

Assurance of Student Learning Reflection 2024-2025

<i>PCAL</i>	<i>Art & Design</i>
<i>1761: Game Design Certificate</i>	
<i>Kristina Arnold, Program and Assessment Coordinator</i>	
Is this an online program? ☐ Yes ☒ No	Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here ☒ Yes, they match! (If they don't match, explain on this page under Evaluation)

Instructions: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your **ASL Rep** by **May 15, 2025**.

Program Student Learning Outcome 1

Program Student Learning Outcome 1	
Program Student Learning Outcome	Design and build a functioning game using industry-standard game design engine.
Evaluation	Recent program revisions will necessitate a thorough review to ensure current SLOs match intended outcomes.
Measurement Instruments	We will continue to evaluate this SLO based on a student-created game, but shift the course where the artifact is captured from CS 301 to GAME 400.
Criteria & Targets	To evaluate SLO 1, students recorded a video of a playthrough of their game and submitted a copy of their documentation created in CS 301 for review, which were evaluated as novice, intermediate, or proficient based on the rubrics for this SLO. Success is defined as 75% of students meeting intermediate or proficient level on this outcome [as this is a certificate and not a major, intermediate level skill is an acceptable outcome]. Recent program revisions will necessitate examining criteria and targets to ensure they are appropriately aligned with SLOs and measurement instruments. By 2025-2026, we hope to have enough students in the revised pipeline to run GAME 400, and enough artifacts collected to make assessing the program based on our new capstone GAME 400 course viable. If not, we will continue to use artifacts collected in CS 301 to assess the program.

Results & Conclusion	The Game Design Certificate is an interdisciplinary program (Art & Design + Computer Science) developed in Fall 2020. The Certificate was first assessed through the annual Activities of Student Learning (ASLs) by an interdisciplinary committee of program faculty in AY 24. Working across departments is challenging but thanks to extensive faculty time, input, and collaboration, the program and its students continue to benefit from several fields of knowledge. Based on student and faculty input and assessment, since its inception, the Game Design Certificate has been substantially revised twice to enhance student outcomes, most recently in Spring 2025. SLOs have been assessed through review of games and written game design documentation created in the CS 301 course, and through this process, we have discovered that one course (CS 301) is not enough to create a functioning game that includes assets developed in animation courses. For an interdisciplinary program, we also realize the need to formally assess a more interdisciplinary project and expand our review beyond examination of one course. The upcoming program revision will address both issues, as a main goal is to reinforce learning outcomes across courses and provide opportunities in both introductory and capstone coursework for students to integrate interdisciplinary knowledge and experiences. Revisions will include creating two new courses: GAME 200: The Theory, History, and Practice of Game Design (comprehensive introduction to program, discipline and industry) and GAME 400: a capstone course mirroring industry, in which students integrate knowledge from all courses in the program to create games in teams. This new GAME 400 capstone experience will also enable all aspects of the program to be more easily assessed, including those SLOs for which assessment has not yet been possible (SLOs 3 and 4).
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Since the Game Design Certificate was created, the program faculty have continued to evaluate the curriculum for efficacy, and created significant revisions. Our plan for the next three-year assessment cycle is as follows: • Commit to evaluating and refining the substantive changes made to the program as outlined above. We will also continue to address holistic curriculum development, oversight, and revision where needed, and take lessons learned from our yearly ASL reports back into the classroom for continued improvement; • We will thoroughly review our SLOs to ensure they are measuring the most important required outcomes for the revised program; • If we rewrite SLOs, we will ensure they are not multi-barreled and are assessable; • We will identify and ensure we are capturing the appropriate artifacts for assessment; • Devise a method to effectively capture artifacts in a format that enables easy review; • For team-based assessment artifacts, develop a method to capture the information necessary to specifically identify certificate student participation and success; • Investigate implementing digital tools to facilitate consistent capture of team presentations and portfolio artifacts.

