11:56:33 From Mahmoud, Ibrahim: I found a good UnReal Engine tutorial I'm going through! Pretty comprehensive for a beginner level
https://www.youtube.com/watch?v=_a6kcSP8R1Y&t=1s&ab_channel=UnrealSensei

Great! Thanks for sharing.

12:06:05 From Deane, Mark Daniel: Would a dull object be an object that is not very shiny or one without a specular component to the material?

A dull object has a low specular exponent, maybe 2. or 3. A shiny object has higher exponent, maybe 20. Or more.

12:17:12 From Leathem, Selma: where is the pdf that is up on the screen I can't find it anywhere
12:18:47 From Leathem, Selma: thanks! where did you find that?

Class Resources page.

12:19:22 From Sowanick, Jacob L: do we have to wait until a week before to start working? [on the final project]

No, you can start as soon as I approve your proposal.

12:19:31 From Mahmoud, Ibrahim: can we use code from previous projects we made?

Yes. But, don’t put together a textured and lighted helicopter and call that a unique Final Project.

12:22:20 From Jacob Eckroth(He/him/his): what if I made a clock by moving blocks around that formed the time

That could be cool – write it up.

12:22:45 From Mike S.: hour glass?

That could also be cool – write it up.

12:24:23 From Pannapat (Apple) Chanpaisaeng: Do we get access to see what the past projects (the one that you think there’s a good amount of work) look like? It’d be nice to see them so we have more idea of what’s too easy what’s too difficult

Yes, that's what much of the rest of today was about. See the video if you weren't there in person.

12:26:46 From Lee, Meng-Lung: Do we have Bonus day for quiz?

No, just for projects.

12:32:46 From Louie, Simon: has anyone done a simple game?

Yes, and it works as long as you focus on “graphics accomplishment” and not the game play.
12:33:24  From Conner: Most of these are basically simple shapes or spheres, should we be aiming for something more simple or can we try for more complex models?

You can go for simple shapes or more complex shapes. But, downloading more complex OBJ files doesn’t count for getting to 100 points.

12:35:43  From DKieft: What if our proposal sucks? Do we do another one, or just wing it from there?

You and I work together to refine it into something that doesn’t suck. Or sucks a lot less.

12:37:18  From Wu, Mingdong: what should we write in proposal, for example, we will use lighting, shader, such like that?

Write about what you are going to do and how you think you are going to do it.

13:12:40  From Nguyen, Quan M: I was trying to add the ISS to the Earth Moon model, and it turned out that the ISS model costs even more than this course

13:12:41  From Nguyen, Quan M: https://www.turbosquid.com/3d-models/iss-international-space-station-max/912657

I got an ISS 3D model from OMSI, but now I’m not sure if I can give it away.

13:14:15  From Markwell, Cameron Douglas: so if our proposal isn't complex enough, do have to submit a revision before Nov 10th?

No, but I need to approve the revision before you start working on the project. That’s why we start this process so early.

13:15:29  From Seale, Jett: Is it ok to use some pre-made geometry and then focus on more advanced shaders/textures and lighting?

Yes. It is the “more advanced shaders/textures and lighting” that gets the 100 points.

13:15:55  From Louie, Simon: you might find cs491’s materials helpful

13:15:57  From Louie, Simon: http://cs.oregonstate.edu/~mjb/cs491/

I didn’t pay him to say this.

13:28:10  From Raymon, Nathaniel A: are reflections done with a similar technique?

They could be. There is an even better one-pass sorta-reflection algorithm we look at in CS 457/557.

13:33:51  From Lloyd, Doug: are spotlights affected by rotatef calls or only the xdir ydir zdir?

All light positions are transformed by the current ModelView matrix. In addition, the spotlight direction vector is transformed by the current ModelView matrix.

13:35:24  From Hoang: What about multiple light sources?

You produce multiple depth buffers, one from each light source position. Then you read them into the fragment shader and sum over all of them to add in just the diffuse and specular intensities from the light sources that that fragment can see.
From Sowanick, Jacob L: do those depth maps go in all directions?

From Toby Parrish: How would you make a depth map for a point light?

From Sowanick, Jacob L: so if your light source is in the middle of a scene, you'll need to do multiple passes?

I typically put the light source’s look-at position in the same place I put my own look-at position. Often, we make the light-rendering field-of-view angle extra large so that it encompasses more of the scene.

From Lloyd, Doug: can I email about advice on how to execute something for the final project to see if it's too difficult?

Yes, or feel free to ask during OHs.