

CS 4731: Introduction to Computer Graphics

Joshua Cuneo

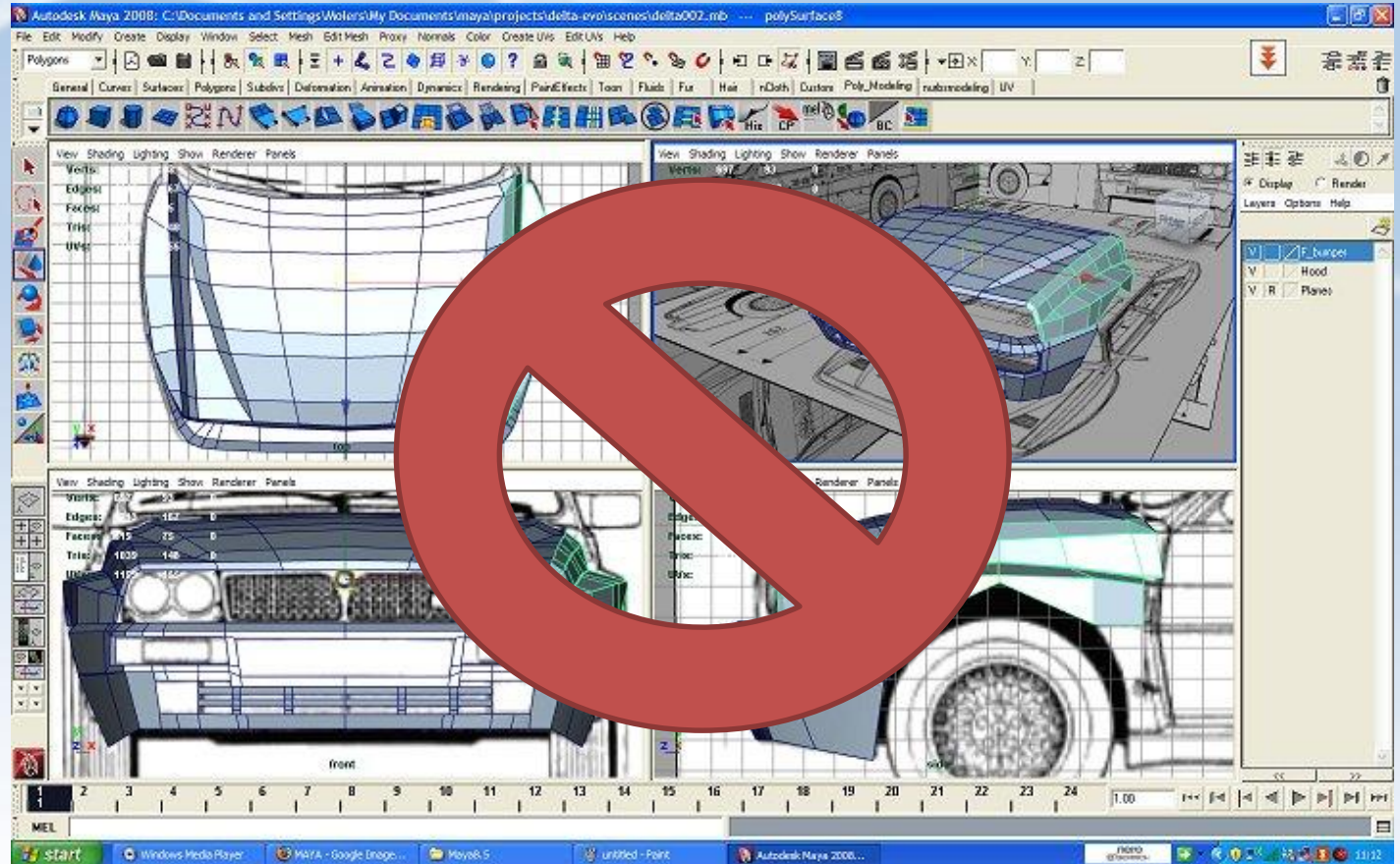


Computer Graphics

...are everywhere

What You Will NOT Learn In This Class

- Photoshop
- Maya
- Adobe AfterEffects
- Unity
- Blender
- Etc.



What You Will Learn In This Class

- Vectors, affine spaces, Barycentric coordinates
- Graphics pipeline
- Transformations
- Camera perspectives and projections
- Lighting and shading
- Texture mapping
- Colors and rasterization
- Interactive programming
- Curves, particle systems, fractals, ray-tracing (time-permitting)

What You Will Learn In This Class

- WebGL
- JavaScript
- Lots of linear algebra

What You Will Learn In This Class

Not this Class (unless time permits)



Ray Tracing (Photorealistic)

This Class



Graphics pipeline (real-time)

Recommended Background

- CS 2223 – Algorithms
- CS 2303 – System Programming Concepts
- MA 2071 – Matrices and Linear Algebra I

How to Address Me

OK

- Josh
- Joshua
- Mr. Cuneo
- Professor
- Professor Cuneo
- Sir

NOT OK

- Cuneo
- Hey you!
- Oh Captain, My Captain

Your TAs



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Cheating Policy

- **DO NOT** copy code from other students
- **DO NOT** copy code from the internet or other sources
- ALL code making up your solution must be **written and understood by you**
- **ANY** evidence of cheating will **result in an automatic zero** for all involved parties with no make-ups allowed.

