to make production ready assets immediately on hire. Small issues that used to be forgiven are now becoming larger dings against candidates. So substance painter is a powerful tool, but it can also be a crutch and impart a real negative effect. A lot of props vibrate of my first substance where elements are placed on a surface then given no secondary attention to edges, damage, wear or very sparingly and unevenly so. Its understandable not every prop is given this attention but some must be brought up to a finished level, work with design to choose hero props and showcase them. Good candidates for hero props: cryo pods, power interacts, doors. It sounds like a lot to ask students to display all these facets of game dev, but a triple A studio will. If a team can display the same abilities of a pro team working together those students will get snapped up because we can just plug and play them onto the production floor. If I sound too tough, i'm actually scolded for going too easy by my executive producer often. Producers at these mega publisher are cutt throat SOBs. Ubi, Bethesda, Epic, EA, Activision, Microsoft...we all get thousands of candidates world wide any given year anymore for extremely limited junior positions as a large amount of art and asset production is getting outsourced, these positions are constricting further.
- 2) Overall some good ideas here, and for a student project is fairly solid from a gameplay/design/programming/audio perspective (other than the bug I ran into and lack of save functionality.) From an art/animation perspective though, it's fairly lacking and there'd be a lot more to do in order for any students interested in art or animation careers to have something that might help them get a foot in the door in a game studio.

Appendix F: CVFX: Compositing Final Project Rubric

| Rubric for Compositing 2 Final Project -- Spring 2018 | | 4/30/2018 | |
|---|---|--|---|
| | Above Standard | Acceptable | Still a Goal |
| Keying 6 points | All elements keyed help tell the story and use advanced matting techniques. | Elements keyed have appropriate matte edges and a clean fill is apparent. | Elements poorly keyed or missing, Matte edges are mismatched. |
| Composition 5 points | Compositions highly engage viewer with innovative views. | Compositions / layouts compliment theme and offer different views. | Compositions work against story or are not convincing. |
| Color grading and lighting. 4 points | Innovative use of color and lighting that convincingly helps story/theme. | Use of re-lighting or shading or shadows. Color grading develops theme. | No use of lighting, shading, or shadows. Color does not compliment story. |
| Color spill or color matching 3 points | No color spill. All elements match. | Color spill is mostly minimized. Elements mostly match. | Color spill is very noticeable. Elements don't match. |
| Tracking or stabilization or animation 3 points | Tracking, stabilization or animation seamlessly integrates elements. | Tracking, roto, stabilization or animation (i.e. animating a light) is fairly smooth. | Tracking, roto, stabilization, or animation stutters or is not used. |
| Fidelity to theme 3 points | Project matches story and develops story. Adapts different elements into unified whole. | Treatment and storyboard match the final movie. | Treatment and storyboard don't match final movie. |
| Special effects 3 points | Innovative and/or engaging use of effects, time remapping, or expressions. | Appropriate use of effects (i.e blur, motion blur, glow, grain, edge blur) or time manipulation. | No use of effects, filters or other manipulations. |
| Use of 3D 2 points | Innovative and/or engaging use of 3D or 3D camera. | Appropriate use of 3D or 3D camera. | No use of 3D or 3D camera. |
| Delivery / Critique 2 points | On time, correct format, able to critique others. | On time, correct format, mostly able to critique. | Late, not in correct format, not able to critique others. |

Project renders due at start of final class. Provide either sequential frames or movies full lossless HD (i.e Animation or ProRes 422 codec) plus the Nuke project file.

