

**Course Reader for
CSE 457 - Computer Graphics
Autumn 2007
Instructor: Zoran Popović**

Topic: Image Processing

Book/Journal Title: Machine Vision
Article/Chapter: Chapters 4 and 5
Author: Ramesh Jain, Rangachar Kasturi, and Brian G. Schunck
Page#s (from - to): 115 – 127, 132 – 136, 143 – 161
Publisher: McGraw-Hill Inc.
Copyright year: 1995
ISBN/ISSN: 0-07-032018-7

Book/Journal Title: Computer Graphics Proceedings of SIGGRAPH 90
Article/Chapter: Paint by Numbers: Abstract Image Representations
Author: Paul E. Haeberli
Page#s (from - to): 207 – 214
Volume/Edition: 24 (4)
ISBN/ISSN: 0-201-50933-4

Topic: Color

Book/Journal Title: Computer Graphics
Article/Chapter: Chapter 13
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 574 – 603
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Topic: Display Devices

Book/Journal Title: Computer Graphics C Version
Article/Chapter: Chapter 2
Author: Donald Hearn and M. Pauline Baker
Page#s (from - to): 36 – 48
Publisher: Prentice Hall, Inc.
Copyright year: 1997
Volume/Edition: second edition
ISBN/ISSN: 0-13-530924-7

Book/Journal Title: Computer Graphics C Version
Article/Chapter: Chapter 4
Author: Donald Hearn and M.Pauline Baker
Page#s (from - to): 154 – 157
Publisher: Prentice Hall, Inc.
Copyright year: 1997
Volume/Edition: 2nd edition
ISBN/ISSN: 0-13-530924-7

Topic: Affine Transformations

Book/Journal Title: Computer Graphics
Article/Chapter: Chapter 5
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 201 – 227
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Topic: Hierarchical Modeling

Book/Journal Title: Interactive Computer Graphics, A Top-Down Approach
Article/Chapter: Chapter 8
Author: Edward Angel
Page#s (from - to): 334 – 357
Publisher: Addison Wesley Longman, Inc.
Copyright year: 2000
Volume/Edition: second edition
ISBN/ISSN: 0-201-38597-X

Topic: Projections

Book/Journal Title: Interactive Computer Graphics, A Top-Down Approach
Article/Chapters: Chapters 1 and 5
Author: Edward Angel
Page#s (from - to): 19 – 31, 194 – 217
Publisher: Addison Wesley Longman, Inc.
Copyright year: 2000
Volume/Edition: second edition
ISBN/ISSN: 0-201-38597-X

Topic: Hidden Surface Algorithms

Book/Journal Title: Computer Graphics
Article/Chapter: Chapter 15
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 649 – 651, 668 – 686
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Topic: Shading

Book/Journal Title: Computer Graphics
Article/Chapter: Chapter 16
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 722 – 741
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Book/Journal Title: Communications of the ACM
Article/Chapter: An Improved Illumination Model for Shaded Display
Author: T. Whitted
Page#s (from – to): 343 – 349
Publisher: The Association for Computing Machinery
Copyright year: 1980
Volume/Edition: 23 (6)

Topic: Ray Tracing

Book/Journal Title: Computer Graphics
Article/Chapter: Chapters 15 and 16
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 701 – 715, 776 – 793
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Book/Journal Title: Graphics Gems I
Article/Chapter: Properties of Surface-Normal Transformations
Author: Ken Turkowski
Page#s (from - to): 539 – 547
Publisher: Academic Press
Copyright year: 1990

Topic: Texture Mapping

Book/Journal Title: Interactive Computer Graphics, A Top-Down Approach
Article/Chapter: Chapter 9
Author: Edward Angel
Page#s (from - to): 373 – 386
Publisher: Addison Wesley Longman, Inc.
Copyright year: 2000
Volume/Edition: second edition
ISBN/ISSN: 0-201-38597-X

Book/Journal Title: IEEE Computer Graphics and Applications
Article/Chapter: Survey of texture mapping
Author: Paul S. Heckbert
Page#s (from - to): 56 – 67
Publisher: IEEE
Copyright year: 1986
Volume/Edition: 6 (11)

Topic: Parametric Curves and Surfaces

Book/Journal Title: Computer Graphics
Article/Chapter: Chapter 11
Author: James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes
Page#s (from - to): 478 – 516, 517 – 528
Publisher: Addison-Wesley
Copyright year: 1996
Volume/Edition: second edition
ISBN/ISSN: 0-201-84840-6

Book/Journal Title: An Introduction to Splines for Use in Computer Graphics and Geometric Modeling
Author: Richard Bartels, John Beatty, and Brian Barsky
Page#s (from - to): 9 – 17
Publisher: Morgan Kaufmann Publishers, Palo Alto, CA
Copyright year: 1987

Topic: Subdivision Surfaces

Book/Journal Title: Wavelets for Computer Graphics: Theory and Applications
Article/Chapter: Chapters 6, 10, and Appendix A
Author: Eric J. Stollnitz, Tony D. DeRose, David H. Salesin
Page#s (from - to): 61 – 72, 141 – 149, 203 – 208
Publisher: Morgan Kaufmann Publishers, Inc.
Copyright year: 1996
ISBN/ISSN: 1-55860-375-1

Topic: Particle Systems

Book/Journal Title: SIGGRAPH 1999 (course notes on Physically Based Modeling)
Article/Chapter: Differential Equation Basics
Author: Andrew Witkin and David Baraff
Page#s (from - to): B1 - B8
Publisher: <http://cdserver.icemt.iastate.edu/cd/s99cn2/courses/36/course36.pdf>
Copyright year: 1999

Book/Journal Title: SIGGRAPH 1999 (course notes on Physically Based Modeling)
Article/Chapter: Particle System Dynamics
Author: Andrew Witkin
Page#s (from - to): C1 - C12
Publisher: <http://cdserver.icemt.iastate.edu/cd/s99cn2/courses/36/course36.pdf>
Copyright year: 1999

Book/Journal Title: SIGGRAPH 1999 (course notes on Physically Based Modeling)
Article/Chapter: Physically Based Modeling
Author: David Baraff
Page#s (from - to): D1 - D5
Publisher: <http://cdserver.icemt.iastate.edu/cd/s99cn2/courses/36/course36.pdf>
Copyright year: 1999

Topic: Character Animation

Book/Journal Title: Proceedings of SIGGRAPH (Computer Graphics)
Article/Chapter: Principles of traditional animation applied to 3D computer animation
Author: John Lasseter
Page#s (from - to): 35 – 44
Publisher: The Association for Computing Machinery
Copyright year: 1987
ISBN/ISSN: 0-89791-227-6

Article/Chapter: Quaternions
Author: Ken Shoemake
Publisher: University of Pennsylvania

Article/Chapter: Inverse Kinematics and Geometric Constraints for Articulated Figure Manipulation
Author: Chris Welman
Publisher: Simon Fraser University
Copyright year: 1993

Topic: Realistic Character Animation

Book/Journal Title: Proceedings of SIGGRAPH (Computer Graphics)
Article/Chapter: Animating Human Athletics
Author: Jessica K. Hodgins, Wayne L. Wooten, David C. Brogan, James F. O'Brien
Publisher: The Association for Computing Machinery
Copyright year: 1995