

# EMC 3310 – 001 Project: Machine: 30 POINTS



Build a machine performing a task in Maya and composite it into live action footage.

## Machine:

Model and texture the machine according to your own preproduction designs. Proper topology and well-defined and accurate character model sheets will be paramount for a successful project. Do research on real mechanical machines, gadgets and robots to see how they work, move, and are put together. The machine must look as if it could really move with gears, hinges, pivots, wheels, screws, nuts, bolts, etc. Add company logos and other labels for more realism. Rig the machine for animation and animate it performing a task. You will not have people physically interact with the machine, so make sure it can work and be activated without touch. Render out with various render layers for more control during the compositing process. Using Adobe After Effects, composite the machine into your own live action footage. *No humanesque robots*. Beyond that, in terms of design, you are only limited by your imagination and engineering skills.

## Video:

Keep the video footage as a stationary shot(s) (ideally using a tripod or setting the camera on a solid surface). The machine must pass behind a real object (this adds to the realism). Final output will be **1280x720** (*this is the minimum resolution you will need*). There should be settings on your camera to get a proper **16:9** aspect ratio. Your frame rate should be **24 fps**. The video should be crisp and clear, not blurry (this excludes video with high depth of field), and not grainy due to low lighting or poor resolution. Use only **Manual** focus so you have full control. Additionally, take still images, roughly, from the point of view of the objects. These will become important later on in the compositing phase. The instructor and class will approve all videos.

## Turn In:

- Final Movie:
  - Quicktime format
  - HD 720p (1280x720) or bigger using 16:9 ratio
  - H.264 codec compression
- Final Maya file
- Referenced source images and video

## DUE DATES:

9/25	• <b>Model sheets</b>
9/25	• <b>Storyboard</b>
10/2	• <b>Video footage (edited together)</b>
10/16	• <b>Modeling</b>
10/21	• <b>Rigging</b>
10/23	• <b>Animation</b>
11/13	• <b>Texturing w/ rough lighting</b>
12/2	• <b>Lighting, rendering, compositing</b>
12/7	• <b>Final Version</b>