Teachers

- Anders Hast (head teacher)
- Pontus Olsson (teacher and lab assistant)
- Johan Nysjö (teacher and lab assistant)
- Prof. Ingrid Carlbom (guest lecturer)
Formalities

- Register for the course on Studentportalen
- 3 mandatory programming assignments
- 1 project (also mandatory)
- 1 exam (5 hours)
- 10 credits (4 for the exam, 6 for the assignments/project)
- More information can be found on the course web page in Studentportalen
Content

Course book

Lab sessions

- The lab sessions will be in the PC-labs in 1312D and 1313D
- We (you!) will program in C++ using OpenGL 3.0 and GLSL 1.30 (or higher if supported by hardware)
- Visual Studio 2012 and OpenGL has been installed on the lab computers (which are equipped with Nvidia 600-series GPUs with 2GB ram)
- We recommend that you also set up an OpenGL development environment on your own computer (so that you can work in your favourite OS and use your favourite text editor/IDE)
- General instructions for the labs/assignments can be found on Studentportalen. More instructions will follow...
Assignment 1

Getting started with OpenGL and shader programming
Assignment 2

- Spinning RGB cube
- 3D model viewer
Assignment 3

Per-pixel Blinn-Phong shading

Environment mapping
Project #1 (volume rendering)

Medical 3D image rendered with GPU-accelerated ray-casting
Project #2 (more of a free project)

3D scene rendered with deferred shading and 50 light sources