02561 COMPUTER GRAPHICS

IMM.DTU

Period: E2014

Lectures & Exercises

Date	Lecture	Readings	Exercises
1. 03.09	Polygon Rendering Coordinate Systems	2.3 - 2.5 3.4 - 3.5, 3.8	02561-01
2. 10.09	Viewing Transformation	1.4, 2.6 4.1 - 4.4.2	02561-02
3. 17.09	9 Shaders	2.8 - 2.9	02561-03
4. 24.09	Local Illumination	5.1 – 5.10	02561-04
5. 01.10	Interaction Animation	2.11 – 2.12 8.7 – 8.8	02561-05
6. 08.10	Texture Mapping	7.4 – 7.6	02561-06
7. 22.10	Shadows - Projection	4.4 - 4.7 4.10	02561-07
8. 29.10	Shadows - Shadow Maps	7.8 – 7.9 7.1 – 7.4	02561-08
9. 05.11	Reflection - Buffers	7.11.1-6, (6.11)	02561-09
10. 12.11	Environment Maps, Cube Maps, Bump Maps	7.8 - 7.9 7.10	02561-10
11. 19.11	Geometric Modelling Nurbs	10.1 10.6 -10.9	02561-11
12. 26.11	WebGL 1 or Refraction, Volumes	B2 11.8-11.11, B3	02561-12
13. 03.12	WebGL 2 or Volume Graphics	B2 11.8 -11.11, B3	02561-13
	Project		02561-14

NJC.31.10.2014

Book and Notes

- B1. E. Angel & D. Shreiner, Interactive Computer Graphics A Top-Down Approach with Shader-Based OpenGL, **6**th ed. International 2012, Pearson/Addison-Wesley
- B2. WebGL noter
- B3. A.Watt, Volume Graphics (Note)

Supplemental

- B4. E. Angel, OpenGL A Primer, 3rd ed., 2008, Pearson/Addison Wesley (Cannot be used as it use OpenGL 2 and not 3.2 or later)
- B5. OpenGl Programming Guide **8th ed.**, The Official Guide to Learning OpenGL, 2013, Addison Wesley
- B6. A. Watt & F. Policarpo, Advanced Game Development with Programmable Graphics Hardware, 2005, A K Peters (Ideas for advanced projects)