ACADEMIC CALENDAR

FALL QUARTER 1979

SEPTEMBER 25	CLASSES BEGIN
DECEMBER 2	CLASSES END

WINTER QUARTER 1980

JANUARY 8	CLASSES BEGIN
MARCH 17	CLASSES END

SPRING QUARTER 1980

MARCH 26	CLASSES BEGIN
JUNE 2	CLASSES END

SUMMER QUARTER 1980

JUNE 18	CLASSES BEGIN
AUGUST 25	CLASSES END

CLASS SCHEDULE

Monday	
INTERMEDIATE	6:30-9:30
TUESDAY	
OPTICS I	6:30-9:30
WEDNESDAY	
INTRODUCTORY	6:30-9:30
THURSDAY	
OPTICS II	6:30-9:30
FRIDAY	
MULTIMEDIA	7:00-9:00
ART & HOLOG.	6:30-9:30
REFLECTION	6:30-9:30
PHOTOCHEMISTRY	6:30-9:30

TUITION *FALL QUARTER 1979*

Registration requires payment of one-half fee. Full tuition must be paid by the first class day.

Class	Non-Student	Student	Student Taking Class For Credit
INTRODUCTORY	$175	$150	$125
INTERMEDIATE	$200	$170	$125
ADVANCED	$250	$250	$250
OPTICS I	$175	$150	$150
OPTICS II	$200	$170	$170
OPTICS III	$250	$250	$250
PHOTOCHEMISTRY	$150	$130	$110
MULTIMEDIA	$125	$125	$125
ART & HOLOG.	$125	$125	$125

Fine Arts Research & Holographic Center

School of Holography

Catalog

1979/80

The School of Holography offers a comprehensive course of study in Holography. We are dedicated to holography as an important Artform and as a developing Technology. The curriculum provides the student with the opportunity to explore the field of holography as an Artist, a Scientist and an Engineer. We believe that a program that encompasses both technical training and philosophical analysis will lead to significant developments in Art and Science.

Classes at the School are scheduled for ten week periods. The academic year is comprised of four periods; Fall, Winter, Spring and Summer Quarters. Registration in any particular Quarter is held until the week before those classes begin. A class schedule is available at the time of registration. Tuition must be paid before the first class meeting.

FACULTY & STAFF

Loren Billings, *Director*

Dr. Tung H. Jeong, *Special Consultant*

Consultants

David Wender	*Optics, Holography*
Rudy Haidle	*Lasers, Photochemistry*
Rudy Guzik	*Optics, Photochemistry*

Instructors

Al Ornelas	*Art & Holography*
John Hoffmann	*Holography, Photochemistry*
Harold Salaba	*Holography*
Victor Heredia	*Multimedia*
Richard Stevens	*Holography*
Lon Moore	*Image Plane Holography*

Fine Arts Research & Holographic Center
1134 W. Washington Blvd. Chicago, Ill. 60607
(312) 226-1007

Curriculum and Systems Information

HOLOGRAPHY I
INTRODUCTORY

Sand box systems with 5 MW LASER, light meter and optical components. Darkroom with processing chemicals and film with a format capability of 4x5.

Course material includes: Technical and Aesthetic history of Holography; Photographic procedure of Holography; and procedures for setting up fundamental Holograms — Single Beam reflection, Single Beam transmission, Multiple Beam reflection, and Multiple Beam transmission.

Prerequisites: None.

HOLOGRAPHY II

The relationships of individual elements of the holographic process are studied in greater depth to give the student greater control of hologram quality. Course subject matter includes the manipulation of exposure and processing chemistry, use of lenses to control light and focus images, forms of noise and their control. The course features the production of image plane holograms.

Prerequisites: Introductory Holography I or equivalent.

INTERMEDIATE *HOLOGRAPHY*

Optical Bench 4'x10' with 35 MW LASER, light meter and optical components. Darkroom with processing chemicals. 8x10 format capability.

