



**WEEKLY SCHEDULE
MA355 Character Modeling**

Instructor: Jim Tavernetti

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Office hours: *By Appointment*

Week 1

- Lecture:** Overview of course
Introduction to Z-Brush
Combining high poly/low poly modeling techniques for multiple outputs
Character design
- Lab:** Getting familiar with Z-Brush
- Assignment:** **Character Design Document.** Must include background, Silhouettes, thumbnails, and a detailed turnaround. **Due Week 2**
- Competency:** Create a 3 dimensional model for physical reference

Week 2

- DUE: Character Design Document.**
Critique assignments
- Lecture:** Edge looping, Strip Modeling, Volume Modeling
Image Planes
Poly layout and subdividing in high detail, moveable areas
- Lab:** Refining character designs
Volume modeling character
- Assignment:** **Character Model 1st Definition Pass.** Must complete a low detail base mesh. **Due Week 3**
- Competency:** Create a 3 dimensional model for physical reference

Week 3

- DUE: Character Model 1st Definition Pass.**
- Lecture:** Keeping the Poly count low and organized
Modeling and refining the base character
Separating out character components and props
- Lab:** Continue character modeling
- Assignment:** **Character Model 2nd Definition Pass.** Refine the original low detail base mesh. **Due Week 4**
- Competency:** Create a 3 dimensional model for physical reference

Produce complex three-dimensional objects using spline or polygonal based techniques.

Week 4

DUE: Character Model 2nd Definition Pass.

- Lecture:** Cleaning up and checking model integrity
Importing into Z-Brush
Looping for animation
- Lab:** Breaking up character into necessary UV sets
- Assignment:** **Modeled Character.** Completed model imported into Z-Brush with no errors in .ztl format. **Due week 5**
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.

Week 5

DUE: Modeled Character

- Lecture:** Unwrapping and testing
Normal maps and displacement maps
- Lab:** Unwrapping the different UV sets
- Assignment:** **Unwrapped Character.** Must unwrap and correctly pack different uv sets **Due week 6**
Portfolio Quality Character Render. Final render must include diffuse, specular and normal/bump map. **Due week 10**
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.

Week 6

DUE: Unwrapped Character

- Lecture:** Identifying and correcting unwrapping errors
Painting in Z-Brush and Photoshop
ZApp link
Color Palette
Z-Brush modeling on low subdivision layers
- Lab:** Identifying and correcting unwrapping errors
Painting base textures
- Assignment:** **First Pass Texture & Model** **Due week 7**
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.

- Week 7** **DUE: First Pass Texture & Model**
- Lecture:** Z-Brush workflow
Z-Brush modeling on high subdivision layers
- Lab:** Open Lab
- Assignment:** **Character Model and Texture Progress** Must show progress in the completion of character model and textures
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.
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- Week 8** **DUE: Character Model and Texture Progress**
- Lecture:** Mapping as a modeling tool; Displacement and normal mapping in Maya
- Lab:** Finish modeling character II based on feedback; Lay out UV's for mapping
- Assignment:** **Completed Models**
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.
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- Week 9** **DUE: Completed Models**
- Lecture:** Generating Normal Maps and exporting into Max and Maya
- Lab:** Continue working on final project
- Assignment:** **Completed Model and Texture import into Max or Maya.** Must import the base 3D mesh and apply all required textures to the character model. **Due week 10**
- Competency:** Produce complex three-dimensional objects using spline or polygonal based techniques.
Differentiate between IK, FK, and skeletal structures for three-dimensional models.
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- Week 10** **DUE: Completed Model and Texture Import into Max or Maya**
- Lecture:** Simple character rigs for posing purposes
3 point lighting
- Lab:** Open lab
- Assignment:** **Portfolio Quality Renders + 1 Process Render** Must include correct composition, lighting, diffuse, specular, and normal maps.
Due week 11
- Competency:** Produce complex three-dimensional objects using spline or

polygonal based techniques.
 Differentiate between IK, FK, and skeletal structures for three-dimensional models.
 Implement IK and FK in preparation for animating objects and forms

Week 11 **DUE: Portfolio Quality Renders + 1 Process Render**
Lecture: “Portfolio Quality” ceremony
Lab: last minute corrections and re-renders for “Portfolio Quality” folder.

Points Breakdown

Due	Assignment	Points Possible	Points Earned
All	Participation	15	
Wk #2	Character Design Document	25	
Wk #3	Character Model 1 st Definition Pass	5	
Wk #4	Character Model 2 nd Definition Pass	5	
Wk #5	Modeled Character	50	
Wk #6	Unwrapped Character	20	
Wk #7	First Pass Texture & Model	5	
Wk #8	Character Model and Texture Progress	5	
Wk #9	Completed Models	10	
Wk #10	Completed Model and Texture Import into Max or Maya	10	
Wk #11	Portfolio Quality Renders	150	
Total		300	

Extra Credit Points Breakdown

You must have a signed document that you are part of a club or attended workshops. You may use the back of the syllabi to obtain these.

All	Clubs and Organizations: First one joined additional	15 10	
All	Workshops and events: First one attended additional	15 10	
MAX		75	

Total Points **300**

A	279-300
A-	270-278
B+	261-269
B	249-260
B-	240-248
C+	231-239
C	219-230
C-	210-218
D+	201-209
D	195-200
F	0-194
Late Work	0

This Schedule is subject to change according to the needs of the class as determined by the instructor.