833. Anthropological Topics in Prehistory

Spring. 4(4-0) May re-enroll for a maximum of 12 credits when other problems are offered. Approval of department.

Relation of archaeology to the other fields of anthropology on both a theoretical and practical level. Archaeological data are used to introduce problems of long-range cultural change and development.

835. Human Osteology and Osteometry

Fall of even-numbered years. 5(3-4) 821 or ANT 540.

Identification of human bones and fragments; aging, sexing and determining the race of skeletal remains; measuring techniques for cranial and postcranial remains; the more common forms of paleopathology.

IDC. Interdisciplinary Seminar on Africa

For course description, see Interdisciplinary Courses.

850. Archaeological Methods and Techniques

Winter. 4(4-0) 833 or approval of department.

Seminar outlining archaeological method and the role of technique in the strategy of archaeology. Techniques and problems of information retrieval will be emphasized.

856. Methodology of Anthropological Research

 $Winter. \ 1 \ to \ 12 \ credits. \ Approval \ of \\ department.$

Seminar in problems of anthropological investigation considered in the framework of history and philosophy of science. Relevance of various field techniques, methods of data gathering and data handling, and strategies of analysis for various problems are treated.

865. Environment, Technology, and Culture

Spring 4(4-0) Approval of department.

Cultural ecology, study of the relation of man and his physical environment, the role of technology in mediating between the two. Comparative analysis of the interdependence of social organization, technology and environment. Case histories of cultural and social change arising from technological innovations.

870. Applied Anthropology

Spring of odd-numbered years. 4(4-0)
Approval of department.

Theoretical and methodological problems involved in planned social change. Course will focus on field experience in the local community. Designed mainly for graduate students having professional interest in the application of social change.

872. Seminar in Special Subject Fields

Fall, Winter, Spring, Summer. 2 to 6 credits. May re-enroll for a maximum of 24 credits when new fields are offered. Approval of department.

Special fields of study will include any area of anthropology selected.

875. Individual Research Projects

Fall, Winter, Spring, Summer. 1 to 12 credits. May re-enroll for a maximum of 24 credits with approval of department. Approval of department.

880. Individual Readings

Fall, Winter, Spring, Summer. 1 to 12 credits. May re-enroll for a maximum of 24 credits with approval of department. Approval of department.

899. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

922. Dimensions of Culture

Winter, 4(4-0) Approval of department.

Intensive review of principles of cultural anthropology, ethnology, and cultural change with particular attention to systems theory and interconnections of cultural, social, personality, and ecological systems.

923. Cultural Dynamics

Spring. 4(4-0) Approval of department.

Intensive review of culture change theories, processes of the development of the self, contemporary cultural movements, and the application of anthropological knowledge.

999. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

ART

College of Arts and Letters

History of Art

205. Introduction to Art

Fall, Winter, Spring. 3(3-0) Not open to majors.

HA

Painting, sculpture and architecture from the time of the Greeks to the present. Individual works of art examined intensively, as regards both their formal qualities and the manner in which they exemplify the shifting patterns of Western culture.

206. History of Western Art Fall. 4(4-0)

Painting, sculpture, architecture and decorative art from prehistoric to modern times. Provides acquaintance with the forms of art typical of each period and indicates the aesthetic qualities which give them artistic significance. Work in first term covers Prehistoric, Egyptian, Mesopotamian, Greek, Roman, Early Christian and Byzantine periods.

207. History of Western Art Winter. 4(4-0)

Continuation of 206. Early Medieval, Romanesque, Gothic, Renaissance and Mannerist periods.

208. History of Western Art

Spring. 4(4-0)

Continuation of 207. Baroque, Rococo, Neoclassic and subsequent periods to contemporary art.

IDC. Introduction to Latin America II For course description, see Interdisciplinary Courses.

400H. Honors Work

Fall, Winter, Spring, Summer, 1 to 6 credits. Approval of department.

404. Greek Art and Archaeology

Winter. 4(4-0) 206 or approval of department.