How to Pass This Class

- Do all of the reading
- Understand the concepts before coding
- Complete all assignments properly and on time
- Be punctual and pay attention
- Ask for help

Ask for Help

There is no such thing as a stupid question.

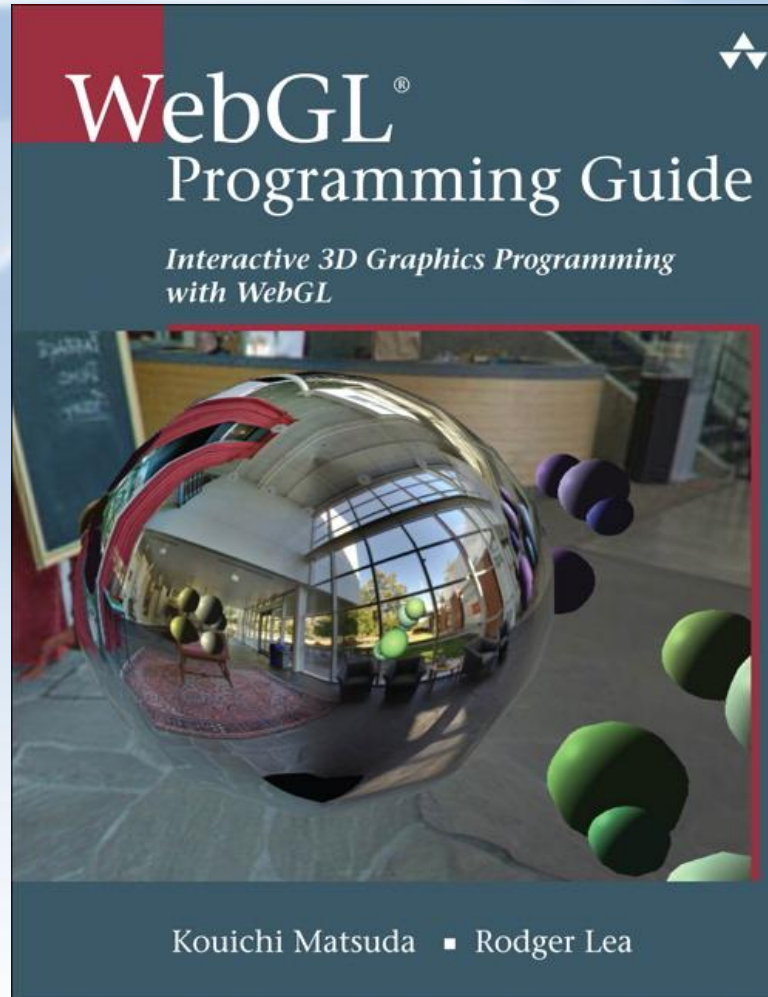
Required Text

"Seven out of every ten students surveyed **didn't** buy a required text **due to the cost.**"



Student PIRGs (Public Interest Research Groups)

Recommended Text



Required Supplies



Required Software (Pick One)



Recommended Software

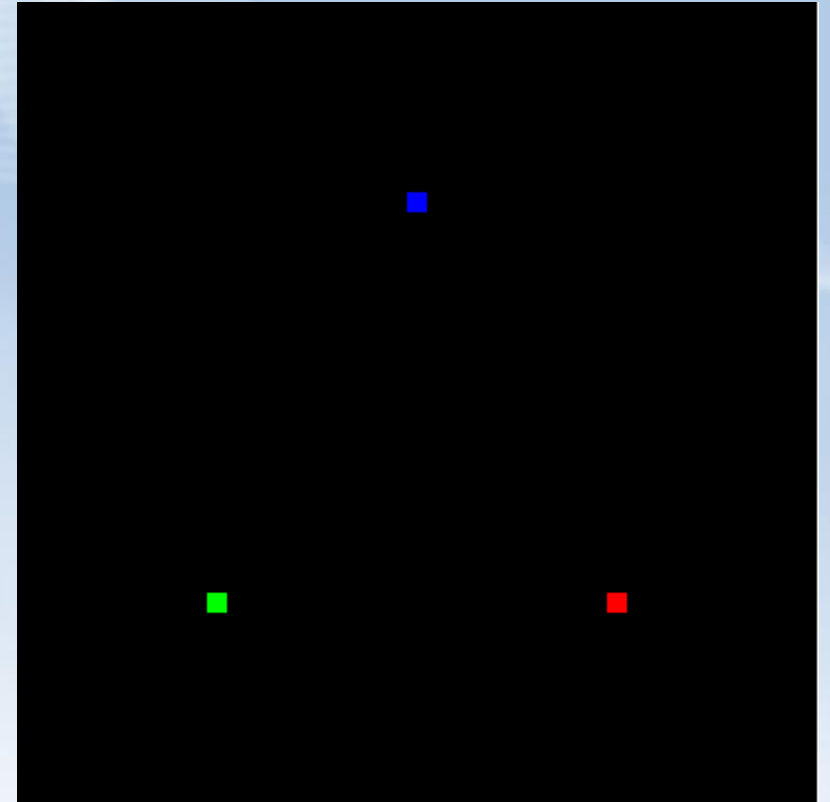


Grades

Item	Percent
Projects (4)	80%
Quizzes (5)	20%
Total	100%

Homework

- Do the required reading and video watching by Sunday night
- Download and unzip the example WebGL file on Canvas. Make sure you can see this image when you open the HTML document:



Computer Graphics

