



COURSE OUTLINE: VGA304 - GAME ART STUDIO 3

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Approved: Bob Chapman, Chair, Health

Course Code: Title	VGA304: GAME ART STUDIO 3
Program Number: Name	4008: GAME - ART
Department:	VIDEO GAME ART
Academic Year:	2022-2023
Course Description:	In this advanced session of Game Art Studio, participants will be faced with the challenges of learning high poly sculpting, retopology and creating optimized game assets. Another emphasis of the course will be learning advanced workflows for Next-Gen game art pipelines.
Total Credits:	6
Hours/Week:	6
Total Hours:	90
Prerequisites:	VGA203
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	VGA402, VGA403, VGA404
Vocational Learning Outcomes (VLO's) addressed in this course:	4008 - GAME - ART VLO 3 Identify and relate concepts from a range of industry roles, including programing, design and art to support the development of games. VLO 4 Contribute as an individual and a member of a game development team to the effective completion of a game development project. VLO 5 Develop strategies for ongoing personal and professional development to enhance work performance in the games industry. VLO 6 Perform all work in compliance with relevant statutes, regulations, legislation, industry standards and codes of ethics. VLO 7 Use game concepts to support the ongoing iteration, creation, design and development of games. VLO 8 Apply game design elements to support the ongoing iteration and creation of unique gaming environments, levels, characters, assets and props. VLO 9 Support the development of evolving and iterative game design documents that align with standard industry expectations and/or company practices.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 4 Apply a systematic approach to solve problems.



- EES 5 Use a variety of thinking skills to anticipate and solve problems.
- EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
- EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
- EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.
- EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
- EES 10 Manage the use of time and other resources to complete projects.
- EES 11 Take responsibility for ones own actions, decisions, and consequences.

Course Evaluation:

Passing Grade: 50%, D

A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Design, digitally sculpt, re-typologize and assemble polished and efficient 3D game models.	1.1 Design and create visually appropriate game assets including 2D concepts, 2D textures, and 3D base meshes. 1.2 Demonstrate the ability to sculpt a high poly 3D mesh. 1.3 Demonstrate the ability to retypologize a high poly 3D mesh to make an efficient low poly 3D game mesh. 1.4 Demonstrate the ability to extract surface texture detail from a high poly 3D sculpted game mesh. 1.5 Demonstrate the ability to assemble a final low poly optimized game mesh complete with texture maps.
Course Outcome 2	Learning Objectives for Course Outcome 2
2. Create and produce optimized, efficient 3D game meshes ready for game animators.	2.1 Understand typology as it pertains to 3D game meshes. 2.2 Show the ability to create a clean, efficient 3D game mesh. 2.3 Work within low polygon limitations to create clean deformable 3D game mesh joints ready for animation. 2.4 Demonstrate the ability to model clean, efficient hard surface 3D game meshes.
Course Outcome 3	Learning Objectives for Course Outcome 3
3. Demonstrate the ability to efficiently transfer and use 3D game meshes and 2D assets from content creation programs alongside game assets created inside a 3D game engine.	3.1 Understand how to export 3D meshes and 2D from content creation programs. 3.2 Demonstrate how to efficiently import, setup, manage and use 3D meshes and 2D game assets in a 3D game engine. 3.3 Demonstrate working knowledge of game engine asset creation tools to make game assets inside a 3D game engine. 3.4 Design and layout a 3D game scene using a combination of game assets from both inside and outside of a 3D game engine.
Course Outcome 4	Learning Objectives for Course Outcome 4
4. Develop perspective in the role of game artists and art within development team	4.1 Demonstrate the ability to apply effective business



	and projects objectives by working effectively as a game artist within a team environment.	practices and time management skills appropriate to his/her position in the game art industry.
	Course Outcome 5	Learning Objectives for Course Outcome 5
	5. Learn how to create and use 2nd UV channels, and light maps in 3D game engines and content creation programs.	5.1 Demonstrate the ability to create and export a 2nd UV channel in a 3D content creation program. 5.2 Demonstrate the ability to import, manage and use a 2nd UV channel in a 3D game engine. 5.3 Demonstrate the ability to render and apply light maps to 3D assets in a 3D game engine. 5.4 Design and produce a fully light 3D game scene complete with light maps.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assignments / Projects	100%

Date:

June 21, 2022

Addendum:

Please refer to the course outline addendum on the Learning Management System for further information.

