

# Faculty Senate Curriculum Committee

## Approval Form

Proposal Title: Introduction to Computer Art Techniques

Sponsor(s): Dr. Haynes, Mr. McLean, Dr. Young Dept.: Art

Check one:  Course  Specialization  Concentration  Achievement Certificate  
 Certification Program  Major Program  Minor Change \_\_\_\_\_  
(please name: deletion or credit/title/catalog change)

Undergraduate  Graduate \_\_\_\_\_<sup>3</sup> Credit Hours

<p><b>Step 1 (Department)</b></p> <p><input checked="" type="checkbox"/> Approved <u>2-22-85</u> Date</p> <p><input type="checkbox"/> Not Approved</p> <p><u>[Signature]</u> Dept. CC Chairperson</p> <p><input checked="" type="checkbox"/> Reviewed _____ Date</p> <p><u>[Signature]</u> Chairperson, Dept.</p>	<p><b>Step 2 (Receipt)</b></p> <p>SCC# <u>1985-50</u></p> <p>Proposal Received <u>2/22/85</u> Date</p> <p><u>[Signature]</u> Chairperson, SCC</p>	<p><b>Step 3 (School CC)</b></p> <p>Reviewed _____ Date</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Not Approved</p> <p><b>Comments:</b></p> <p><u>[Signature]</u> Chairperson, School Curr. Comm.</p>
---	---	---

**Step 4 (Academic Dean) Comments:**

The course is comprehensive and much needed by these students as commercial art is well known. This is a very nice idea and the prerequisites are really some necessary.

Reviewed \_\_\_\_\_  
Date

[Signature]  
Signature, Dean of School

**Step 5 (SCC)**

Open Hearing 2/22/85  Approved by Senate Curriculum Committee 2/22/85  
Date Date

Returned to sponsor(s) for the following reasons:

**Step 6 (Faculty Senate)**

Presented to Faculty Senate: 2/22/85  Approved  Not Approved  
Date

Notification to Vice-President Academic Affairs \_\_\_\_\_  
Date

[Signature]  
Signature, SCC Chairperson

**Step 7 (Vice-President for Academic Affairs)**

Received 5/15/25  
Date

Approved  Yes  No

If no, reasons are as follows:

Student credit hours 3

Faculty load hours 3

Equalized credit hours 3

Official copy and approval sheet filed 5/15/25  
Date

Signature [Handwritten Signature]  
Vice-President for Academic Affairs

---

**Registrar**

Approved course description received \_\_\_\_\_  
Date

Hegis Taxonomy and Course Number assigned \_\_\_\_\_

Signature \_\_\_\_\_  
Registrar Date

---

Notification forwarded: Senate Curriculum Committee Chairperson, Department Chairperson(s),  
Academic Dean(s), Registrar, Sponsor(s).

## I

### DETAILS

- a. Course Title: INTRODUCTION TO COMPUTER ART TECHNIQUES.
- b. Sponsor: Art Department; Computer Art Committee-- Des McLean, Chairperson, Dr. Bob Haynes, Dr. Byron Young.
- c. Course Level: Undergraduate, Junior-Senior; three (3) credit hours.
- d. Curricular effect: elective.
- e. Prerequisites: Foundation Program, Art Department; <sup>Introduction to Printing</sup> Graphics I; or Illustration I; Introduction to Computer Science--- or by permission of the instructor.
- f. Suggested time: January 1986.
- g. Adequacy: The present faculty within the Art Department is sufficient to implement this course. Four computer art work-stations have been requisitioned and will be on-board before the course is offered. The computer art work-stations will be comprised of IBM microcomputers, Tecmar Graphics Master cards, Taxan 420L RGB monitors, two (each) double sided-double density disc drives and either a Koala Pad or Summagraphics tablet. Accompanying the above will be a PC-Eye video digitizing package (camera & board) and ink jet printers (Quadram Quadjet) printers. Software will include PC Crayon, PC Draw, PC Paintbrush, Dr. Halo, Videogram and Imigit (for the PC Eye). 4 Point Graphics, Moviemaker and other programs are to be included.  
(Please see addendum, p. 6)

## II

### RATIONALE

The computer is making many significant changes in our culture, and not the least of these is in the visual arts. The arts have been deeply influenced by the computer's ability to augment creativity. Only the camera might be compared with such a wide-ranging influence on the arts and on culture in general.