Course material includes: Procedure for making Noise Free Master; Procedure for making hybrid Holograms — Focused Image, Rainbow and Integral White Light Transmission.

Prerequisites: Introductory or equivalent and Portfolio.

ADVANCED HOLOGRAPHY

Optical bench L-shaped 9'x16' with Krypton LASER, 100 MW Helium-Neon LASER, power meters, optical signal processing components. 36x48 and greater format capabilities. Course material will include large format Holograms, Dichromated gelatin Holograms and Optical signal processing.

Students in this course use optical signal processing techniques in independent projects and meet in seminar to discuss current developments in holography.

Prerequisites: It is recommended that the student have a background in contemporary optics and photochemistry.

OPTICS I

LIGHT AND LENSES

An introduction to geometrical optics; the physics and properties of light; the theory and application of reflecting and refracting optics.

Prerequisites: Algebra and trigonometry, high school Physics helpful. Coregistration with INTRODUCTORY holography.

OPTICS II

COHERENCE AND INTERFERENCE

An introduction to physical optics; the physics of coherent and incoherent interference; the theory and application of diffraction analysis.

Prerequisites: OPTICS I or Calculus, Differential Equations, and Elementary Physics or Geometrical Optics. Coregistration with INTERMEDIATE holography.

OPTICS III

PHYSICS OF HOLOGRAPHY

An introduction to the principles of Holography; Fourier Optics; Applications of Holography; and a review of current developments.

Prerequisites: OPTICS I & II or partial Differential Equations, and Physical Optics (or Wave Optics). Coregistration with ADVANCED HOLOGRAPHY.

PHOTOCHEMISTRY

Course describes the actions and processes of silver halide emulsions, photochemicals and non-silver recording.

Prerequisites: None.

ART AND HOLOGRAPHY

Course is designed and dedicated to exploring the potential of Art and aesthetics in Holography with an emphasis on the meaningfulness of art for Art's sake and humanism in art.

Prerequisites: None.

MULTIMEDIA

ILLUSIONS OF THE SENSES

Course explores the multiple uses of laser light in coordination with other media; sound, film, optics, holography and physical properties to combine art and technology as both an exploratory and entertainment medium.

INTENSIVE INTRODUCTORY COURSE

Course offers students the opportunity to learn the fundamental procedures of holography in one weekends time, two twelve-hour sessions.

Prerequisites: None.

• *Course credit may be obtained by students of the University of Illinois, Chicago Circle Campus for studies in holography. The Fine Arts Research & Holographic Center is currently discussing similar affiliation and accreditation with other colleges and universities.*

TUTORIALS

Students eligible for any level of study may under special conditions obtain personalized instruction in a condensed or more convenient time period. Materials covered and amount of time allotted are as outlined in regular course descriptions. Arrangements must be made in advance with individual instructors subject to the approval of the director. Fees for special tutorials are $525 per course. Normal refund policy applies.

SPECIAL SEMINARS

Special seminars will be held thruout the year. The seminars concentrate on specific topics and are led by teachers who have distinguished themselves in those particular fields. The fee for a seminar is set at the time of registration.

LECTURE SERIES

The Fine Arts Research & Holographic Center conducts a regular series of educational lectures and exhibits both at its own facility and at outlying organizations and institutions. Information regarding these programs is available on request.

• *The Fine Arts Research and Holographic Center maintains a library of books, magazines, articles and videotapes accessible as reference materials to students, as well as books and holographic film available for purchase.*

• *The Fine Arts Research and Holographic Center retains the right to limit class size and to cancel a class because of insufficient enrollment or other administrative reasons with full refund.*

• *To provide a facility for continuous study, the Holographic Center is making available on a reserved time basis its various holographic systems to qualified holographers at a modest hourly rental fee.*

• *The Fine Arts Research & Holographic Center operates under a policy of total non-discrimination and does not discriminate against student applicants on the basis of race, color and national or ethnic origins.*

REFUND POLICY

Withdrawal after first week	80%
Withdrawal after second week	60%
Withdrawal after third week	No Refund