The history of painting, sculpture and architecture of ancient Greece from the Bronze Age through the Hellenistic period. The history of archaeology excavatings of selected sites.

405. Roman Art and Archaeology

Spring, 4(4-0) 206 or approval of department.

The history of painting, sculpture and architecture of Ancient Rome from the Republic through the 4th century. The history of archaeological excavations of selected sites,

406. Ancient Painting

Spring of odd-numbered years. 4(4-0) 206 or approval of department.

Ancient Greek and Roman painting, including Minoan Crete. Special emphasis is placed on Archaic and Classical Greek painting on pottery and on Roman wall painting from Pompeii and elsewhere.

407. Ancient Sculpture

Fall of odd-numbered years. 4(4-0) 206 or approval of department.

The sculpture of Ancient Greece and Rome, from the Bronze Age through Early Christian times.

408. Ancient Architecture

Winter of even-numbered years. 4(4-0) 206 or approval of department.

The architecture of Ancient Greece and Rome, from Mycenaean times to the 6th century A.D., with special emphasis on the religious architecture of Classical Greece and Imperial Rome.

410. Byzantine Art

Fall, Summer. 4(4-0) 206 or approval of department.

Late antique painting, sculpture and architecture and their development in the East Christian Empire and Orthodox Russia.

411. Early Medieval Art

Winter, Summer. 4(4-0) 207 or approval of department.

History of architecture, sculpture, and painting in the Latin West from Hiberno-Saxon art of the 7th century to the Romanesque Abbeys of the 12th century.

412. Later Medieval Art

Spring, Summer. 4(4-0) 207 or approval of department.

Gothic painting, sculpture, and architecture with particular emphasis on the cathedrals of the 13th century.

420. Italian Renaissance Architecture

Spring. 4(4-0) 207 or approval of department.

Important buildings of the 15th and 16th centuries, architectural theories, and architectural representations in drawings and paintings.

421. Italian Renaissance Sculpture

Winter, 4(4-0) 207 or approval of department.

Major artists from circa 1250 to 1600.

422. Italian Renaissance Painting— Fifteenth Century

Fall. 4(4-0) 207 or approval of department.

Developments in Italian painting, especially Florentine, of the 14th and 15th centuries, with emphasis on 15th century masters such as Masaccio, Piero della Francesca and Botticelli.

423. Italian Renaissance Painting— Sixteenth Century

Spring. 4(4-0) 207.

Emphasis on Leonardo, Michelangelo, Raphael, Titian, Tintoretto, and other important masters of the High and Late Renaissance.

427. Northern Renaissance Painting

Fall, Summer. 4(4-0) 207 or approval of department.

The two centuries paralleling the Renaissance in Italy: the Van Eycks and their school, the French and German masters.

430. Seventeenth and Eighteenth Century Art in Italy

Fall of odd-numbered years. 4(4-0) 208 or approval of department.

Art and architecture of Italy in the 17th and 18th centuries; Caravaggio, the Carracci, Bernini, Borromini, Guarini, Juvarra, Piazzetta, Tiepolo, Piranesi, Guardi.

431. Bruegel and Rubens—Sixteenth and Seventeenth Century Flemish Art

Fall. 4(4-0) 208 or approval of de-

partment.

The paintings of Pieter Bruegel the Elder, Peter Paul Rubens, their major followers, Jan Breughel, Anthony van Dyke and Jacob Jordaens; and others,

433. Seventeenth Century Dutch Art

Winter of odd-numbered years. Spring of even-numbered years. 4(4-0) 208 or approval of department.

Art and architecture of the Northern Netherlands during "The Golden Age" with emphasis on paintings of Rembrandt, Vermeer, Hals and genre, still-life and landscape specialists.

434. French Art in l'Ancien Regime

Spring of odd-numbered years. 4(4-0) 208 or approval of department.

French art and architecture from the reign of Louis XII to the Revolution: Royal patronage at Fontainebleau, Versailles and Paris; the influence of Italy, Flanders and Holland on French artists.

