445C. Advanced Product Design III Spring. 5(1-8) STA 445B.

Product design thesis. Design and development of a product system using data developed in STA 444B. Design solution will be presented in the form of a one-person exhibition.

446. Product Design Workshop

Fall, Winter, Spring. 2(0-4) May reenroll for a maximum of 12 credits if different topic is taken. STA 231, STA 239, STA 245. A Product Design or an Advanced Product Design course concurrently.

Intense investigation of one product or product type such as furniture design, toy design, and package design. Workshop subject will change every term and will be announced prior to early registration. Students will investigate design principles, user behavior, materials, processes and trends of the workshop subject.

447. Industrial Design Internship

Fall, Winter, Spring, Summer. 5 to 15 credits. May reenroll for a maximum of 15 credits. Approval of department.

An off-campus field study program in Industrial Design. Students will gain pre-career experience by working in a design environment under the supervision of a professional Industrial Designer.

449. Advanced Metalsmithing

Fall, Winter, Spring. 2 to 6 credits. May reenroll for a maximum of 35 credits. STA 249, STA 349 or approval of department.

Hollow form emphasized. Smithing including raising, forging, and Masonite die. Additional specialized techniques such as resins, enamels, electro forming, and tool making. Individual development emphasized.

450W. Art Workshop

Summer. 1 to 6 credits. May reenroll for a maximum of 15 credits. Approval of department.

Specific sessions of short duration (one to three weeks) permitting a concentrated experience in one area of interest within the general studio spectrum.

800. Studio Problems

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 24 credits.

Studio problems in drawing, painting, printmaking, graphic design, industrial design, interior design, advertising design, sculpture-carving, sculpture-direct metal, ceramics.

801. Painting

 $Fall, Winter, Spring, Summer.\ 3\ to\ 12$ credits.

Advanced work in a variety of painting media with strong emphasis on independent development.

802. Drawing

 $Fall, \, Winter, \, Spring, \, Summer. \, 3 \, \, to \, \, 12 \, \, credits.$

Advanced work in drawing employing a variety of media and calculated to contribute to development in related areas of art practice.

803. Sculpture

 $Fall,\,Winter,\,Spring,\,Summer.\,\,3\,\,to\,\,12\,\,credits.$

Advanced work in a variety of three dimensional media with strong emphasis on individual development.

804. Ceramics

Fall, Winter, Spring, Summer. 3 to 12 credits.

Advanced work in pottery involving a variety of experiences and leading to independent development.

805. Serigraphy

Fall, Winter, Spring, Summer. 3 to 12 credits.

Work in silk screen printmaking techniques leading to independent expressive development.

806. Graphic Design

Fall, Winter, Spring, Summer. 3 to 12 credits.

Advanced work in all phases of the area of graphic design leading to independent development.

807. Industrial Design

Fall, Winter, Spring, Summer. 3 to 12 credits

Advanced study in the areas of design analysis and product development with emphasis on continued independent development.

808. Jewelry and Metal

Fall, Winter, Spring, Summer. 3 to 12 credits.

Advanced work in jewclry and metal, and other related areas leading to continued independent development.

809. Etching

Fall, Winter, Spring, Summer. 3 to 12 credits.

Work in etching leading to expressive independent development.

810. Lithography

Fall, Winter, Spring, Summer. 3 to 12 credits.

Work in lithographic techniques leading to expressive independent development.

816. Issues in Contemporary Art

Fall. 3(3-0) Graduate students or approval of instructor.

Impact of technology, new media, exploitation and exhaustion of current styles, new sources of patronage, political control; implications of art systems replacing object art explored in seminars with staff.

820. Problems in Art Education

Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 10 credits. Contract from department required prior to registration.

821. Art Instructional Media Laboratory I-Multi-Media

Fall, Winter, Spring, Summer. 4(1-9) May reenroll for a maximum of 8 credits. Approval of department.

Investigation of multi-media techniques as media of artistic expression and communication for application to art education or related fields.

822. Art Instructional Media Laboratory II–Television

Fall, Winter, Spring, Summer. 4(1-9) May reenroll for a maximum of 8 credits. Approval of department. Interdeparmental and jointly administered with the Department of Telecommunication.

