Lecture & Project Schedule

Dates	LECTURE TOPIC/Lab Subject	Due †	Topic cluster
Th 9/28	**#1 Basic Modeling**		3D data types; Pointing problem; "Cameras:" projections from 3D to 2D, saving 2D images. Surface normals.
Tu 10/3	**#2 Derivative Geom & Hidden Surfaces**	P0	From 2D to 3D: extrusion, revolution, sweeps & lofting. Boolean operations. Hidden-surfaces: backside culling, depth-sorting & z-buffering.
Th 10/5	DETAILS AND ENTOURAGE	P1	
Tu 10/10	**#3 Lights + Cosine Shading**	P2	Lights, Cosine Shading, Shadows.
Th 10/12	ADDING LIGHT; SHADE & SHADOW		
Tu 10/17	**#4 Textures – surface detail**	P3	Faux geometry: Smoothing (Gouraud/Phong), Texture maps (surface, solid & procedural textures, color, transparency & bump maps).
Th 10/19	ADDING & CONTROLLING TEXTURES.		
Tu 10/24	**#5 Photorealism**	P4	Rendering refraction, diffuse reflection, soft shadows, fog, etc.–. (global illumination, ray tracing, radiosity, physically-based rendering)
Th 10/26	Raytracing, Radiosity, Global Illumination		
Tu 10/31	**#6 NURBS & Meshes**	P5	Principles and introduction to modeling of curved objects beyond surfaces of revolution and sweeps. (NURBS, patches, 'degree', handles, nodes)
Th 11/2	NURBS, Splines, etc.		
Tu 11/7	**#7 Site modeling**	P6	Landform modeling: slabs, meshes or TINs. Building a site. Abstraction *v.* "reality". (plus: fractals, meshes, randomness, growth and irregularity)
Th 11/9	MODELING TERRAIN		
Tu 11/14	**#8 Advanced Geometry Options**	P7	Symbols: instances *v.* copies. Billboards. Proxies. Fur/grass. Smoke. Parametric & procedural geom.
Th 11/16	ENTOURAGE, PROXIES, SKY, BACKGROUNDS		
Tu 11/21	**#9 Finishing Touches**	P8	HDR Skies & IES Lights. Photoshop touchup.
Th 11/23	*(THANKSGIVING HOLIDAY)*		
Tu 11/28	**#10 Post-production**		Designing & assembling presentations using video (codecs, transitions, intellectual property rights, audio.
Th 11/30	WORK DAY	P9	In-class help and questions
Tu 12/5	WORK DAY		
Th 12/7	WORK DAY		
FR 12/8	**All work due by 11:59PM (midnight)**	P10	(deadline for turning in work)

Notes:

† With the exception of P0, Assignments are due by the START OF CLASS on the indicated date. These dates and times should match the Dropbox due dates. Let me know if they don't!

Revised: 9/5/17