

- 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.
- 455. Advanced Painting**
(STA 435.) Fall, Winter, Spring. 3 to 5 credits. May reenroll for a maximum of 15 credits. STA 355, STA 356, STA 357 plus 2 additional credits in STA 355 or STA 356 or STA 357.
Advanced work with increased supervised independent study opportunities.
- 460. Independent Study**
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 4 credits. Juniors. Contract from department required prior to registration.
Supervised individual advanced work in special interest areas of studio art.
- 461. Selected Topics-Ceramics**
Fall, Winter, Spring, Summer. 3(0-6) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level.
Issues of technique, style, and content in ceramics.
- 462. Selected Topics-Product Design**
Fall, Winter, Spring, Summer. 3(0-6) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level.
Issues of technique, style, and content in product design.
- 463. Selected Topics-Painting**
Fall, Winter, Spring, Summer. 3(0-6) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level.
Issues of technique, style, and content in painting.
- 464. Selected Topics-Photography**
Fall, Winter, Spring, Summer. 3(0-6) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level.
Issues of technique, style, and content in photography.
- 465. Selected Topics-Printmaking**
Fall, Winter, Spring, Summer. 3(0-6) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level.
Issues of technique, style, and content in printmaking.

- 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.
- 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.
- 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.
- 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. Interdepartmental 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—Studio Art**
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 6 credits. Approval of department.
Supervised teaching of departmental courses in Studio Art.
- 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

- 100. Writing for College**
Summer. 3(0-6)
Workshop to strengthen skills in writing impromptu and polished papers in college. Refinement of skills in planning, developing, drafting, revising, and polishing written work. Approved through Summer 1992.
- 150. Arts and Letters Seminar I**
Fall. 3(3-0)
Topical course exploring enduring themes, issues, and concerns in the liberal arts and sciences. Close reading of core texts. Frequent writing. Approved through Fall 1990.
- 151. Arts and Letters Seminar II**
Winter. 3(3-0) A L 150.
Continued exploration of topic from A L 150. Use of library and community resources for research. Frequent writing. Approved through Winter 1991.

**Descriptions — Arts and Letters
of
Courses**

152. Arts and Letters Seminar III
Spring, 3(3-0) A L 151.

Continued exploration of topic from A L 150 and A L 151. Individual seminar research project.
Approved through Spring 1991.

201. Introduction to Women's Studies: Women's Consciousness
(IDC 233.) Fall, Winter, Spring, 4(4-0) Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.

Development of women's consciousness in various historical, cross-cultural and scientific contexts. Contexts basic to feminist thought are clarified. Critique of sexism in traditional scholarship.

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.

232. American Humor
Winter, 4(4-0) Sophomores.

An interdisciplinary study of the relationship between American humor and the developing American experience, especially of the nineteenth and twentieth centuries.

300. Special Topics in Women's Studies
Spring of even-numbered years. 3(3-0) or 4(4-0) May reenroll for a maximum of 8 credits if different topic is taken. Sophomores, W S 201 or approval of instructor. Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.

Special topic emphasizing women and/or gender.

301. The Silent Film
Fall of odd-numbered years. 3(2-2) Sophomores.

History of silent film: major films, directors, movements, trends.

303. Contemporary Cinema
Spring of even-numbered years. 3(2-2) Sophomores.

History of world cinema since 1960: major films, directors, movements, trends.

305. Women's Studies Internship
Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 4 credits. Six credits of women's studies courses, approval of Women's Studies Program. Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.

Integration of feminist knowledge through work experience in legislative, community or educational settings.

310. American Film and Society (MTC)
Fall, Winter, Spring, 4(2-4) May reenroll for a maximum of 8 credits if different topic is taken. Sophomores.

American films as they reflect and influence society.

311. Great Cities, Arts, and Ideas: The Western Classical Age (A)
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)
Winter, 4(4-0) Sophomores.

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. Cities will be Florence, Rome, or Paris.

313. Great Cities, Arts, and Ideas: The Modern World (A)
Spring, 4(4-0) Sophomores.

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.

320. Major Directors (MTC)
Fall of even-numbered years. 3(2-2) May reenroll for a maximum of 6 credits. A L 210 or another course in the Film Studies—Thematic Program, Sophomores.

Themes, concerns, and artistry of major film directors.

330. Film Genres (MTC)
Winter of odd-numbered years. 3(2-2) May reenroll for a maximum of 6 credits. A L 210 or another course in the Film Studies—Thematic Program, Sophomores.

Characteristics, conventions, development of film genres; shaping cultural forces; sources of vitality and appeal.

345. Jewish Humanities in the Twentieth Century (A)
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 Twentieth Century as they have reflected the experiences, preoccupations, and contributions of the Jews.

390H. Perspectives in Literature
Fall, 3(3-0) Juniors, approval of Honors 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, 3(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, 3(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.

400. Film Theory and Analysis
Winter of odd-numbered years. 3(2-2) Juniors, at least three courses in the Film Studies—Thematic Program.

Major film theories and theorists; analysis of selected films.

401. Women's Studies Senior Level Seminar

Spring, 4(4-0) Juniors; W S 201 or six credits of ATL 181, ATL 182, ATL 183. Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.
Synthesis of course work in women's studies. Emphasis is on individualized research projects.

402. Feminist Theory
Fall, 4(4-0) Nine credits in women's studies courses, approval of instructor. Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.

Integrative theoretical approaches to women's studies; ways of conceptualizing sex and gender; varieties of explanation of sexual inequality; feminist critiques of traditional knowledge.

409. Independent Study in Women's Studies

Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 8 credits. Juniors, approval of Women's Studies Program. Interdepartmental with the College of Social Science and Women's Studies Program. Administered by Women's Studies Program.

Individual reading and research on women and gender.

450. Arts Management
Fall, Winter, Spring, 3 to 5 credits. May reenroll for a maximum of 9 credits. Seniors or Graduate 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.

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

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. Approval of college.

**ASTRONOMY AND
ASTROPHYSICS**

See Physics and Astronomy.