Analysis of teaching video tapes and television programs in art. Utilization of television as a medium of artistic expression and communication for application to art education or related fields.

825. Seminar in Art Education

Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 8 credits. Approval of department.

Examination and discussion of contemporary thought in the field of art education. Current problems examined within an interdisciplinary framework.

826. Critical Theory and Aesthetic Experience in Art Education

Fall, Winter, Spring, Summer. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken. Approval of department.

Theories of art criticism and aesthetic experience. Organization of these concepts for application to art education programs or related fields.

827. Curriculum Design for Art Education

Fall, Winter, Spring, Summer. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken. Approval of department.

Factors affecting art curriculum; analysis, preparation and evaluation.

828. Research Methods for Art Education

Fall, Winter, Spring, Summer. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken. Approval of department

Orientation to research; designs and methodologies applicable to the study of problems in art education.

840. Teaching Seminar-Art Practice

Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Approval of department.

Supervised teaching of college classes in art practice.

899. Master's Thesis Research

Fall, Winter, Spring. Variable credit. May reenroll for a maximum of 12 credits. Approval of department.

ARTS AND LETTERS A L

College of Arts and Letters

130. The First Americans: An Introduction to the Native American Experience (RES 130.) Fall, Spring. 4(4-0)

Overview of Native American cultures and experiences from pre-European to contemporary

210. Film: An Introduction

Fall, Winter, Spring. 4(2-4)

An interdisciplinary examination of film, to enhance the student's knowledge and appreciation of the film experience by focusing on theory, practice, history, social meaning, and criticism.

IDC. Introduction to Women's Studies: Women's Consciousness

For course description, see Interdisciplinary Courses.

311. Great Cities, Arts, and Ideas: The Western Classical Age (A)

(HUM 311.) Fall. 4(4-0) Sophomores.

The humanities in an urban culture during the Western classical age. Major ideas and works of art and literature, their significance in the city's life, and their continuing influence. Cities will be Athens or Rome.

312. Great Cities, Arts, and Ideas: The Renaissance (A)

(HUM 312.) Winter, 4(4-0) Sopho-

mores.

The humanities in an urban culture during the Renaissance. Major ideas and works of art and literature, their significance in the city's life, and their continuing influence. Citics will be Florence, Rome, or Paris.

313. Great Cities, Arts, and Ideas: The Modern World (A)

(HUM 313.) Spring. 4(4-0) Sopho-

mores.

The humanities in an urban culture during the modern era. Major ideas, works of art and literature; their significance in the life of an important world capital during the 18th, 19th, or 20th century.

332. Development of American Indians as an Ethnic Minority

(RES 313.) Spring. 4(4-0) Approval of

college.

The history of the contact between Euro-Americans and American Indians is examined from the perspective of Native Americans.

333. Contemporary Problems of American Indians

(RES 333.) Spring. 4(4-0) A L 332.

An overview of contemporary American Indian problems including their background in federal policies, protests engendered, and possible solutions.

335. Film and Drama, a Comparison (J. M. 335A.) Winter, Spring. 3(3-2)

Juniors.

A comparison of dramatic and cinematic forms with primary emphasis on the unique attributes of each medium that create differing impacts and responses on the reader/viewer.

339. Interdisciplinary Studies in the Arts and Humanities

(J M 339A.) Fall, Winter, Spring. 3(3-0) or 4(3-0) May reenroll for a maximum of 8 credits. Juniors or approval of department.

Study of a theme or topic from the perspectives of at least two disciplines.

345. Jewish Humanities in the Twentieth Century (A)

(HUM 345.) Fall, Winter, Spring. 4(4-0) Sophomores. Previous studies in the humanities recommended.

An interdisciplinary study of the novel, short story, drama, music, film, and arts of the Twenteith Century as they have reflected the experiences, preoccupations, and contributions of the Lews.

380. The Role of Women in America: Arts and Self

(ATL 380.) Winter of even-numbered years. 4(4-0) Juniors.

Various art forms by women and the exploration of a feminine sensibility; sex, race, and class interactions, sexual stereotypes; male views of women and themselves; the impact of the media.

