Computer Graphics

88-663

Lecturer: Dr. Hagit Hel-Or

This course is an introductory course in Computer Graphics. Previous knowledge assumed: First year mathematics (Calculus A, Algebra A). The course will follow the topics listed below, as time allows:

- Introduction
- Basic Geometry
- Input/Output Devices
- Transformations
- Scan Conversion
- Polygon Fill
- Clipping
- Hidden Surface Removal
- Geometric Modeling
- Illumination Models
- Color Theory (part2) (part3) (part4) (part5)
- Ray Tracing
- Aliasing
- Shadows Generation
- Texture
- Images

Literature:

- Computer Graphics - Principles and Practice (Second Edition). J.D.Foley, A.Van-Dam, S.K.Feiner and J.F.Hughes. Addison-Wesley, 1990.
- Advanced Animation and Rendering Techniques. A.Watt and M.Watt. Addison-Wesley, 1992.
- OpenGL Programming Guide. J. Neider, T. Davis and W. Mason. Addison-Wesley, 1994.