Television logi, music videos, commercials, animation, science fiction films, special effects, sound and music are the most evident uses of computer art. Less visible, but perhaps more ubiquitous, are the computerized art studios. Computer art will become an increasingly prevalent means of expression and communication in the visual arts as computer engineers turn from number crunching' and word processing to the requirements of image processing. The evidence of the recent achievements in this area may be seen in the relatively inexpensive 'Mindset', the mid-range Artronics, and the more expensive systems like 'Genigraphics' (35,000 to \$55,000).

In the Delaware Valley region the following colleges have computer art courses: Tyler School of Art (Temple Univ.), Philadelphia College of Art, The Art

-2-

Institute of Philadelphia, and Rutgers University, Camden. These institutions are preparing art students for career futures not in the traditional curriculum. Glassboro State College art students need computer art if they are to be current, competitive and creative. A computer art course will broaden the department's curriculum, making it contemporaneous with other curricular offerings in the region. The prospective art student will find G.S.C. more attractive and educationally feasible. Our students will be prepared for the coming developments in computer imaging technology: expanded color palette, greater memory, faster processing chips, and much higher monitor resolution.

### III

#### ESSENCE OF THE COURSE

##### a. Major Objectives:

1. To familiarize the art student with the equipment specific to the computer art work-station.
2. To introduce the art student to the creative potential that is inherent in the computer equipped to produce images.
3. Each student will assemble a 'portfolio' ---hard copy in the form of slides or print-outs from ink-jet printers--- of creative work.

##### b. Specific Objectives:

1. Students will be able to plot and develop shapes using the horizontal and vertical coordinates of the computer monitor's vector field.
2. Students will utilize a video camera and digitizing board with their computer work station to alter photographs, original art work, television images, and other media sources.
3. Students taking the course will be introduced to various in-put devices ---such as drawing pads and graphics tablets--- for drawing, painting, sketching and designing. They will develop skill in the use of these devices much as they have with pencil, pen or brush.
4. Those taking the course will become familiar with the strengths and weaknesses of the various software programs available: PC Paintbrush, 4-Point Graphics, PC Draw, 3 Design, Telegraph, Moviemaker, Dr. Halo, MicroIllustrator, Artist's Program, PC Crayon and PC Eye. The Lumena Program, because of its complexity and depth, will be offered to students successfully utilizing four other programs.
5. Students will become skilled in developing generations of specific designs with permutations of original visual concepts.
6. Students will be introduced to the visual techniques ---copying, rotation, mirroring, tapering, shadowing, perspective mapping, grid overlaying, filling, masking, erasing, image merging, color change--- of computer art. It is expected that their computer art portfolio will represent a creative use of these techniques.

- 7. Students will attend a computer art conference, seminar, or exhibition where possible. Class trips to computer art/graphics companies, commercial studios and computer artists will provide other field trip experience.

c. Evaluation and Grading Procedure of Students

- 1. Students will demonstrate their command of the computer art workstation and of several software programs. A checklist will be used.
- 2. Projects and problems will be assigned with slides, or hard-copy print outs recording the progress and completion of assigned projects.
- 3. A portfolio of computer art accomplished during the course will be assembled by each student. The portfolio of projects will be the primary basis for the student's grade.
- 4. An examination will be given concerning terminology, procedures, nomenclature and principles of computer art systems.

d. Course Evaluation

- 1. Students completing the course will be asked to submit an evaluation.
- 2. The Art Department Curriculum Committee will review the course in terms of departmental and college objectives. The committee will use projects, course materials, student exams, and conferences with the course instructor and students.

IV

RESULTS OF CONSULTATION

a. Art Department: Dr. H. Cohen, Dr. R. Haynes, Dr. J. Cuttano, Dr. B. Wasserman, Dr. B. Young. Curriculum Comm.: Profs. Adelson, Appleton, & Tischler.

Math. & Computer Science Department: Prof. Jack Cimprich, Chairman- Academic Computer Planning Committee, G.S.C.

Geography & Anthropology Dept.: Prof. Richard Scott, G.S.C.

Computer Design/Art; Art Institute of Philadelphia: Mr. Robert Arufo, Chairman, Computer Design/Art.

STATEMENT: A great deal of very practical insight was provided by Mr. Arufo concerning the use of the computer in the art curriculum. Bob Arufo has taught computer art for several years at A.I.P. His suggestions for sequencing software programs have been taken into consideration. Prof. Scott's familiarity with computer graphic hardware, achieved through cartography, was valuable and applicable to the needs of hard-copy for artists.

Professor Cimprich's knowledge of computers and a concern for excellence stressed the need to avoid courses which are superficially end-user oriented.

