

Covenant University, Ota

College: Science and Technology
Department: Computer & Information Sciences
Programme:

- B. Sc. Computer Science

Course Code: CSC 433
Course Title: Computer Graphics and Animation

c. Method of Lecture delivery/Teaching Aids

Lecture Delivery:

- Guided instruction
- Interaction classroom session
- Student group assignments
- Lecture notes

Teaching Aid

- Overhead projection
- Multimedia projection

Module 1: what is computer graphics

- Weeks 1 - 2
- * Types of Computer graphics
 - Raster (Bitmap) graphics
 - Vector graphics
 - * Application of Computer Graphics
 - * Example of Computer Graphics Packages
 - * Interactive and Passive Graphics
 - * Ingredients of Computer Graphics
 - * vectors

Module 2: Scan Conversion Definition

- Week 3 - 5
- * Advantage of developing algorithms for scan conversion *
 - Percept Sequence
 - * Examples of objects which can be scan converted
 - * Pixel or Pel
 - * Scan Converting a Point
 - * Scan Converting a Straight Line
 - Properties of Good Line Drawing Algorithm:

Module 3: Line Drawing Algorithms

Week 6 - 7

- * DDA Line Drawing Algorithm
- * Bresenham Line Drawing Algorithm
- * Mid-point Line Drawing Algorithms?

Module 4: Circle Drawing Algorithm

Week 8

- * Defining a Circle
- * Midpoint circle drawing algorithm
- * Bresenham Circle drawing algorithm

Module 5: Transformation Techniques 2D

Week 9

- * Translation
- * Rotation
- * Scaling
- * Reflection
- * Shear

Module 5: Transformation Techniques 3D

Week 10-12

- * Translation
- * Rotation
- * Scaling
- * Reflection
- * Shear

Week 13 Revision

e. Tutorial

f Structure of the Programme/Method of Grading

1. Continuous Assessment

* Class Test

30 marks

2. Semester examination 70 marks
- g. Ground rules & regulation
- Recorded over 90 % average class attendance
 - Students displayed a good sense of responsibility and decorum
 - Class assignment are taken seriously
 - Students engaged actively in all class activities
 - Punctuality to class is expected of every student
- h. Topics for term papers/Assignment/Students activities
Structure questions based on class work
- i. Alignment with Covenant University Vision/Goals
The delivery of the lecture aligns with the goals and vision of Covenant University to the raising new generation of leaders.
- j. Contemporary issues/Industry relevance
The course is very relevance because we are in the era when optimization is very crucial in any organization vis-a-vis areas human endeavor