

# COMPUTER SCIENCE 3710

## Computer Graphics

### Project - Ray Tracing Software

Spring 2012

**Due:** Thursday Feb. 16 at midnight.

**Late Penalty:** NO LATE PROJECTS ACCEPTED

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Use a software tool to produce a high quality ray traced image of some local (i.e. Southern Alberta) landmark. There are three pictures required:

1. a digital photo of your object.
2. a rendered version of the object with similar properties (camera location, lighting, etc.)
3. a rendered version of the object from a different camera angle.

In addition to the picture, include a detailed description (in html) of how you made the pictures, what it is, what was difficult, etc. (Worth 5/20 marks!) Also include credits of any related or borrowed work. This is *not* a group project – please do your own work!

You may use any of the following ray tracing software tools: POVRay, Blender, 3DStudioMax, or Maya. The first two are free downloads. You may use Google's *SketchUp* software instead.

You are welcome to do the work at home on a PC, but please put the final project (pictures and index.html, etc.) in your CS3710 `public.html` directory before the due date so that it can be viewed. Use local rather than global references in your html since I would like to make a copy of your work for the department. A .gif or .jpg picture can be displayed in an .html document with:

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There will be 2 small prizes for the best pictures (as determined by the marker and professor): one for the best POVRay picture and one for the best picture made with other software (ex. Blender, Maya, 3dMax, etc.).

You can download the most recent version of *POVRay* from [www.povray.org](http://www.povray.org) for Windows, Linux, or MacOS. There are several useful tools such as *M0ray* that you are welcome to use.

Blender can be downloaded from [www.blender.org](http://www.blender.org) – it is tougher to learn but is more powerful than POVRay.

SketchUp can be downloaded from <http://sketchup.google.com/product/> – only available for Mac and Windows.