

# GAME 398: 3D Game Art II - Section K01 – Spring 2024 Syllabus

## Information

Location & Time:	G313, 3:00 – 4:15 pm, Tuesdays and Thursdays
Instructor/Email:	John David McGrew - <a href="mailto:jmcgrew4@gmu.edu">jmcgrew4@gmu.edu</a>
Office Hours:	Tues. & Thurs. 10:30 am – 12 pm, G553 (email for appointment)
Student LA Contact:	Hyoju Yang / <a href="mailto:hyang34@gmu.edu">hyang34@gmu.edu</a> / Kakao: yanghj099
Office Hours:	TBA

## Instructional Mode

The course is currently designed as a face-to-face course in the Mason Korea building but may be adjusted to accommodate or adhere to changing conditions.

## Description

Advanced 2D and 3D animation projects for interactive game scenes and scenarios are built using commercial and proprietary software and game design tool kits. Advanced texturing, rigging, lighting, and perspective manipulation will be covered. Limited to three attempts.

## Succeeding in this Course

Students who attentively attend each class, participate, take notes, read and follow instructions, start and turn in assignments on time, spend adequate time (9+ hours per week) outside of class on projects, and communicate with the instructor are far more likely to succeed in this course. 3D modeling and animation go beyond memorizing facts and require students to learn how to problem solve and take on new creative challenges.

## Prerequisites

GAME 231, with a grade of C or above.

## Objectives

- Build intermediate skills in modeling organic and hard surface game-ready objects in 3DS Max
- Create intermediate model textures
- Develop a thorough knowledge of importing 3D models into a game engine
- Sculpt, Retopogize, UV Map, and 3D paint complex models
- Develop an intermediate understanding of game art production pipelines and asset management

## Required Software

All required software is available on Game Design classroom lab computers for on-campus work:

**Autodesk 3DS Max 2023** (free student version available through [students.autodesk.com](https://students.autodesk.com))

**Unity 2021.X** (free version available at [unity.com](https://unity.com))

**Photopea or Adobe Photoshop CC** (7-day trial and student discount subscription available at [adobe.com](https://adobe.com))

**Physical & Cloud storage** for back-ups (Google drive, Microsoft OneDrive, Apple Cloud, etc...)

# Recommended Texts

There are not any required texts for this course, but the following resources are recommended:

Autodesk's 3DS Max [Support and Learning](#) page

[Autodesk 3DS Max 2020 Complete Reference Guide](#) (Murdock, ISBN: 9781585039500)

[The Animator's Survival Kit](#) (Williams, ISBN: 9780865478978)

## Grading

Assignments are graded on a point scale, based on the assignment rubric. Criteria for assignments often include: Completeness, Adherence to Requirements, Technical Execution, and Visual Aesthetic Quality.

Assignments - 450 points

Milestones - 45 points

Final Project - 250 points

## Assessment

90% or above will receive an "A" grade.

80-89% will receive a "B" grade.

70-79% will receive a "C" grade.

60-69% will receive a "D" grade.

59% or below will receive a grade of "F"

A minimum grade of "C" or above is required for Game Design Majors and Minors to take upper-level coursework for which this course is a prerequisite.

## Late Work and Resubmissions

Deadlines are a key aspect of the game and film industries. Students are expected to turn in all work by the due date. An assignment turned in within the first week after the due date will receive a 10% grade penalty. An assignment turned in within the second week after the due date will receive a 20% grade penalty. Any assignment turned in more than two weeks after the due date will receive a failing grade.

Students can resubmit any assignment once for a new grade. Resubmissions must be turned in no later than two weeks after the initial submission was graded. In the case of the final project, the deadline for resubmissions is no later than the beginning of the final exam time. If the initial submission was turned in late, any late penalties will also apply to the resubmitted work's grade.

## Course Schedule

The class schedule is available on the course's Blackboard shell. Please consult the schedule often and attend class regularly to ensure you meet all class requirements.

## Honor Code

It is expected that students adhere to the George Mason University Honor Code as it relates to integrity regarding coursework and grades. The Honor Code reads as follows: "To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this Honor Code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work." More information about the Honor Code, including definitions of

cheating, lying, and plagiarism, can be found on the Committee of Academic Integrity's website at <https://masonkorea.gmu.edu/resources-and-services/cai/overview>.

## Diversity, Equity, and Inclusion

This class strives to provide an equitable learning atmosphere for all students. Communication and actions among students, the instructor, and anyone else in the class are to be respectful and free of any malice, discriminatory language or actions, derogatory language, or hate speech. Students are evaluated based on the merit of their work, without regard to gender, ethnicity, race, nationality, sexual identity, religion, or political affiliation.

## Title IX

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking

As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason Korea's Deputy Title IX Coordinator pursuant to University Policy 1202 and 1412. If you would like to speak with a Mason Korea counselor, please see <https://masonkorea.gmu.edu/resources-and-services/counseling-and-wellness> for more information. For further information about what Title IX is, please see <https://masonkorea.gmu.edu/resources-and-services/title-ix>.