435. Eighteenth Century Art in England and France

Fall of even-numbered years. 4(4-0) 208 and approval of department.

Art and architecture of England and France during the 18th century: the painting of Watteau, Chardin, Hogarth, Gainsborough and others; the Rococo style in France and stylistic eclecticism in England.

440. Modern Architecture

Fall. 4(4-0) 208 or approval of de-

History of modern architecture in Europe and the Americas from its beginnings in the nineteenth century to the present day.

442. Modern Sculpture

Spring, 4(4-0) 208 or approval of

From circa 1800 to the present. From Rodin to the present, with special attention to contemporary sculptors.

445. European Painting: 1760-1848

Fall, Summer. 4(4-0) 208 or approval of department.

The revival and development of Classicism in the late 18th and early 19th centuries and the flowering of Romanticism; a study of the rich complexities of painting in Europe.

446. European Painting: 1848-1907.

Winter, 4(4-0) 208 or approval of department.

Realism in conflict with the established traditions; growth and development of Impressionism, Post Impressionism, Symbolism, and Pre-Raphaelitism.

447. 1900: The Arts of Europe at the Turn of the Century

Winter. 4(4-0) 208.

European painting, sculpture, architecture and the applied arts at the turn of the century; symbolism, historicism and art nouveau and their contribution to the development of fauvism, expressionism and cubism.

450. Twentieth Century Painting

Spring. 4(4-0) 208 or approval of department.

Development of painting from 1900 to the present with special reference to the various "isms" that have characterized it since that time.

458. Contemporary Art Critics

Spring. 4(4-0) 208.

Contemporary art interpreted by American critics. Influences of earlier European theorists. Formal, historical, moral and social criticism by Rosenberg, Greenberg, Fried, Krauss, Kozloff, Steinberg, Rose, Lippard, Alloway, Burnham.

460. Seventeenth and Eighteenth Century American Art

Fall. 3(3-0)

Architecture, painting, and sculpture from colonial times to 1800; the Colonial, Georgian, and Federal styles as evidence of the emerging American pattern.

463. Nineteenth Century American Painting

Winter of even-numbered years. 3(3-0)

The American tradition in painting in Cole, Durand, and the landscape painters; the genre and realist works of Mount, Homer, and Eakins; and in the European painterly mode of Sargent and Whistler.

464. Nineteenth Century American Architecture and Sculpture

Winter of odd-numbered years. 3(3-0)

The evolution of American architecture from the Neo-classical revivals to the early works of Frank Lloyd Wright; the impact of the Chicago School; changing sculptural patterns from Powers to Saint-Gaudens.

465. Twentieth Century American Art Spring. 3(3-0)

Architecture, painting, and sculpture from 1900 to the present; the Ash Can School, the Armory Show, Regionalism, Abstract Expressionism, and post-Abstract Expressionism as expressive of the changing American pattern.

471. Art of China

Fall of even-numbered years. 3(3-0) The evolution of Chinese art from early Neolithic times to the present; the landscape paintings of the Sung and Yuan; 20th century Chinese art against the background of traditional Chinese art.

473. Art of Japan: Pre-Buddhist to the Momoyama Period

Winter. 3(3-0)

Architecture, sculpture, and painting from the Jomon and Yoyoi periods to the renaissance of Chinese traditions in the Muromachi period; the interaction of Chinese and Japanese traditions.

474. Art of Japan: Momoyama to the Present

Spring. 3(3-0)

Architecture, sculpture, painting, and prints of the Momoyama and Tokugawa periods; the interaction of Japanese and Western art in Namban art, Meiji, and post-Meiji art.

475. Art of India

Fall of odd-numbered years. 3(3-0)

The evolution of Indian art from the Indus Valley culture to the present; Buddhism and Hinduism as major forces in the formation of the Indian tradition.

480. Historic Preservation

Winter. 3(3-0) Seniors, approval of department. Interdepartmental with Urban Planning.

History and philosophy of historic preservation; the new attitude towards preservation—historic districts and neighborhoods—adaptive use, documentation and tools for preservation; a project based on field research.

