## **Computer Animation I**

Final Project Milestone 3: Models

## MILESTONE 3 due Monday November 13<sup>th</sup> at the beginning of class

Hand-in a properly-named folder (aka "PerryMilestone3") to the hand-in folder, complete with ALL of the models you need to make your film. Obviously you need to keep your own copies too.

This milestone is about having animation-ready objects. Here's a brief checklist (for all of your objects) that gets at what this actually means:

- Is the object well-designed? Does it look like it's supposed to look?
- Is the object named appropriately?
- Is the geometry well built? In other words, do you have an appropriate density of faces given the object's purpose in the film? Are the surface normals facing the proper direction? Does the model look good from all appropriate viewpoints?
- Has it been assigned a basic surface color for easy interactive use in Maya?
- (animating objects) Does the rig work? Are the pivots in the proper places? TEST IT!
- (animating objects) Have you locked/hidden the attributes you don't want to animate?

We will look at as much of your stuff as time permits on Monday, starting with your character(s). We'll be walking through this very checklist, so please heed it.

I would consider it rather difficult to build good models based only on what we've covered in class, so I expect you all to do the Maya Polygonal Modeling tutorials and read/skim the relevant chapter of the online Maya pdf manual ("Modeling Polygons") to supplement what you already know.

Reminder of some useful things from class:

Image Planes	Created in the Environment sub-menu of the camera attribute editor. Useful for visual reference while modeling
Pivot Points	Set appropriate pivot points for all of your objects. Select the object, then the move tool, then hit Home. Hit Home again when done (or, as we saw in class, select the move tool and hold down "d" to move the pivot).
Changing Selection Type	Hold down the right mouse over an object and move to either vertex, edge, face, or object. Sometimes you can get stuck; try switching tools and right-clicking again over the object.
Modifying Selections	Hold down shift while left-clicking/dragging to extend a selection or toggle the state of an already selected vertex/edge/face/object.
Construction History	MIGHT be useful for you. When you have an object selected, open the attribute editor and examine the tabs at the top. Some of these tabs are from the poly modeling tools and may have variable parameters. Use with caution.
Combine	Under Polygons menu. With multiple, separate objects selected, this command unites them into a single polygonal object.
Group	Under Edit menu. Groups multiple selected objects under a shared parent. Useful for encapsulating multiple primitives under one hierarchy node.
Freeze Transformations	Modify->Freeze Transformations. For zeroing-out scale, rotation, or translation values prior to using in a hierarchy. Scale is the most important to deal with.
Expressions	Window->Animation Editors->Expression Editor. For mathematically relating one channel to another.
Driven Key	Animate->Set Driven Key. For creating an arbitrary graph by which one channel is related to another.