Introduction
• Meeting times: Tue & Thur 7 – 8:15pm, ECSN 2.126

• Contact info:
  ◦ Office phone: 972-883-????
  ◦ Personal phone: 214-392-1971
  ◦ Office location: ECSS ??.????
  ◦ e-mail address: jsk061000@utdallas.edu
  ◦ Website: www.utdallas.edu/~jsk061000
  ◦ Office hours: ???
Course Overview

• TA:
  ◦ Office location: ECSS ?-????
  ◦ e-mail address: ???@utdallas.edu
  ◦ Office hours: ???

*I don’t regularly check e-mail in eLearning, so don’t e-mail me there!
  ◦ If I have any announcements (grades posted, assignment changes, etc.) I will post an announcement in eLearning (“Announcements”) and on my webpage
• **Pre-req’s:**
  1. CS/CE 1336/1337
  2. CS/CE 2335/2336
  (No knowledge of linear algebra is assumed)

• **Course description:** Device and logical coordinate systems, and the nature of raster display. Algorithms for basic 2-D drawing primitives, such as line-drawing, clipping and Bezier curves. Perspectives in 3-D, and hidden-face elimination, such as Painter's and Z-Buffer algorithms. Color and texture. Fractals and the Mandelbrot set. ECS majors cannot receive credit for this course.
After successful completion of this course, you should be able to:

- Have a solid understanding of computer numbering systems
- Have a solid understanding of pixels and coordinate systems
- Understand algorithms for 2D drawing primitives
After successful completion of this course, you should be able to:

- Understand perspective in 3D
- Understand color theory and texture
- Have experience with fractals and the Mandelbrot Set
- Be familiar with Java 3D
• Required text:

• Suggested texts:
• Suggested texts:
• Exams

  ◦ There will be three exams during the course: two midterms and a final exam. The exams will be closed book, but will be mainly limited to material covered during the immediate unit. Test material will be taken primarily from classroom lectures and assignments. The final will be somewhat cumulative.
• Assignments
  ◦ There will be regularly assigned reading and four homework assignments. Reading assignments should be done before the class session. Homework will require the student to spend time implementing a class topic outside of class, either in a written assignment and/or a programming assignment. All assignments should be submitted using your eLearning account.
Assignments

- Each programming assignment must contain the following:
  1. A text copy of all source code including its documentation (.java)
  2. A file showing test cases for your programs input and displayed output (.doc)
  3. Copies of all Java executable code (.class) files needed to execute the program.
Course Overview

- Final course grading:
  - Midterm 1: 20%
  - Midterm 2: 20%
  - Final: 35%
  - Assignments: 25%
  - Extra credit: ?
Course Overview

Schedule (tentative)

- Week 1 – 2: Numbering systems
- Week 3: Introduction to Computer Graphics (pixels and coordinate systems) (Ch. 1)
- Week 4 – 5: Algorithms for 2D drawing primitives (Ch. 4), midterm review, Midterm 1
- Week 6 -7: Perspective in 3D (Ch. 5)
• Schedule (tentative)
  ◦ Week 8 - 9: Hidden face elimination (Ch. 7)
  ◦ Week 10 - 11: Color theory and texture (Notes)
  ◦ Week 12 - 13: Fractals and Mandelbrot set (Ch. 8), midterm review, **Midterm 2**
  ◦ Week 14 - 15: Introduction to Java 3D (Notes)
Course Overview

• Schedule (tentative)

  ◦ Week 16: Advanced topics (time permitting), Final review

  ◦ **Final exam**: Tuesday, May 7\textsuperscript{th}, 8 – 10:45pm, FO 1.502 (subject to change at my whim)
Course Overview

- Grading
  - Final course grades:
    - A: 93.0 – 100
    - A-: 90.0 – 92.9
    - B+: 87.0 – 89.9
    - B: 83.0 – 86.9
    - B-: 80.0 – 82.9
    - C+: 77.0 – 79.9
    - C: 73.0 – 76.9
    - C-: 70.0 – 72.9
    - D+: 67.0 – 69.9
• Grading

  ◦ Final course grades:
    • D: 60.0 – 66.9
    • F: Below 60.0
Grading

Assignments:

- Non-programming assignments:
  - Point values as indicated (partial credit may be available)

- Programming assignments:
  - Code development: 30% (compile w/o error)
  - Program execution: 20% (run successfully)
  - Program design: 25% (conform to specs)
  - Documentation: 15% (program, comments)
  - Coding style: 10% (clear, efficient)
Other class policies

- Make-up exams: There will be no make-up exams under normal circumstances
- Extra credit: Extra credit may be available in the form of pop quizzes
- Late work: 10% penalty/day up to 1 week from due date; not accepted after 1 week
- Special assignments: TBD

Course Overview
• Other class policies

◦ Class attendance: Not required, although HIGHLY encouraged (think “pop quiz”)

◦ Classroom citizenship: Class participation is highly encouraged and may make a difference in your final grade if you are borderline

◦ Field trips: Sadly, no field trips are currently – planned for this class, except perhaps to the Open Lab (weather permitting)
• Other class policies
  ◦ UTD official policies and procedures, blah blah blah, disclaimers, blah blah, blah (see the syllabus)
• Questions/comments/great BBQ recipes?