

Curriculum plan (Even Semester 2020-21)

Teacher Name: Dr. Sapna Varshney

Paper name: Computer Graphics

Class type: BSc. (H) Computer Science VI semester

Paper shared with: Ms. Rajani

Unit to be taken	Month wise schedule to be followed	Tests/Assignments/Revision/Presentations etc
Unit 2 Graphics Hardware: Architecture of Raster and Random scan display devices. Input/output devices.	Feb (Week III, IV) Feb (Week IV)	Test Quiz – Unit 1, 2
Unit 3 Drawing Primitives: Raster scan line, circle and ellipse drawing algorithms Polygon filling, line clipping and polygon clipping algorithms.	March (Week I, II) March (Week III)	Assignment 1 Test Quiz – Unit 3
Unit 4 Viewing and Transformations: 2D and 3D Geometric Transformations. 2D and 3D Viewing Transformations, Vanishing points.	March (Week IV) April (Week I)	Assignment 2 Test – Unit 4
Unit 5 Geometric Modeling: Representing curves (Hermite and Bezier)	April (Week II)	
Unit 6 Visible Surface determination: Z-buffer algorithm, Depth Sort algorithm and Warnock's algorithm	April (Week III)	Test – Unit 5, 6
Unit 7 Surface rendering: Color Models, Illumination and shading models. Computer Animation	April (Week IV, V)	Test Quiz – Unit 7 Revision

References

1. **Computer Graphics: Principles and Practice (2nd Edition in C), James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes, Pearson Education Asia, 1999.**
2. **Computer Graphics C version (2nd Edition), D. Hearn, M.P. Baker, Pearson Education, 2006.**
3. **Mathematical Elements for Computer Graphics (2nd Edition), D.E. Rogers, J.A. Adams, Mc Graw Hill, 2002.**

Name of teacher: Dr. Sapna Varshney

Signature