

3D Modeling I & II

Syllabus

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Overview: Learn the 3D modeling techniques used in movies, visual effects, video games, cartoons, commercials, and animation! Using 3DS Max, you will work in this highly skill-based art form to manipulate and sculpt pure imagination into substantial forms. By the end of the course, you will have developed a portfolio of original projects that you can use when applying for an internship, higher education, or a job.

Learning Outcomes: *Students will demonstrate proficiency with...*

- navigating 3DS Max software;
- creating shapes using 3DS Max software;
- rendering shapes to accomplish a planned design;
- assembling a high quality work portfolio;
- sharing work in an online environment.

Length of Course:

3D Modeling I: Modules 1-8 (suggested) - Between 80 and 120 hours of coursework

3D Modeling II: Modules 9-15 (suggested) - Between 80 and 120 hours of coursework Modules 1-8

Assessments Include: Rubrics designed for Authentic Assessment of Individual Work and Project Based Learning Activities

Software Required: Autodesk 3Ds Max

Modules	Lessons	Assignments
1 Welcome to 3Ds Max	1 Placing Primitives #1 2 Primitive Mech #1 3 Primitive Mech #2	<ul style="list-style-type: none">● Placing Primitives● Thinking about 3Ds Max● Primitive Mech● Creating a Primitive Mech
2 Working with Shapes	4 The Temple #1 5 The Temple #2 6 The Temple #3	<ul style="list-style-type: none">● Thinking about the Essential Question● Reflection● The Temple
3 Working with Boxes	7 Boxes #1 8 Boxes #2 Workshop 1: Boxes #3	<ul style="list-style-type: none">● The Iterative Process● Share Your Boxes and Barrels
4 Sculpting from One Mesh	9 Block Man #1 10 Block Man #2 11 Block Man #3	<ul style="list-style-type: none">● Thinking about the Essential Question● Building Block Man● Block Man
5 Building an Organic Model	12 The Shark #1 13 The Shark #2 Workshop 2: The Shark #3	<ul style="list-style-type: none">● Creating a Shark● The Shark

6 Creating an Asset List	14 The Cave #1 Workshop 3: The Cave #2 Workshop 4: The Cave #3	<ul style="list-style-type: none"> Thinking about the Essential Question Workshop 3 – Asset List Workshop 4 – Block it Out
7 Building Objects	Workshop 5: The Cave #4 Workshop 6: The Cave #5 Workshop 7: The Cave #6	<ul style="list-style-type: none"> Workshop 5 – Plan and Proceed Thinking about the Essential Question Workshop 7 – Finish the Environment
8 Building Colliders	15 The Cave #7 16 The Cave #8 Presentation 1	<ul style="list-style-type: none"> Collider Objects The Cave Presentation of “The Cave”
9 Combining Techniques	17 The Spaceship #1 18 The Spaceship #2 19 The Spaceship #3	<ul style="list-style-type: none"> Reflection Thinking about the Essential Question
10 Converting to a Polygon Object	20 The Spaceship #4 21 The Spaceship #5 Workshop 8: The Spaceship #6	<ul style="list-style-type: none"> Research Report
11 Refining Skills	22 The Spaceship #7 23 The Spaceship #8 Workshop 9: The Spaceship #9 Research Break	<ul style="list-style-type: none"> Spaceship Critique Spaceship Critique #2 Spaceship Modeling Sharing Your Research
12 Applying Your Skills	24 The Car #1 25 The Car #2 Workshop 10: The Car #3 Cars	<ul style="list-style-type: none"> Project Action Plan Sharing 3Ds Max Car-Rendering Tricks Rendering The Design Process
13 Evaluating Progress	26 The Car #4 Workshop 11: The Car #5 Workshop 12: The Car #6	<ul style="list-style-type: none"> Reflection The Car Asset List
14 Finishing Your Project	27 The Car #7 Workshop 13: The Car #8 28 The Car #9	<ul style="list-style-type: none"> Thinking about Careers Reflection The Car
15 Presenting Your Portfolio	29 Portfolio #1 Workshop 14: Portfolio #2 Presentation 2	<ul style="list-style-type: none"> Thinking about the Essential Question Your Portfolio Presentation 2
<p>3D Modeling I Final Exam – Multiple Choice 3D Modeling I Final Exam – Essay</p> <p>3D Modeling II Final Exam – Multiple Choice 3D Modeling II Final Exam – Essay</p>		