484. History of Prints

Winter. 4(4-0)

History and appreciation of engraving, etching, lithography and woodcuts. Durer, Rembrandt, Goya, Daumier and contemporary printmakers. Prints and book illustrations as source material.

485. Special Problems

Fall, Winter, Spring. Variable credit. May re-enroll for a maximum of 10 credits. Approval of department.

Selected problems in history of art for individual study.

800. Seminar in Ancient Art

Fall, Winter, Spring. 4 credits.

810. Seminar in Medieval Art

Fall, Winter, Spring. 4 credits.

820. Seminar in Italian Renaissance Art

Fall, Winter, Spring. 4 credits.

830. Seminar in Seventeenth and Eighteenth Century European

Fall, Winter, Spring. 4 credits.

840. Seminar in Modern Art

Fall, Winter, Spring. 4 credits.

875. Methods and Approaches in Art History

Fall. 4(4-0) Reading knowledge of French or German recommended.

Reference books, history of scholarship, and particular techniques and challenges in the various specialties of art history and archaeology.

885. Problems in History of Art

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 15 credits. Approval of department.

Selected graduate problems in history of art for individual study.

899. Research

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

Studio Art

STA

101. How to Look at Art

Fall, Winter, Spring. 4(3-2)

Ways of looking at art of any period, but particularly modern art. Slide lectures, reading and studio exercises showing how artists relate their work to socio-intellectual developments of their time.

131. Art I

Fall, Winter, Spring, Summer. 4(1-6)

Conventional and experimental art concepts explored through a wide range of media. Films and presentations reenforcing studio experiences and familiarizing students with the department.

141. Drawing

Fall, Winter, Spring, Summer. 4(0-8)

Drawing in a variety of forms as an essential discipline, a means of expression, a preparation for and adjunct to the other arts.

142. Color

131

Fall, Winter, Spring, Summer. 4(0-8)

Color theories additive and subtractive; pigment and light as applied to the problems of the artist,

143. Three Dimensional Design

Fall, Winter, Spring, Summer. 4(0-8)

Experimentations with volume through manipulation of mass, plane and line in a wide range of materials and techniques.

200. Photography

Fall, Winter, Spring, Summer. 3(2-2) History of photography and basic technology of photography combined with darkroom experience in black and white processing. Equipment and fundamental problems are investigated. Students are required to furnish cameras and all materials.

201. Art for Elementary Teachers

Fall, Winter, Spring, Summer. 4(1-8) ED 200; approval of department. Not open to Freshmen or Art majors.

Understanding the creative art experiences of children. Studio work in materials suitable for grade school use. Reading and discussions relating the child's growth and development and his art experience.

228. Sculpture

Fall, Winter, Spring, Summer. 4(1-8)

Preparation for sculpture, involving experience with three dimensional forms. Exploration of the characteristics of sculpture past and present.

231. Graphic Design

Fall, Winter, Spring, Summer. 4(0-10)

Letterforms leading to the understanding of written and printed letters; the traditional methods by which they are produced and their relation to modern typography.

240. Ceramics

Fall, Winter, Spring, Summer. 4(0-10)

An exploration of form mainly from the standpoint of the enclosed volume. The complete process from the preparation of clay bodies to the glazed and fired piece. Limited to earthenware.

241. Life Drawing

Fall, Winter, Spring. 4(1-8) May reenroll for a maximum of 8 credits. 141.

Tools and materials of the artist applied in a variety of ways to the act of representing the human figure.

245. Design

Fall. 4(1-8) 141.

Use of basic design elements in two and three dimensions. Study of the appropriateness of forms to various media. Introduction to applied design procedures and processes.

247. Printmaking

Fall, Winter, Spring. 4(1-8) 141, 142.

Study of the art of printmaking and its major techniques. Studio practice in a wide range of printing methods.

255. Painting

Fall, Winter, Spring. 4(1-8) 141, 142.

Pictorial expression. Class discussion and studio work in a variety of media.

