STA 110.

Three-Dimensional Processes.

STA 113.

Time-Space Motion Sound.

STA 114.

Intermediate Drawing.

STA 111, STA 112, STA 114.

Observational and imaginative drawing including the human figure. Non-representational drawing. Contemporary drawing systems, concepts, and process.

STA 300.

Painting I.

STA 111, STA 112, STA 114.

Representational painting of landscape, figure, and still life imagery. Painting concepts, materials, and techniques.

STA 325.

Painting II.

STA 320.

Continued of representational painting, and introduction to non-representational painting and concepts.

STA 340.

Ceramics I.

STA 111, STA 113, STA 114.

Ceramic processes including handbuilding, glaze formulation, and kiln firing.

STA 345.

Ceramics II.

STA 340.

Continued development of ceramic forming and kiln firing techniques including handbuilding, glaze formulation, mold making, casting, and wheel throwing.

STA 350.

Figure Modeling.

STA 111, STA 113, STA 114.

Modeling human and natural forms.

STA 355.

Construction and Fabrication.

STA 111, STA 113, STA 114.

Sculptural concepts using methods of construction and fabrication as an approach to artistic expression.

STA 360.

Graphic Design.

STA 111, STA 113, STA 114.

Graphic signs and symbols used in visual communication. Application of design principles to experimental and practical problem solving.

STA 370.

Photography.

STA 111, STA 113, STA 114.

History and basic technology of black and white photography, integrative camerawork, and darkroom processing. Issues in photographic aesthetics. Students furnish camera and all materials.

STA 390.

Advanced Drawing.

STA 320.

Drawing with an emphasis on a wide range of current drawing concepts, materials, and techniques. Advanced non-representational drawing. Application to individual thematic development.

STA 405.

Screen Printing.

STA 300 or STA 320.

Theory and practice of relief prints including additive methods, linocut and woodcut.

STA 430.

Lithography.

STA 300 or STA 320.

Lithographic process as an artistic medium. Techniques of the medium. Preparing the plate or stone, printing, and using trowel, wash and rubbing as a means to creative imagery.

STA 455.

Intaglio.

STA 300 or STA 320.

Aesthetic principles and techniques such as line etching, soft ground, aquatint, dry point, wax resist, calligraphy, and monoprints.

STA 470.

Graphic Design.

STA 300 or STA 320.

Handmade paper as an art form. Basic techniques including lamination, layering, folding and vacuum forming.

STA 495.

History and basic technology of black and white photography, integrative camerawork, and darkroom processing. Issues in photographic aesthetics. Students furnish camera and all materials.

STA 545.

Ceramics.

STA 300 or STA 320.

A student may earn a maximum of 20 credits in all enrollments for this course.

STA 560.

Advanced Drawing.

STA 320.

A student may earn a maximum of 20 credits in all enrollments for this course.

STA 580.

Lithography.

STA 300 or STA 320.

Lithographic process as an artistic medium. Techniques of the medium. Preparing the plate or stone, printing, and using trowel, wash and rubbing as a means to creative imagery.

STA 600.

Intaglio.

STA 300 or STA 320.

Aesthetic principles and techniques such as line etching, soft ground, aquatint, dry point, wax resist, calligraphy, and monoprints.

STA 620.

Graph Design.

STA 300 or STA 320.

Handmade paper as an art form. Basic techniques including lamination, layering, folding and vacuum forming.
Descriptions — Studio Art of Courses

450. Advanced Sculpture  
Fall, Spring. 4 credits. A student may earn a maximum of 20 credits in all enrollments for this course. P: At least two courses from the sequence STA 350, STA 351, STA 354, STA 355. Advanced applications of sculpture concepts, styles and techniques. Consideration of the language of contemporary sculpture, with emphasis on individual direction.

460. Graphic Communication  
Fall, Spring. 4 credits. P: STA 360. Graphic design for visual communication based on typographic problem solving. Selected experimental and practical projects.

462. Three-Dimensional Design  
Spring. 4 credits. P: STA 460. Development and application of visual communication elements for three-dimensional structures and compound surfaces within a broad range of scale.

463. Book Design  
Fall. 4 credits. P: STA 460. Principles of typography and graphic design as applied to the book form.

464. Design Process and Concepts  
Fall. 4 credits. P: STA 460. Problem solving methods, strategies, and procedures. Exploration of problem definition, analysis, concept development, and evaluation.

465. The Poster  
Spring. 4 credits. P: STA 460. Poster design as a combined verbal and non-verbal communication device. Visual elements used to persuade and inform.

466. Corporate Imagery  
Fall. 4 credits. P: STA 460. Design development, hierarchical unification, and application strategies for the graphic identification of organizations and sub-units of organizations.

467. Motion Graphics and Electronic Media  

468. Computer Graphics  
Spring. 4 credits. P: STA 460. The computer as a medium for visual communication design. Experimentation with drawing, painting and solid modeling applications.

470. Still Photography  

472. Color Photography  

473. Landscape Photography  
Pall. 4(2-4). P: STA 470. Principles of landscape photography ranging from response to the rural and pastoral to urban and human altered. Historical and contemporary aesthetic trends. Film formats ranging from 35 mm to 4"x5". Black and white and color printing and zone system.

474. Photography Studio Lighting  

475. Photography Workshop  

481. Art Experiences with Children and Youth: Elementary  
Fall. 5(1-8). R: Open only to majors in the Department of Art with a teacher certification option. Completion of Tier I writing requirement. Art teaching in the Saturday Art Program. Emphasis on elementary experiences. Planning and writing art curriculum.

