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; approval of department.

462. Selected Topics—Graphic 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; approval of department.

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; approval of department.

464. Selected Topics—Photography
Winter of even-numbered years. 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; approval of department.

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; approval of department.

466. Design Center
Fall, Winter, Spring. 2(0-4) May reenroll for a maximum of 6 credits. Juniors; at least 8 credits in STA courses at the 300 or 400 level; approval of department.

467. Design Internship
(STA 447.) Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 4 credits. Juniors; at least 8 credits in STA courses at the 300-400 level; Contract from department required prior to registration.

485. Professional Practices and Portfolio
Winter, Spring. 2(1-2) Juniors; at least 8 credits in STA courses at the 300 or 400 level. Evaluation of portfolios of accomplished artists and designers. Study of professional practices and agency visits. Production of a finished portfolio.

497. Design Internship
(STA 447.) Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 4 credits. Juniors; at least 8 credits in STA courses at the 300-400 level; Contract from department required prior to registration.

500. 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.

501. 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(1-8) 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 III—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 6 credits. Approval of department. Examination of 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(0-6) 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(0-6) 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(0-6) 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.

830. 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

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. Reinforcement of skills in planning, developing, drafting, revising, and polishing written work. Approved through Summer 1992.

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(2-0)
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.

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.

310. American Film and Society (MTC)
Fall, Winter, Spring, 4(2-2) Sophomores. May reenroll for a maximum of 6 credits if different topic is taken. Sophomores. Administration of arts organizations, management of facilities, understanding operational structures, financial structure and funding of arts centers.

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 19th, 20th, or 21st 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.

340. German Film
Spring. 3(2-2) One of the following: GRM 203, A L 210 or TC 280 or approval of department, Interdepartmental with and administered by German.
Artistic, historical, and cultural analysis of German film. Weekly film viewings.

345. Jewish Humanities in the Twentieth Century (A)
Spring. 4(4-0) Sophomores. Previous studies in the humanities recommended.
An interdisciplinary study of the novel, short story, drama, musical, and arts of the Twentieth Century as they have reflected the experiences, preoccupations, and contributions of the Jews.

390I. 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.

399. Independent Study in Women's Studies
Fall, Winter, Spring, Summer. 1 to 4 credits. May reenroll for a maximum of 6 credits. Juniors or approval of college.

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 151, ATL 152, ATL 153. 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 exploitation 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 6 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.

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.

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. 3.00 CPA, approval of instructor.
Supervised pre-professional field experience for juniors, seniors, or graduate students.

501. American Studies Theory, Methods and Bibliography
Fall. 3(3-0) Graduate students in American Studies or approval of college.
Methods and bibliographical sources of American Studies research. Major interdisciplinary approaches to studying American culture.

801. Directed Readings in American Studies
Fall, Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 12 credits. Graduate students in American Studies or approval of college.
Supervised individual reading course in American Studies topics and fields for graduate students.

820. Humanistic Perspectives on Health
Fall. 4(4-0) Approval of Director of Interdisciplinary Programs in Health and Humanities.
Multidisciplinary perspectives on health care and medicine, emphasizing the linkages among the humanistic and scientific disciplines.

829. Capstone Seminar in Health and Humanities
Spring. 2(2-0) Approval of Director of Interdisciplinary Programs in Health and Humanities.
Peer review of master's theses completed or near completion. Discussion of recent works in interdisciplinary approaches to health and humanities.
Astronomy and Astrophysics

See Physics and Astronomy.

Audiology and Speech Sciences

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
Fall, Winter. 3(3-0)
Speech, hearing and language disorders in adults and children.

222. Oral Language Development
Fall, Winter, Spring, Summer. 3(3-0)
Emergence and development of receptive and expressive aspects of oral language of the child.

227. Physics for Audiology and Speech Sciences
Fall, Spring. 4(4-0) MTH 108. Not open to students with credit in PHY 237. Introduction to physics for Audiology and Speech Sciences majors: kinematics, Newton's Law, conservation of energy and momentum, waves and vibrations, sound propagation, resonance, speech production.

274. Structures and Functions of Speech and Hearing Mechanisms
Fall, Winter. 5(4-2) ASC 108 or approval of department. Peripheral and central auditory mechanisms and the respiratory, phonatory and articulatory mechanisms for speech.

276. Descriptive Phonetics
Winter, Spring. 3(3-0) ASC 274 or approval of department. Detailed description of the principles that underlie the production of speech sounds.

277. Speech Science
Fall, Spring. 3(3-0) ASC 274, ASC 276. Scientific bases of voice communication with special reference to the acoustic aspect of production.