300. Still Photography I

Winter, Spring. 5(0-10) 200, approval of department.

Control of the photographic medium and production of fine prints with investigations into light as form-giver, modifier and reducer; study of specific subjects as design and as information.

301. Applied Photography Fall. 3(1-2) 300.

Photography in the reproduction of such twodimensional materials as art work and charts; three-dimensional art, products and architecture; methods of presentation with emphasis on slide and book forms.

302. Art in Special Education

Fall, Winter, Spring. 4(1-8) ED 200.

Art and the teacher as related to special education. Experience with materials and techniques as well as critical examination of the creative/ expressive processes for handicapped children.

303. Resources and Materials for Art Education I

Fall, Winter, Spring, Summer. 4(1-9) ED 200; 24 credits in studio art.

Concepts, processes and materials as they apply to art teaching situations.

305. Serigraphy

Fall, Winter, Spring, Summer. 3(0-6) Junior majors, 241, 247.

Silk screen as a fine print medium. Basic techniques as a means toward expressive development.

306. Lithography

Fall, Winter, Spring. 3(0-6) 247, 340.

Techniques of the medium, preparing the stone, etching, printing, the use of tusche, wash, rubbing, etc.

307. Etching

Fall, Winter, Spring, Summer. 5(1-8) Junior majors, 241, 247.

Techniques of straight etching, soft ground and aquatint.

308. Relief Prints

Fall, Summer. 5(2-6) Junior majors,

247.

Printing from a raised surface as a contemporary medium. Review of traditional techniques and materials as the basis for individual experimentation and expression.

311. Film Art II

Winter, Summer. 5(0-10)

Emphasis on the animated film.

320. Resources and Materials of Art in Education II

Fall, Winter, Spring, Summer. 4(0-8)

303.

Art teaching. Learning experiences with children and youth.

324. Graphic Design

Fall, Winter, Spring, Summer. 5(0-10) May re-enroll for a maximum of 15 credits. 231.

Visual communication involving the complete range of specialized materials, methods and processes leading to an understanding of the unique limitations of graphic design.

328. Sculpture

Fall, Winter, Spring, Summer. 5(1-8) Junior majors, 228, 241.

Exploration of the physical characteristics and possibilities of clay within the limitation of figurative representation. Plaster casting, wax modeling, etc.

339. Design Communications

Fall, Summer. 5(0-10) 241, 245; EGR 162.

Methods of representation, including drawing, delineation, photography with experimental exploitation of new tools and techniques.

340. Advanced Drawing

Fall, Winter, Spring, Summer. 5(1-8) May re-enroll for a maximum of 15 credits. Junior majors, 241.

Advanced problems in drawing as an end in itself, stressing experimentations with form and materials with emphasis on the human figure.

341. Ceramics

Fall, Winter, Spring, Summer. 5(0-10) Junior majors, 240, 241, approval of department.

Creating and executing designs in clay for pottery and other compositions. Making glazes, stacking and firing a kiln,

344. Industrial Design I

Fall, Winter, Spring, Summer. 5(0-10) Junior majors, 241, 245; EGR 161, 162 or 267. Products and product systems from the visual and practical point of view. Research and analysis as a prelude to meaningful design. Reports, sketches, renderings, study mock-ups and presentation models.

353. Composition and Painting

Summer. 3 to 6 credits. Approval of department. 24 or 36 hours per week in class; additional hours arranged. Course given at Lectanau Summer Art School, Leland, Michigan. Composition practice, analysis and painting technique. Still life, figure, and landscape.

355. Painting

Fall, Winter, Spring, Summer. 5(1-8) Junior majors, 241, 255.

Survey of accepted working procedures in all phases of oil painting, exploration of a wide range of problems of expression based on still life and the human figure.

391. Jewelry

Fall, Winter, Spring, Summer. 3(0-6) Junior majors.

Basic jewelry and metal techniques in sheet metal, wire and casting. Polishing and setting stones, repousse, etc.

