Computer Graphics I Course Grading (Fall 2020)

Part I - Whitted-style Ray Tracer (max. 27 points)

Pin hole camera	2
Normal shader	1
Lambert shader	1
Phong/Whitted shader	3
Hard shadows	1
Textures with bilinear interpolation	1
Reflections	3
Refractions	5
Environmental map (cube map or spherical map)	2
Gamma correction	1
Super sampling	2
Depth of field	1
BVH (construction and traversal)	2
SAH	2

Part II - Path Tracer (max. 18 points)

Mirror BRDF	1
Lambert BRDF	2
Modified Phong BRDF (energy-conserved)	2
Modified Phong BRDF (energy-normalized)	2
PBR with Cook-Torrance BRDF	5
Next event estimation (direct light sampling)	3
Image-based lighting with importance sampling	3
Russian roulette	2

Notes:
1. Importance sampling of all BRDFs is expected
2. Furnace test should be provided for all scenes used during handover