482. Art Experiences with Children and Youth: Secondary  
Spring. 6(2-8). R: Open only to majors in the Department of Art with a teacher certification option. Completion of Tier I writing requirement. Art teaching in the Saturday Art Program. Emphasis on secondary experiences. Planning and writing art curriculum.

490. Independent Study  
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Approval of department. Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491A. Selected Topics - Painting  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: STA 320. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in painting.

491B. Selected Topics - Printmaking  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: One 400 level course in printmaking. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in printmaking.

491C. Selected Topics - Ceramics  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: STA 340. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in ceramics.

491D. Selected Topics - Sculpture  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: One 300 level course in sculpture. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in sculpture.

491E. Selected Topics - Graphic Design  
Spring. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: STA 360. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in graphic design.

491F. Selected Topics - Photography  
Fall of odd-numbered years. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: STA 370. R: Not open to freshmen and sophomores. Approval of department. Issues of technique, style, and content in photography.

492. Senior Seminar and Professional Practice (W)  
Fall, Spring. 4(2-6). R: Open only to seniors in Studio Art. Completion of Tier I writing requirement. Capstone course for artists and designers. Writing as a mode of issue delineation and definition.

493. Design Internship  
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P: 12 credits in 400 level design courses. R: Open only to juniors and seniors in Studio Art with photography or graphic design concentrations. Approval of department, contract required prior to enrollment. Field experience in a working design environment under supervision of a design professional: art director, graphic designer, or photographer.

494. Design Center  
Fall, Spring. 4(4-0). P: 12 credits of 400 level design courses and a portfolio review. R: Open only to majors in the Bachelor of Fine Arts program in Studio Art with a design emphasis. Practicum in design problem solving, including extensive contact with selected clients at a professional level.

820. Painting  
Fall, Spring. 3 to 8 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to Master of Fine Arts students in Studio Art. Approval of department. Advanced study in a variety of painting media to foster independent development.

830. Relief Printing  
Fall, Spring. 3 to 8 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to Master of Fine Arts students in Studio Art. Approval of department. Theory and practice of relief prints as a means to create expressive imagery.

831. Screen Printing  
Fall, Spring. 3 to 8 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to Master of Fine Arts students in Studio Art. Approval of department. Theory and practice of screen printing as a means to create expressive imagery.

832. Lithography  
Fall, Spring. 3 to 8 credits. A student may earn a maximum of 40 credits in all enrollments for this course. R: Open only to Master of Fine Arts students in Studio Art. Approval of department. Theory and practice of lithography as a means to create expressive imagery.
SUGERY

Surgical Department of Surgery
College of Human Medicine

608. Basic Surgery Clerkship
Fall, Spring, Summer. 6 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
P: MIP 602. R: Open only to graduate-professional students in College of Human Medicine. The surgical patient, surgical diagnosis, pre-operative evaluation and post-operative care.

609. Otolaryngology Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Common otolaryngologic disorders, emergencies, diagnosis and treatment. Primary physician's judgments about management.

610. Plastic Surgery Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Principles of wound healing and tissue repair. Indications and applications of plastic surgery procedures.

611. Urology Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Demonstration of clinical manifestations of genito-urinary disease, investigative methods and techniques of diagnosis and management. Urologic emergencies and performance of basic urologic skills.

612. Orthopedic Surgery Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Diagnosis and management skills in common orthopedic problems. Orthopaedic emergencies.

613. Neurosurgery Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Problems related to common emergent and elective neurosurgery involving the brain, spine, and peripheral nerves. Neurological examinations, diagnostic methods.

615. Ophthalmology Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Medical and surgical treatment of eye diseases. Clinical experiences include private office practice, surgical observations, pre-and post-operative care.

616. Thoracic Surgery Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Problem solving in thoracic medicine and surgery. Pulmonary physiology. Diagnostic tools and tests, and indications for surgical procedures.

618. Anesthesia Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Common anesthetic agents. Performing anesthetic procedures under faculty supervision.

619. Sub-specialty Surgery Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
P: SUR 608. R: Open only to graduate-professional students in College of Human Medicine. Surgical domains not covered otherwise in which students desire further exposure.

620. Advanced Surgery Clerkship
Fall, Spring, Summer. 6 credits. P: SUR 608, MED 620. R: Open only to graduate-professional students in College of Human Medicine. Advanced experience in critical care, trauma, and nutrition. Students must successfully complete several technical bedside procedures with more responsibility for patient care than in SUR 608.

621. Surgical Nutritional Care Clerkship
Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course. I: SUR 608. Open only to graduate-professional students in College of Human Medicine. Clinical experience with nutrition team dealing with surgical and medical patients requiring therapeutic nutrition as a result of metabolic derangement and nutritional deficiencies.

622. Care Competencies III
Fall, Spring, Summer. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Human Medicine, Medicine, Pediatrics and Human Development, Family Practice, and Obstetrics, Gynecology and Reproductive Biology, Administered by Human Medicine. Pharmacologic interventions useful in volume resuscitation.

801. Shock and Metabolism
Fall, 4(4). R: Open only to M.S. students in Surgery. Results of prolonged reduction in tissue perfusion on tissue metabolism, structure, and function at the systemic, cellular and subcellular levels. Pharmacologic interventions useful in volume resuscitation.

802. Clinical Surgical Anatomy
Spring, 4(4) Interdepartmental with Anatomy.

803. Enteral and Parenteral Nutrition
Fall, Summer, 3(3-0). R: Open only to M.S. students in Surgery. Identification of individuals requiring nutritional support. Nutritional requirements in diseases. Delivery of total parenteral and enteral nutrition. Special problems.