

**OAKTON COMMUNITY COLLEGE  
GENERIC COURSE SYLLABUS**

I.	<u>Course Prefix</u>	<u>Course Number</u>	<u>Course Name</u>	<u>Credit</u>	<u>Lecture</u>	<u>Lab</u>
	ART	263	Computer Graphics and Video in Multimedia	3	0	6

II. Prerequisites:

Art 260 or instructor's consent

III. Course (catalog) Description:

This course explores methods used in professional video and film production. Students will learn to storyboard, structure, and produce a short video piece. Students will also create computer generated material, such as 2D and 3D graphics and animations, which will be combined with scanned photographs and digitized video production. Attention will be given to software manipulation of video, including distorting video segments with custom filters, and special effect techniques such as compositing, rotoscoping, and morphing. Practical considerations of graphic format, resolution, color and saturation limitation are explored. Key peripherals are explained in the context of real world production situations.

IV. Learning Objectives:

1. To understand how video productions are put together.
2. To demonstrate the ability to design and produce video and graphics.
3. To understand the limitations of video and multimedia.
4. To demonstrate the ability to create and render video productions.
5. To understand the basic concept and terms used in computer graphics and video.
6. To understand the hardware involved in computer graphic and video production and the implementation of hardware in multimedia.
7. The ability to use post production techniques on a video.

V. Academic Integrity:

The very nature of higher education requires that students adhere to accepted standards of academic integrity. Therefore, Oakton Community College has adopted a Code of Integrity. These may be found in the Student Handbook. You may also find a summary of the Code of Academic Conduct in the College Catalog. Among the violations of academic integrity listed and defined are: cheating, plagiarism,

falsification and fabrication, abuse of academic materials, complicity in academic dishonesty, falsification of records and official documents, personal misrepresentation and proxy, and bribes, favors, and threats.

It is the student's responsibility to be aware of behaviors that constitute academic dishonesty.

Pursuant to the due process guarantees contained in the Policy and Procedures on Student Academic Integrity, the minimum punishment for the first offense for a student found in violation of the standards of academic integrity is failure in the assignment. In addition, a disciplinary record will be established and kept on file in the office of the Vice President for student affairs for a period of 3 years.

VI. Outline of Topics:

- A. Types of Still Images
  - 1. Bitmaps
  - 2. Vector
  - 3. 3D drawing and rendering
- B. Color
  - 1. Natural light
  - 2. Color palettes
- C. Image File Formats
- D. Video Clips
- E. Broadcast Video Standards
  - 1. NTSC
  - 2. PAL
  - 3. SECAM
  - 4. HDTV
- F. Computers and Video
  - 1. Overlay system
  - 2. Digital and analog
  - 3. Text and titles
  - 4. Peripherals
- G. Recording Formats
  - 1. S-VHS
  - 2. YUV
  - 3. Component Digital and Composite Digital
  - 4. Video hardware issues
  - 5. Editing
- H. Lighting and Shooting
  - 1. Blue screen
  - 2. Chroma and composition

- I. Video Compression
  - 1. JPEG
  - 2. MPEG
  - 3. DVI Indeo
  - 4. Optimizing for CDROM
- J. Assembling and Creating Movies
  - 1. Video terminology
  - 2. Clips
  - 3. Transitions
  - 4. Time units
  - 5. Compiling
  - 6. Filters
    - a. Tint filters
    - b. Brightness and contrast
    - c. Razor tool
    - d. Changing filters
  - 7. Superimposed clips
    - a. White alpha matte
    - b. Green screen type
  - 8. Advanced Editing
    - a. Place markers
    - b. Virtual clips
    - c. Trimming
- K. Capturing and Recording
  - 1. Recording options
  - 2. Batch capturing and device control
  - 3. Video tape

VII. Methods of Instruction:

This course will be presented using a combination of lectures, slide presentations and the use of the school's computer workstations.

VIII. Course Practices Required:

- 1. Attend all critiques and quizzes as scheduled in the course calendar.
- 2. Finish a Final Exam.
- 3. Do all the exercises and print all of the assignments.
- 4. Attend all classes and labs.

IX. Instructional Materials:

- 3½" high density diskettes
- Zip disk
- Blank CD disk

X. Methods of Evaluation:

The final grade will be based upon the following elements and their weights:

1. Quizzes 25%
2. Critiques 25%
3. Final Test 25%
4. Final Critique 25%

Quizzes will be administered at the critiques. Each quiz will have multiple choice questions. There will be a total of fifty questions. Quizzes constitute 25% of the grade. There will be three quizzes. The critiques offer the student the opportunity to show work in progress to the instructor and to the class. This allows each student to obtain feedback on the work presented. There will be four critiques including the final. The three critiques constitute 25% of the grade and the final critique constitutes 25% of the grade.

XI. Other Course Information:

If you have a documented learning, psychological, or physical disability you may be entitled to reasonable academic accommodations or services. To request accommodations or services, contact the ASSIST office in The Learning Center. All students are expected to fulfill essential course requirements. The college will not waive any essential skill or requirement of a course or degree program.

Effective beginning term: Summer 2003

Ending term: \_\_\_\_\_

Syllabus prepared by: Bernard Krule

Date: 6/7/99

Reviewed by Dept./Prog. Chair: Bernard Krule

Date: 6/7/99

Approval by Dean: Linda A. Korbel

Date: 3/5/03