400H. Honors Work

Fall, Winter, Spring, Summer. 1 to 6 credits. Approval of department.

401. Still Photography Workshop

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 30 credits. 300, approval of department.

Continuation of 300 with emphasis on personalized seeing and image making. Independent study will be encouraged for superior students with demonstrated potential.

405. Advanced Serigraphy

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 18 credits. 305, approval of department.

Continuation of 305 for superior students with a demonstrated potential for advanced independent study.

406. Advanced Lithography

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 18 credits. 306, approval of department.

Continuation of 306 for superior students with a demonstrated potential for advanced independent study.

407. Advanced Etching

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 18 credits. 307, approval of department.

Continuation of 307 for superior students with a demonstrated potential for advanced independent study.

408. Advanced Relief Prints

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 18 credits. 308 or approval of department.

Continuation of 308 for students interested in a deeper exploitation of the various block printing media.

410. Film Workshop

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 30 credits. Approval of department.

Film workshop with emphasis on independent study. Live film assignments.

421. Art for Classroom Teachers

Summer. 3(1-3) Certified classroom teachers.

Reading and discussion relating the child's art experience to his growth and development. Outside assignments required.

422. Art for Classroom Teachers

Summer. 3(1-3) 201 or 421.

Continuation of 421.

423. Art in Special Education

Summer. 3(2-2) Junior and Senior Special Education majors and approval of department.

Art and the art teacher in relation to the exceptional child. Development of an understanding of the creative processes of handicapped children.

424A. Advanced Graphic Design

Fall. 5 to 10 credits. May re-enroll for credit. Seniors; 324; approval of department.

Design and production of a book. Advanced group problems.

424B. Advanced Graphic Design

Winter, 5 to 10 credits, 424A.

Advanced problem solving involving existing media of graphic expression. Study of graphic equivalents of literal images and ideas in the creation of posters, trademarks and magazine and book covers.

424C. Advanced Graphic Design

Spring, 5(0-10) to 10(0-20) 424B.

Senior thesis based on design research required as a special project. Will use all studio facilities; campus resources.

428. Advanced Sculpture

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 35 credits. 328.

Continuation of 328. Problems in carving, modeling, casting in wax, clay, plaster, direct metal, etc.

431. Advanced Ceramics

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 35 credits. 341,

Continuation of 341 with increased opportunity for supervised individual study.

433. Advanced Composition and Painting

Summer. 3 to 6 credits. May reenroll for credit. 353, 355 or approval of department.

Continuation of 353 or 355 with increased opportunity for supervised independent development,

435. Advanced Painting

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 30 credits. 340, 355.

Continuation of 355 with increased opportunity for supervised independent development.

440. Special Problems

Fall, Winter, Spring, Summer. 2 to 5 credits. Approval of department.

Advanced work developed from special interest areas.

444. Industrial Design II

Fall, Winter, Spring, Summer. 5 to 10 credits. May re-enroll for a maximum of 35 credits. 344, approval of department.

Continuation of 344 with a broader choice of projects in industrial design and increased emphasis on independent development.

449. Advanced Jewelry

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. 391, approval of department.

Continuation of 391 with augmented opportunities for independent development and additional techniques.

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 re-enroll for a maximum of 24 credits.

Studio problems in drawing, painting, printmaking, graphic design, industrial design, interior design, advertising design, sculpturecarving, 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 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 systems 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 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 developments of the power structure since 1945.

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

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 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 re-enroll 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 and Justin Morrill College.

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

999. Research

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for maximum of 36 credits. Approval of college.

ASTRONOMY AND ASTROPHYSICS*

AST

College of Natural Science

109. Astronomical Fiction

Winter. 1(1-0) 119 concurrently.

Concurrent readings of works of science fiction to assist the visualization of the concepts presented in AST 119.

117. Introductory Observing

Fall, Spring. 1(0-2) 119, or 217, or 229 or concurrently and approval of department.

Observations of celestial objects, constellation identification, and occasional planetarium exercises.

^eName changed effective March 1, 1974. Formerly Astronomy.