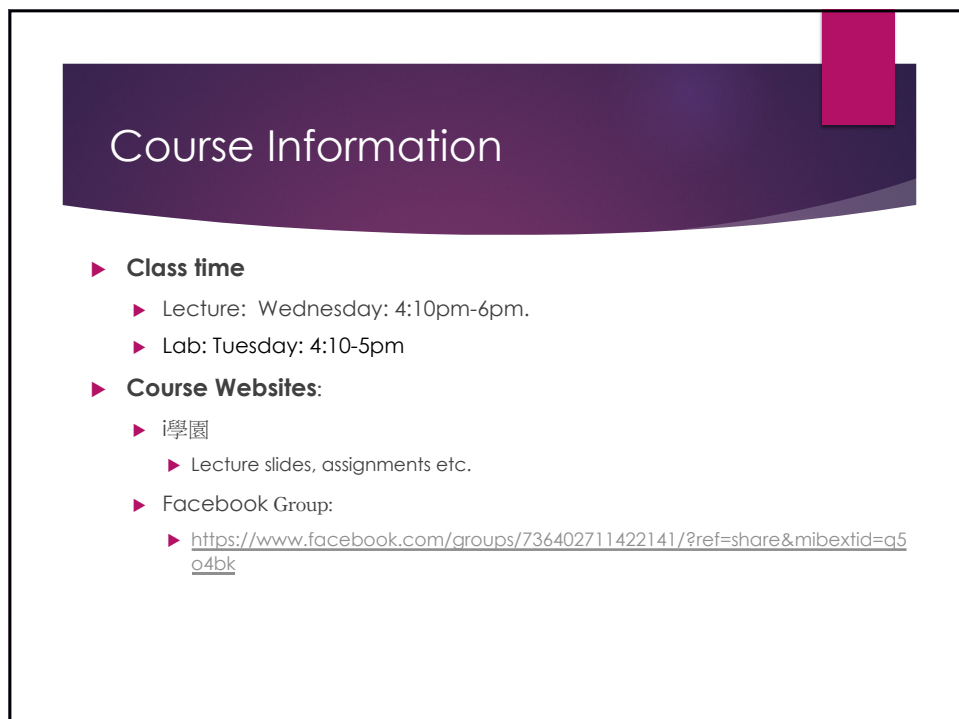




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Course Administration

Instructor

- 江佩穎
- peyingc@mail.ntut.edu.tw
- Office: 科技大樓1625 分機: 4236
- Office Hours:
 - Wed 3pm-7pm, Friday 4-7pm
 - Make appointment first

TA

- 林奕辰
 - t108598054@ntut.org.tw
 - Office: 科技大樓1422 分機:4266
 - Office Hours: Mon 1pm~3pm, Tue 2pm~4pm
- 黃培恒
 - 108598024@ntut.org.tw
 - Office: 科技大樓1422 分機:4266
 - Office Hours: Tue 2pm~4pm, Wed 2pm~4pm

3

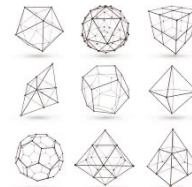
Prerequisites

- ▶ Data structure
- ▶ C++/Java/ C# programming skills

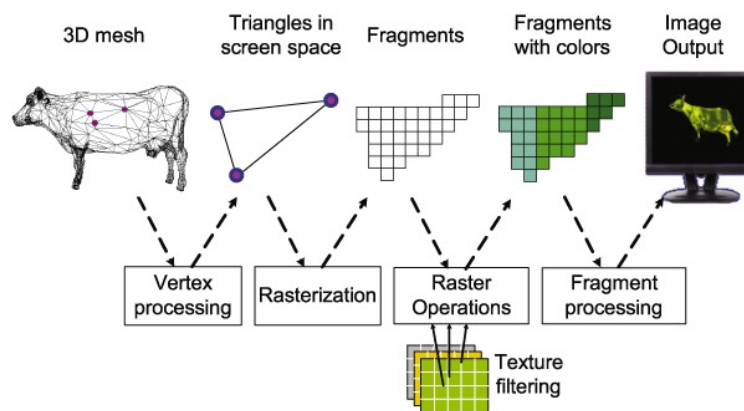
4

Course syllabus

- ▶ Computer Graphics (
 - ▶ What is Computer Graphics
 - ▶ Basic OpenGL / Input and Interaction
 - ▶ Polygonal Meshes, Transformation (Vector, matrix)
 - ▶ Viewing , Projection, Clipping
 - ▶ Rasterization
 - ▶ Lighting and shading
 - ▶ Texture Mapping
 - ▶ Spline
 - ▶ Shaders




5

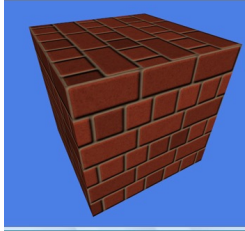
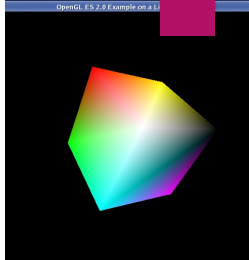
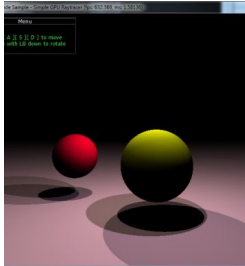
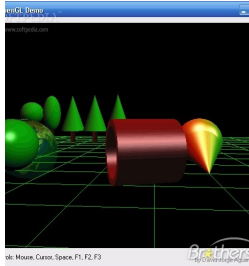


6

OpenGL


▶ examples




7

Grading



OpenGL weekly


Lab assignment 40%



Midterm Project 20%



Final Project /
Presentation 30%



Attendance & Mini task
10%

8




Textbook

Textbook

- Interactive Computer Graphics: A Top-Down Approach with Shader-Based OpenGL (5th or 6th Edition)

OpenGL Reference

- OpenGL SuperBible: Comprehensive Tutorial and Reference (5th/6th Edition)
- <http://www.openglsuperbible.com>
- OpenGL Programming Guide: The Official Guide to Learning OpenGL, Versions 3.0 and 3.1 (7th Edition)
- OpenGL Programming Guide: The Official Guide to Learning OpenGL, Version 4.3 (8th Edition)

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Sample codes

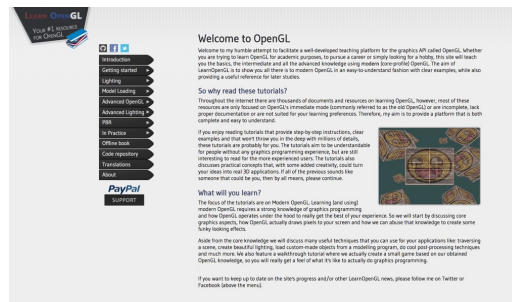
OpenGL SuperBible: Comprehensive Tutorial and Reference (7th edition, OpenGL4.5)

- ▶ <http://www.openglsuperbible.com/example-code/>
- ▶ <http://www.openglsuperbible.com/previous-editions/>
 - ▶ OpenGL Superbible 5th edition sample code

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Shader

► <https://learnopengl.com/>



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Announcement

- This Wednesday (Tomorrow, 2/22)
 - No class
 - 3/7, 3/28
 - 4-5pm 補課
 - 5-6pm Lab

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