The course as it is designed is the result of several adaptations and redesigns as a consequence of the above consultations. The letters attached provide testimony to the collaborative process.

b. Copies of Consultation Attached:

1. Mr. Robert Arufo, Chairman, Computer Design/Art, Art Institute of Philadelphia.
2. Prof. Richard Scott, Geography & Anthropology Dept., G.S.C.
3. Prof. Jack Cimprich, Math. & Computer Science Dept.; Chairman, Academic Computer Planning Committee.

V

CATALOG DESCRIPTION

(Please see next page.)

CATALOG DESCRIPTION

THIS COURSE WILL INTRODUCE THE STUDENT TO THE TECHNIQUES MADE POSSIBLE BY THE COMPUTER WITH DESIGN, DRAWING AND PAINTING PROGRAMS. DIGITIZING/GRAPHICS TABLETS, LIGHT PENS, VIDEO DIGITIZERS AND THE KEYBOARD WILL BE USED AS INPUT DEVICES. A VARIETY OF SOFTWARE PROGRAMS WILL BE USED IN THE COURSE TO EXPLORE THE COMPUTER'S ABILITY TO PERMIT THE READY REALIZATION OF POSSIBILITIES IN DESIGNING. COPYING, RESCALING, MIRRORING, ROTATION, COLOR PERMUTATION, TAPERING, SHADOWING, FILLING, ANIMATION AND MANY OTHER COMPUTER ART POSSIBILITIES IN IMAGE MAKING WILL BE EXPLORED. EACH STUDENT WILL BE EXPECTED TO COMPLETE A PORTFOLIO OF COMPUTER ART BASED ON SLIDES, AND PRINTOUTS FROM COLOR PRINTERS AND PLOTTERS.

(continued)

I

DETAILS

- g. Adequacy:** A secure space is available within Memorial and adjacent to the Color-Design Room, and across from two offices. This room, known as the "Animation Room" has no windows (like many of the computer rooms on campus, and especially in Robinson) and is air conditioned.



State of New Jersey  
GLASSBORO STATE COLLEGE  
GLASSBORO, NEW JERSEY 08028

MATHEMATICS AND COMPUTER SCIENCE  
Robinson Building

609-863-6044

M E M O R A N D U M

TO: Des McLean, ART department  
FROM: Jack Cimprich  
DATE: 3/21/85  
RE: Comments on your new proposed course

I have read over your proposal for a course titled "Introduction to Computer Art Techniques."

I think that you've done a very fine job in putting together an exciting course that will be of great value to not only Art majors but others on campus as well.

In working with you during the past year in your efforts to develop computer applications for the Art department, I have been impressed by your enthusiasm and the knowledge you've gained of computer graphics. I look forward to your first presentation of this course.

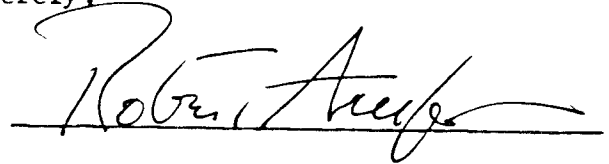
JC/mc

FROM: Mr. Robert Arufo, Director of Computer Art, Art Institute of Philadelphia.

TO WHOM IT MAY CONCERN:

I have studied the proposed course, Introduction to Computer Art, designed by Prof. McLean of Glassboro State College and have found it to be eminently suited for its purpose. The proposed content should encourage creative growth with students attracted to this rewarding and new studio tool for artists. Based on my experience, the evaluation of student progress as outlined in the proposal is reliable and valid.

Sincerely,



A handwritten signature in cursive script, appearing to read "Robert Arufo", is written over a horizontal line. Below this line is another horizontal line, which is not crossed by the signature.



**State of New Jersey**

**GLASSBORO STATE COLLEGE  
GLASSBORO, NEW JERSEY 08028**

February 26, 1985

TO WHOM IT MAY CONCERN:

In business, in government, and in academic fields from art to zoology computer assisted design and production of graphic images have moved rapidly from being an experimental frontier occupied by a few number crunching pioneers, to an accepted, crucial, and integral well settled territory.

As a geographer and cartographer, I know that the maps I make with the aid of the computer are superior, in many respects, to those drawn so laboriously by hand. The speed of the computer allows experimentation with design, form, scale, color, and aspect to a degree that is impossible without its assistance.

The same advantages that apply to computer assisted cartography and more will apply to computer art. Therefore, I give my full support to the proposed course, Introduction to Computer Art Techniques, and offer the proposers any assistance I am able to provide.

A handwritten signature in cursive script that reads "Dick Smith".