## Disability Services and Accommodations

This course is meant to be accessible, and the instructor will make reasonable efforts to remove barriers to learning that a student brings to his attention. If at any point in the semester you would like to apply for specific accommodations relating to physical, learning, and/or psychological disabilities, please contact the Director of Academic Affairs (Jiye Chang - [jchang22@gmu.edu](mailto:jchang22@gmu.edu)), who will connect you with [Disability Services](#) on the Fairfax campus.

## Changes to Syllabus and Schedule

The instructor reserves the right to make changes and adaptations to the syllabus and schedule as needed. Any changes will be announced in class.

\*This GAME 398 course and syllabus are adapted from materials provided by the Computer Game Design Program and Professor Paul Eric Piccione of the Mason Fairfax Campus.

## Course Schedule

**Expect to work 9+ hours per week outside of class on assignments for this course.**

Unless otherwise stated, all assignments are due on Tuesday at 3:00 pm before class starts. For this course, a week is defined as **beginning at 3:00 pm each Tuesday and ending at 3:00 pm on the following Tuesday.**

To help you manage your schedule and time to complete the assignments in this course, please follow the recommended timeline below. If you have a question or concern or encounter a problem with an assignment, please contact your instructor immediately so we can discuss and work out a resolution ([jmcgrew4@gmu.edu](mailto:jmcgrew4@gmu.edu)).

Weeks	Lessons	Due Dates
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<b>Week 1</b>  Feb. 20 & 22	<b>Lesson 1:</b> Modeling Barrells and Crates	Watch "Assignment 1" videos  Submit "Assignment 1 - Milestone 1" for grading (DUE Feb. 27)
<b>Week 2</b>  Feb. 27 & 29	<b>Lesson 2:</b> Finishing the Room	Watch "Assignment 1" videos  Submit "Assignment 1" for grading (DUE March 5)
<b>Week 3</b>  March 5 & 7	<b>Lesson 3:</b> Modeling Trees and Bushes	Watch "Assignment 2" videos  Submit "Assignment 2" for grading (DUE March 12)
<b>Week 4</b>  March 12 & 14	<b>Lesson 4:</b> Well and Tower Modeling	Watch "Assignment 3" modeling videos  Submit "Assignment 3 - Milestone 1" for grading (DUE March 19)
<b>Week 5</b>  March 19 & 21	<b>Lesson 5:</b> Building UVs & Textures	Watch "Assignment 3" UV texturing videos  Submit "Assignment 3" for grading (DUE March 26)
<b>Week 6</b>  March 26 & 28	<b>Lesson 6:</b> Sculpting & Retopology in Blender	Watch "Assignment 4" videos  Submit "Assignment 4 - Milestone 1" for grading (DUE April 2)
<b>Week 7</b>  April 2 & 4	<b>Lesson 7:</b> UV Mapping and 3D Painting	Watch "Assignment 4" videos  Submit "Assignment 4" for grading (DUE April 11)
<b>Week 8</b>  April 11  No Class on April 9	<b>Lesson 8:</b> Sculpting a Head - Blocking	Watch "Assignment 5" videos  Submit "Assignment 5 - Milestone 1" for grading (DUE April 16)
<b>Week 9</b>  April 16 & 18	<b>Lesson 9:</b> Sculpting a Head - Detailing	Watch "Assignment 5" videos  Submit "Assignment 5 - Milestone 2" for grading (DUE April 23)
<b>Week 10</b>  April 23 & 25	<b>Lesson 10:</b> Sculpting a Head - Retopology	Watch "Assignment 5" videos  Submit "Assignment 5 - Milestone 3" for grading (April 30)
<b>Week 11</b>  April 30 & May	<b>Lesson 11:</b> Sculpting a Head - UVs and 3D Painting	Watch "Assignment 5" videos  Submit "Assignment 5" for grading (DUE May 7)
<b>Week 12</b>  May 7 & 9	<b>Lesson 12:</b>  Final Project - Roles in Game Art (3D Modeller (Character or Environment), or Animator)	Submit "Assignment 6 - Milestone 1" for grading (DUE May 14)
<b>Week 13</b>  May 14 (Wednesday classes on Thursday, May 16, No Class on May 16)	<b>Lesson 13:</b>  Final Project - Cont...	Submit "Assignment 6 - Milestone 2" for grading (DUE May 21)
<b>Week 14</b>  May 21 & 23	<b>Lesson 14:</b>  Final Project - Cont...	Submit "Assignment 6 - Milestone 3" for grading (DUE May 28)

<b>Week 15</b>  May 28 & 30	<b>Lesson 14:</b>  Final Project - Cont...	Submit "Assignment 6 - Milestone 4" for grading (DUE June 4)
<b>Week 16</b>  June 4	<b>Lesson 16:</b>  Final Project - Cont...	Submit "Assignment 6" for grading (DUE June 11)
<b>Final Project</b>  Wednesday, June 11, 11:59 pm		No presentation, please use final exam time to complete your projects