Program Student Learning Outcome 2

Program Student Learning Outcome	Demonstrate practical skills in at least one industry-standard programming language.
Evaluation	Recent program revisions will necessitate a thorough review to ensure current SLOs match intended outcomes.
Measurement Instruments	We will continue to evaluate this SLO based on a student-created game, but shift the course where the artifact is captured from CS 301 to GAME 400.
Criteria & Targets	Similar to SLO 1, to evaluate SLO 2, students recorded a video of a playthrough of their game and submitted a copy of their documentation created in CS 301 for review, which were evaluated as novice, intermediate, or proficient based on the rubrics for this SLO. Success is defined as 75% of students meeting intermediate or proficient level on this outcome [as this is a certificate and not a major, intermediate level skill is an acceptable outcome]. Recent program revisions will necessitate examining criteria and targets to ensure they are appropriately aligned with SLOs and measurement instruments. By 2025-2026, we hope to have enough students in the revised pipeline to run GAME 400, and enough artifacts collected to make assessing the program based on our new capstone GAME 400 course viable. If not, we will continue to use artifacts collected in CS 301 to assess the program.
Results & Conclusion	The Game Design Certificate is an interdisciplinary program (Art & Design + Computer Science) developed in Fall 2020. The Certificate was first assessed through the annual Activities of Student Learning (ASLs) by an interdisciplinary committee of program faculty in AY 24. Working across departments is challenging but thanks to extensive faculty time, input, and collaboration, the program and its students continue to benefit from several fields of knowledge. Based on student and faculty input and assessment, since its inception, the Game Design Certificate has been substantially revised twice to enhance student outcomes, most recently in Spring 2025. SLOs have been assessed through review of games and written game design documentation created in the CS 301 course, and through this process, we have discovered that one course (CS 301) is not enough to create a functioning game that includes assets developed in animation courses. For an interdisciplinary program, we also realize the need to formally assess a more interdisciplinary project and expand our review beyond examination of one course. The upcoming program revision will address both issues, as a main goal is to reinforce learning outcomes across courses and provide opportunities in both introductory and capstone coursework for students to integrate interdisciplinary knowledge and experiences. Revisions will include creating two new courses: GAME 200: The Theory, History, and Practice of Game Design (comprehensive introduction to program, discipline and industry) and GAME 400: a capstone course mirroring industry, in which students integrate knowledge from all courses in the program to create games in teams. This new GAME 400 capstone

	experience will also enable all aspects of the program to be more easily assessed, including those SLOs for which assessment has not yet been possible (SLOs 3 and 4).
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Since the Game Design Certificate was created, the program faculty have continued to evaluate the curriculum for efficacy, and created significant revisions. Our plan for the next three-year assessment cycle is as follows: • Commit to evaluating and refining the substantive changes made to the program as outlined above. We will also continue to address holistic curriculum development, oversight, and revision where needed, and take lessons learned from our yearly ASL reports back into the classroom for continued improvement; • We will thoroughly review our SLOs to ensure they are measuring the most important required outcomes for the revised program; • If we rewrite SLOs, we will ensure they are not multi-barreled and are assessable; • We will identify and ensure we are capturing the appropriate artifacts for assessment; • Devise a method to effectively capture artifacts in a format that enables easy review; • For team-based assessment artifacts, develop a method to capture the information necessary to specifically identify certificate student participation and success; • Investigate implementing digital tools to facilitate consistent capture of team presentations and portfolio artifacts.

Program Student Learning Outcome 3	
Program Student Learning Outcome	Demonstrate basic computer animation techniques.
Evaluation	Recent program revisions will necessitate a thorough review to ensure current SLOs match intended outcomes.
Measurement Instruments	We will evaluate this SLO based on an animation created in ANIM 210 and captured via portfolio or demo reel created in GAME 400.
Criteria & Targets	In past review cycles, we were unable to capture artifacts to measure SLO 3. Moving forward, we will need to ensure that our method to effectively capture artifacts in a format that enables easy review includes artifacts that allow review of this SLO.
Results & Conclusion	The Game Design Certificate is an interdisciplinary program (Art & Design + Computer Science) developed in Fall 2020. The Certificate was first assessed through the annual Activities of Student Learning (ASLs) by an interdisciplinary committee of program faculty in AY 24. Working across departments is challenging but thanks to extensive faculty time, input, and collaboration, the program and its students continue to benefit from several fields of knowledge. Based on student and faculty input and assessment, since its

	inception, the Game Design Certificate has been substantially revised twice to enhance student outcomes, most recently in Spring 2025. SLOs have been assessed through review of games and written game design documentation created in the CS 301 course, and through this process, we have discovered that one course (CS 301) is not enough to create a functioning game that includes assets developed in animation courses. For an interdisciplinary program, we also realize the need to formally assess a more interdisciplinary project and expand our review beyond examination of one course. The upcoming program revision will address both issues, as a main goal is to reinforce learning outcomes across courses and provide opportunities in both introductory and capstone coursework for students to integrate interdisciplinary knowledge and experiences. Revisions will include creating two new courses: GAME 200: The Theory, History, and Practice of Game Design (comprehensive introduction to program, discipline and industry) and GAME 400: a capstone course mirroring industry, in which students integrate knowledge from all courses in the program to create games in teams. This new GAME 400 capstone experience will also enable all aspects of the program to be more easily assessed, including those SLOs for which assessment has not yet been possible (SLOs 3 and 4).
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	Since the Game Design Certificate was created, the program faculty have continued to evaluate the curriculum for efficacy, and created significant revisions. Our plan for the next three-year assessment cycle is as follows: • Commit to evaluating and refining the substantive changes made to the program as outlined above. We will also continue to address holistic curriculum development, oversight, and revision where needed, and take lessons learned from our yearly ASL reports back into the classroom for continued improvement; • We will thoroughly review our SLOs to ensure they are measuring the most important required outcomes for the revised program; • If we rewrite SLOs, we will ensure they are not multi-barreled and are assessable; • We will identify and ensure we are capturing the appropriate artifacts for assessment; • Devise a method to effectively capture artifacts in a format that enables easy review; • For team-based assessment artifacts, develop a method to capture the information necessary to specifically identify certificate student participation and success; • Investigate implementing digital tools to facilitate consistent capture of team presentations and portfolio artifacts.

