

DEC 18 2000

grande prairie regional college fine arts department

dd 1160/70 digital imagery

- contact** lane borstad (that's me the instructor)
my office (L125) hours are tuesday and thursday from 10:00 to 11:30 or
you may reach me at (780) 539 - 2836 or better yet e-mail to
Lane@Borstad.com see also my web page [www.FineArts.GPRC.ab.ca](http://www.FineArts.GPRC.ab.ca/lane)
/lane
- times** A2 - monday friday 3:00 - 14:20 pm
B2 - tuesday thursday 13:00 - 14:20 pm
- room** L123
- description** dd 1160 and dd 1170 are designed to give students an introduction to the
theory and practice of three dimensional computer generated images (CGI).
Students will model, animate and render photorealistic images suitable for
animation, game development, and/or video
- Note: dd 1160 and dd 1170 are not programming courses. They are
designed for students interested in learning to use existing tools for creating
3 dimensional images, developing personal expertise with those tools, and
understanding the resulting aesthetic
- objectives** Students will:
- Acquire an solid understanding of the concepts and principles of 3D
object creation.
 - Develop skills in the use of specific computer tools applicable to 3D
CGI.
 - Produce a portfolio of work which demonstrates their knowledge and
expertise.

assignments Major emphasis will be placed upon:

- Modelling basics of point, line, and polygons
- Organic shapes with spline curves, NURBS and Boolean operations.
- Rendering of photorealistic images
- Materials and surface treatments such as textures, reflection, refraction, transparency, specularly and bump mapping
- Photographic and atmospheric effect such as motion blur, depth of field and fog.

The following topics will be introduced in AR 1160 and expanded upon in AR 1170

- Animation via keyframe-based animation
- Inverse Kinematics for character animation
- 3D morphing
- Particle animation

grades

midterm-----	20%
project-----	40%
final -----	40%

note More than 10% absenteeism may constitute a failure except for medical or extenuating circumstances in which case a doctor's letter will be required.