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 jewelry 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.

811. **Criticism in Contemporary Art**  
Fall, Winter, Spring. 4(4-0) Approval of department.  
Principles of evaluation in the visual arts today and their uses in the studio work of the contemporary artist.

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 systeks replacing object art explored in seminars with staff.

820. **Problems in Art Education**  
Fall, Winter, Spring, Summer. 1 to 5 credits. May re-enroll for a maximum of 10 credits. 421 or 422 or a bachelor's degree in art from an accredited institution.

821. **Art Instructional Media Laboratory I—Multi-Media**  
Fall, Winter, Spring, Summer. 4(1-9) May re-enroll 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 re-enroll for a maximum of 8 credits. Approval of department. Interdepartmental 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 re-enroll 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) 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) Approval of department.  
Factors affecting art curriculum; analysis, preparation, and evaluation.

828. **Research Methods for Art Education**  
Fall, Winter, Spring, Summer. 3(3-0) 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 re-enroll for a maximum of 6 credits. Approval of department.  
Supervised teaching of college classes in art practice.

899. **Research**  
Fall, Winter, Spring, Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

**ARTS AND LETTERS** A L

**College of Arts and Letters**

390H. **Perspectives in Literature**  
Fall. 4(3-0) Juniors, approval of the 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. 4(3-0) Juniors, approval of the Honors College.  
The two primary areas of concern will be ethics and aesthetics. The emphasis is 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 field, and the preparation of a substantial paper.

392H. **Perspectives in History**  
Spring. 4(3-0) Juniors, approval of the 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 development of the power structure since 1945.

393H. **Perspectives in 20th Century Arts: 1900-1926**  
Fall. 3(3-0) 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.

450. **Arts Management**  
Fall, Winter, Spring. 3 to 5 credits. May re-enroll 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 art 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 re-enroll for a maximum of 12 credits if different topics are taken. Juniors, approval of Honors College, or approval of instructor. Interdepartmental with the College of Social Science and Justin Morrill College.  
An integration of subject matter and methodologies of several disciplines as they are relevant to particular topics.

999. **Research**  
Fall, Winter, Spring, Variable credit. May re-enroll for a maximum of 36 credits. Approval of college.

**ASTRONOMY AND ASTROPHYSICS**

**College of Natural Science**

109. **Astronomical Fiction**  
Winter. 1(1-0) 110 concurrently.  
Concurrent readings of works of science fiction to assist the visualization of the concepts presented in AST 110.

117. **Introductory Observing**  
Fall, Spring, 1(1-0) 110, or 227, or 229 or concurrently and approval of department.  
Observations of celestial objects, constellation identification, and occasional planetarium exercises.

*Name changed effective March 1, 1974. Formerly Astronomy.