373. Speech-Language Pathology: Evaluation Procedures
Fall, Winter, Spring, Summer. 5(4-2) ASC 201 and ASC 277 or approval of department. Evaluation procedures in speech-language pathology.

444. Oral Language of Urban Areas
Winter, Summer. 3(3-0) Concentration in the characteristics of language and human communication as these relate to studies and practices of those involved in urban affairs.

445. Communication Disorders: Social and Emotional Components
Spring, 3(3-0) Juniors. Analysis and management of the social and emotional components of speech, language, and hearing problems.

454. Introduction to Audiology
Fall, Spring. 3(4-2) ASC 276, ASC 277. Fundamental aspects of normal hearing, hearing disorders, hearing tests.

460. Aural Rehabilitation
Winter, Summer. 3(5-0) ASC 454 or approval of instructor. Fundamental aspects of hearing aids, auditory training, and speechreading for the hearing-impaired person.

501. Communication Disorders
Spring, Summer. 3(3-0) Juniors. Not open to Audiology and Speech Sciences majors. An overview of communication disorders; the professions of speech and language pathology and audiology and their relationships to allied professions.

474. Clinical Practicum in Speech and Language Pathology
Fall, Winter, Spring, Summer. 1 credit. May enroll for a maximum of 2 credits. Grade of 2.0 or better in both ASC 373 and ASC 374; satisfactory completion of a speech, language, and hearing screening/evaluation at the MSU Speech and Hearing Clinic. Therapeutic experience in speech and language pathology.

476. Speech Language Pathology: Intervention Procedures
Fall, Winter, Spring. 4(4-0) ASC 373 or approval of department. Intervention procedures in speech-language pathology.

477. Methods in Public School Speech and Hearing Therapy
Fall, Winter. 4(3-2) ASC 201, ASC 373. Must be taken prior to term of student teaching. Administration and organization, procedures and materials in public school speech and hearing therapy.

501. Basic Laboratory in Experimental Audiology
Fall, Spring. 3(4-1) MTH 108, PHY 227, ASC 454: Juniors. Contemporary experimental procedures in basic audiological research. Projects include systematic exercises in equipment use, calibration, psychophysical methods, and data analysis.

499. Independent Study
Fall, Winter, Spring. Summer. 1 to 6 credits. May enroll for a maximum of 12 credits. Approval of department.

801. Phonological Disorders
Spring. 4(4-0) Approval of department. Advanced study of normal aspects and correlates of phonological development; traditional and contemporary intervention issues, and issues related to research in phonological disorders.

833. Specialized Clinical Audiology
A. Differential Audiology
Fall. 4(3-2) Pure tone audiometric tests as an aid to the otologist in evaluating the pathology of hearing loss; including the development of norms. Consideration of nonorganic loss.

B. Speech Audiology
Fall. 4(3-2) Evaluation of speech and speech-like signals; detection, discrimination and recognition.

C. Industrial Audiology
Spring. 4(3-0) Evaluation of the role of the audiologist in industry emphasizing identification, procedures, damage-risk criteria, measurement and control of noise, conservation procedures, and medicolegal problems.

D. Advanced Audiological Evaluation
Winter. 4(3-2) Theory, administration and evaluation of selected tests of the peripheral and central auditory system.

E. Pediatric Audiology
Fall. 4(4-0) Evaluative procedures including play audiometry, language assessment, and case studies as aids to the differential diagnosis of auditory disorders in children; habilitative procedures for the acoustically handicapped child.

F. Geriatric Audiology
Summer. 4(4-0) ASC 460 or approval of department. Causes and descriptions of hearing loss associated with aging; audiological evaluation and rehabilitation of older people with emphasis on amplification needs.

G. Auditory Habilitation of the Hearing Impaired
Summer. 4(4-0) ASC 460; ASC 833B or approval of department. Communication skills development, early identification, differential diagnosis, personal and classroom amplification systems, methodological controversies and public laws affecting education of the hearing impaired.

H. Electrophysiologic Methods of Auditory Assessment
Spring. 2(2-0) ASC 854 or approval of department. Electroencephalographic and brain stem audiometry, electrocochleography, electrocardiac audiometry, respiratory audiometry, electrodermal audiometry, impedance audiometry and electroencephalography.

I. Amplification Systems for the Hearing Impaired
Winter. 4(3-2) ASC 833B. Form, function and clinical application of group and personal amplification systems for the hearing impaired.

J. Tinnitus and Vestibular Disorders
Spring. 3(2-2) ASC 833I or approval of department. Anatomy, physiology, evaluation, interpretation and management of tinnitus.

840. Language Theories and Disorders
Summer. 4(4-0) Previous course work in language development. Advanced study of child language research emphasizing an applied psycholinguistic approach to child language disorders.