

Workshop in 3D Computer Animation

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with Nickolay Hristov and Tunde Adeyemi

Time: 6:00–9:00 pm, April 26-29, 2011

Location: CDI, Suite 2105 Winston Tower, 301 North Main Street, Winston-Salem NC 27101

The **Center for Design Innovation** is located in downtown Winston-Salem, in the high-rise Winston Tower between 3rd and 4th Streets. Limited free parking is available in the building's garage, and additional spaces are easy to find on the street and in nearby decks. Look for the elevators that go to floor 21.

CDI contact: Katherine Taylor <ktaylor@centerfordesigninnovation.org> 336-727-4310

REGISTRATION is required by April 22, 2011. Bring or send a check to the address above, for \$50.00 (general) or \$25 (faculty) payable to Center for Design Innovation. Students may attend at no charge. The workshop is limited to 10 participants.

PREREQUISITES: No previous computer experience is necessary. Only Macintosh operating systems will be available.

DESCRIPTION: This workshop will introduce concepts and strategies of 3D animation. Participants will move directly into learning polygonal modeling techniques, subdivision modeling, organic modeling, industrial modeling, lighting and animation using Maya software. Workshop sessions will be geared specifically to help participants understand Maya and the Mac platform. Activities will include basic tutorials to practice technical skills, aesthetic decisions and creative solutions for commonly encountered projects.

GOALS AND OBJECTIVES: Participants will learn the fundamentals of Maya animation and the impact it has upon film, video, industrial and web design. Participants will develop a basic level of understanding of Maya software. This knowledge base will be enough for them to continue working on their own if they wish to.

Tuesday, April 26:

- Learning the interface and hotkeys of Maya
- Creating polygon shapes (sphere, cone, cube, etc.)
- Bouncing ball animation
- Basic Dynamic with ball and pin animation
- Creating room design
 - Polygonal chairs with Boolean punch design
 - Polygonal tables
 - Grouping table and chairs with Locator
 - Creating animation fly through with camera

Wednesday, April 27:

- Polygonal Robot Man
- Simple animation cycle
- Modeling simple forms

Thursday, April 28:

- Symmetrical Sub divisional modeling of alien face
 - Use of split polygon tool
 - Merge edge tool
 - Polygon smooth tool
- Blend Shape animation sequence with alien head with mp3 voice over
- IK chain of Character

Friday, April 29:

- Walk cycle using the IK chain and learning baking techniques to create infinite walk cycles
- Creating particle systems
- Attaching particles systems to objects
- Rendering techniques with Mental Ray

HOT KEYS:

w = move

e = rotate

r = sizing

apple + z = undo (up to 20 times)

alt + left mouse = revolve

alt + middle mouse = move page image

alt + right mouse = in and out to image

space bar (quick press) = perspective windows (front, side, top, and perspective)

space bar (long press) = menu selection

shift = multiple selections

right click (on object) = vertice, face, edge, and object mode

s = keyframe

Warning: Never click extrude face unless you have a single face selected

WEBSITES:

- <http://www.alias.com>
- <http://3dcafe.com>
- <http://www.gnomononline.com>
- <http://www.raph.com/3dartists>

SUPPLIES:

- Sketch book for personal notes
- Thumb drive to back up your work