Program Student Learning Outcome 4	
Program Student Learning Outcome	Demonstrate basic 3D modeling for animation and game design.
Evaluation	Recent program revisions will necessitate a thorough review to ensure current SLOs match intended outcomes.

Measurement Instruments	We will evaluate this SLO based on a model created in ANIM 220 and captured via portfolio or demo reel created in GAME 400.
Criteria & Targets	In past review cycles, we were unable to capture artifacts to measure SLO 4. Moving forward, we will need to ensure that our method to effectively capture artifacts in a format that enables easy review includes artifacts that allow review of this SLO.
Results & Conclusion	The Game Design Certificate is an interdisciplinary program (Art & Design + Computer Science) developed in Fall 2020. The Certificate was first assessed through the annual Activities of Student Learning (ASLs) by an interdisciplinary committee of program faculty in AY 24. Working across departments is challenging but thanks to extensive faculty time, input, and collaboration, the program and its students continue to benefit from several fields of knowledge. Based on student and faculty input and assessment, since its inception, the Game Design Certificate has been substantially revised twice to enhance student outcomes, most recently in Spring 2025. SLOs have been assessed through review of games and written game design documentation created in the CS 301 course, and through this process, we have discovered that one course (CS 301) is not enough to create a functioning game that includes assets developed in animation courses. For an interdisciplinary program, we also realize the need to formally assess a more interdisciplinary project and expand our review beyond examination of one course. The upcoming program revision will address both issues, as a main goal is to reinforce learning outcomes across courses and provide opportunities in both introductory and capstone coursework for students to integrate interdisciplinary knowledge and experiences. Revisions will include creating two new courses: GAME 200: The Theory, History, and Practice of Game Design (comprehensive introduction to program, discipline and industry) and GAME 400: a capstone course mirroring industry, in which students integrate knowledge from all courses in the program to create games in teams. This new GAME 400 capstone experience will also enable all aspects of the program to be more easily assessed, including those SLOs for which assessment has not yet been possible (SLOs 3 and 4).
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Program Student Learning Outcome 5	
Program Student Learning Outcome	Produce industry-standard documentation of relevant work
Evaluation	Recent program revisions will necessitate a thorough review to ensure current SLOs match intended outcomes.
Measurement Instruments	We will evaluate this SLO based on a portfolio or demo reel created in GAME 400 that includes game(s) and related game documentation, model(s), and animation(s) created in certificate coursework.
Criteria & Targets	To evaluate SLO 5, students submitted a copy of their documentation created in CS 301 for review, which were evaluated as novice, intermediate, or proficient based on the rubrics for this SLO. Success is defined as 75% of students meeting intermediate or proficient level on this outcome [as this is a certificate and not a major, intermediate level skill is an acceptable outcome]. Recent program revisions will necessitate examining criteria and targets to ensure they are appropriately aligned with SLOs and measurement instruments. By 2025-2026, we hope to have enough students in the revised pipeline to run GAME 400, and enough artifacts collected to make assessing the program based on our new capstone GAME 400 course viable. If not, we will continue to use artifacts collected in CS 301 to assess the program.
Results & Conclusion	The Game Design Certificate is an interdisciplinary program (Art & Design + Computer Science) developed in Fall 2020. The Certificate was first assessed through the annual Activities of Student Learning (ASLs) by an interdisciplinary committee of program faculty in AY 24. Working across departments is challenging but thanks to extensive faculty time, input, and collaboration, the program and its students continue to benefit from several fields of knowledge. Based on student and faculty input and assessment, since its inception, the Game Design Certificate has been substantially revised twice to enhance student outcomes, most recently in Spring 2025. SLOs have been assessed through review of games and written game design documentation created in the CS 301 course, and through this process, we have discovered that one course (CS 301) is not enough to create a functioning game that includes assets developed in animation courses. For an interdisciplinary program, we also realize the need to formally assess a more interdisciplinary project and expand our review beyond examination of one course.

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