381. The Role of Women in America: Movements and Ideology

(ATL 381.) Spring of odd-numbered years. 4(4-0) Juniors.

Key personalities and philosophical currents in the women's movement; biological and cultural myths and realities; the historical role of the family, 'The Culture of Romance.'

390H. Perspectives in Literature

Fall. 4(3-0) Juniors, approval of Hons College.

Attention will be focused on several major literary works. Students will employ various types of literary analysis, considering theme, idea, structure, etc., and examining some major trends in contemporary literary criticism.

391H. Perspectives in Philosophy

Winter. 4(3-0) Juniors, approval of Honors College.

The two primary areas of concern will be ethics and aesthetics, the emphasis on one or the other to be determined by the professor. The course will include reading of major works, discussion of major figures in the fields, and the preparation of a substantial paper.

392H. Perspectives in History

Spring. 4(3-0) Juniors, approval of Honors College.

The focus will be on the nature of international diplomacy in the 20th century, the development of nationalism, the balance of power system, the influence of new ideologies, and the developments of the power structure since 1945.

393H. Perspectives in 20th Century Arts: 1900-1920

 $Fall.\ 3(3\text{-}0)\ Juniors,\ approval\ of\ Honors\ College.$

Reaction to Naturalism across the arts traced in Symbolism and Expressionism as interrelated phenomena in response to the crisis of confidence in European institutions.

394H. Perspectives in 20th Century Arts: 1920-1945

Winter. 3(3-0) Juniors, approval of Honors College.

Formalist analysis of art elements examined across the arts in Cubism, Surrealism and new musical structures as positive response to war, depression and dictatorship.

395H. Perspectives in Contemporary Arts: Postwar Period

Spring. 3(3-0) Juniors, approval of Honors College.

The function of avant-garde arts after World War II to the present studied in the new dimensions of an environment created by new technology and the mass media explosion.

434. Critical Issues in Dance

(J M 434.) Winter. 3(3-0) Seniors in Dance Field of Concentration or approval of department.

Development of aesthetic values and opinions through analysis of critical issues in dance. Solidification of individual dance philosophies.

450. Arts Management

Fall, Winter, Spring. 3 to 5 credits. May reenroll for a maximum of 9 credits. Seniors or Craduate Students or approval of department.

Administration of arts organizations, management of facilities, understanding operational methods and procedures of performing companies, financial structure and funding of arts centers, study of audience development, contemporary trends in arts management field.

461. Aging and Human Values

Spring, 3(3-0) Juniors.

Development of personal and professional responses to value-laden questions concerning aging and the elderly through historical, literary, philosophical and related perspectives.

491H. Perspectives in the Social Sciences and Humanities

Fall, Winter, Spring. 2 to 6 credits. May reenroll for a maximum of 12 credits if different topic is taken. Juniors, approval of Honors College, or approval of instructor. Interdepartmental with the College of Social Science.

An integration of subject matter and methodologies of several disciplines as they are relevant to particular topic areas.

492. Integrative Topics in the Arts and Humanities

(U C 492.) Fall, Winter, Spring. 4(4-0) May reenroll for a maximum of 8 credits. Juniors or approval of department.

In-depth study of topics in the arts and humanities. Integrative and interdisciplinary approach.

499. Arts and Letters Internship

Fall, Winter, Spring, Summer. 1 to 10 credits. May reenroll for a maximum of 10 credits. Juniors, 3.00 GPA, approval of instructor. Supervised pre-professional field experience for juniors, seniors, or graduate students.

999. Doctoral Dissertation Research

Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 36 credits. Approval of college.

ASTRONOMY AND ASTROPHYSICS

See Physics and Astronomy.

AUDIOLOGY AND SPEECH SCIENCES ASC

College of Communication Arts and Sciences

108. Voice and Articulation

Fall, Winter, Spring, Summer. 3(4-0) The study and development of the skills of voice and articulation.

201. Introduction to Communication Disorders

(372.) Fall, Winter. 3(3-0)

Speech, hearing and language disorders in adults and children.

222. Oral Language Development Winter, Summer. 3(2-0)

Emergence and development of receptive and expressive aspects of oral language of the child.