


Lecture 2

**Review of Basics:
Raster Scan Conversion (Lines and Polygons)**

Friday, January 21, 2000

William H. Hsu
Department of Computing and Information Sciences, KSU
<http://www.cis.ksu.edu/~bhsu>


Readings:
Appendix 5-7, Chapter 3, Foley *et al*
Slide Set 2, VanDam



CIS 736: Computer Graphics Kansas State University
Department of Computing and Information Sciences

Lecture Outline


- **Reading**
 - Appendix 5-7, Chapter 3, FVD
 - Slide set 1 (September 9, 1999), VanDam
- **Graphics Applications**
 - Sample-based
 - Geometry-based
 - Examples
 - 2D, 3D imaging
 - Photorealism
- **Raster Scan Conversion**
 - Drawing lines
 - Incremental algorithm
 - Bresenham's midpoint line algorithm
 - Drawing circles
 - Filling polygons



CIS 736: Computer Graphics Kansas State University
Department of Computing and Information Sciences

Terminology


- **Graphics Applications**
 - Sample-based
 - Geometry-based
 - Examples
 - 2D, 3D imaging
 - Photorealism
- **Raster Scan Conversion**
 - Drawing lines
 - Incremental algorithm
 - Bresenham's midpoint line algorithm
 - Drawing circles
 - Filling polygons



CIS 736: Computer Graphics Kansas State University
Department of Computing and Information Sciences

Summary Points

- **Reading**
 - Appendix 5-7, Chapter 3, FVD
 - Slide set 1 (September 9, 1999), VanDam
- **Graphics Applications**
 - Sample-based
 - Geometry-based
 - Photorealistic rendering examples
- **Raster Scan Conversion**
 - Drawing lines
 - Drawing circles
 - Filling polygons
- **Next Week: ???**



CIS 736: Computer Graphics Kansas State University
Department of Computing and Information Sciences