ART (ART)

ART 100 USING VISUAL INFORMATION EFFECTIVELY (3)
Accessing, analyzing and organizing visual information, including Internet research and Web page design. Gen.Ed. I.B. Lab/Class fee will be assessed.

ART 101 DIGITAL TOOLS AND CONCEPTS (3)
Introduction to digital tools, processes, issues, and concepts used by artists and designers working with digital media. Prerequisite: ART, ARTH, or ARED Major or Minor. Lab/Class fee will be assessed.

ART 103 2D PROCESS (3)
Creative process, elements, and principles of two-dimensional design and color theory through a variety of drawing processes. Prerequisite: ART Major or Minor. GenEd I.E. or Core: Creativity & Creative Development. Lab/Class fee will be assessed.

ART 104 3D PROCESS (3)
Elements and principles of three-dimensional design: form and space problems involving various tools, materials and techniques. Prerequisite: ART Major or Minor. Lab/Class fee will be assessed.

ART 106 DRAWING FOR NON-ART MAJORS (3)
Creative process through drawing. Studio application, lectures, demonstrations and research problems. GenEd I.E or Core: Creativity & Creative Development.

ART 107 CERAMICS FOR NON-ART MAJORS (3)
Creative process through studio application of ceramics. Lectures, demonstrations and research problems. Core: Creativity & Creative Development and GenEd I.E. Lab/Class fee will be assessed.

ART 109 SCULPTURE FOR NON-ART MAJORS (3)
Creative process through sculpture. Studio application, lectures, demonstrations and research problems. GenEd I.E or Core: Creativity and Creative Development. Lab/Class fee will be assessed.

ART 111 DRAWING AND THE APPRECIATION OF DRAWING (3)
Problems of expressive draftsmanship in a variety of media. Drawing from the costumed and nude figures, still life and landscape. Prerequisite: ART Major or Minor. Lab/Class fee will be assessed.

ART 113 PAINTING FOR NON-ART MAJORS (3)
Creative process through painting. Studio application, lectures, demonstrations and research problems. GenEd I.E. or Core: Creativity & Creative Development.

ART 115 AMERICAN TRADITIONS IN PAINTING (3)

ART 117 PRINTMAKING FOR NON-ART MAJORS (3)
Creative process through printmaking. Core: Creativity & Creative Development or GenEd I.E. Lab/Class fee will be assessed.

ART 118 JEWELRY FOR NON-ART MAJORS (3)
Creative process through jewelry production. GenEd I.E. Lab/Class fee will be assessed.

ART 126 FABRIC DESIGN FOR NON-ART MAJORS (3)
Study of design elements and principles using various textile techniques, such as embroidery, appliqué, quilting, and dyeing. GenEd I.E. Lab/Class fee will be assessed.

ART 146 HONORS DRAWING FOR NON-ART MAJORS (3)
Creative process and communication through drawing. Studio application, lectures, demonstrations and research problems. Prerequisite: Honors College course. Core: Creativity or GenEd I.E. Lab/Class fee will be assessed.

ART 156 ARTIST BOOKS FOR NON-ART MAJORS (3)
Lecture, demonstration and studio application of handmade artist bookmaking techniques. Focuses on technical, formal, and conceptual concerns related to historical and contemporary bookbinding, and the creation of artist books as a mode of creative expression. GenEd I.E. or Core: Creativity & Creative Development. Lab/Class fee will be assessed.

ART 157 LETTERPRESS FOR NON-ART MAJORS (3)
The art of letterpress, typesetting, and relief printing on a hand-operated printing press. Core: Creativity & Creative Development or GenEd I.E. Lab/Class fee will be assessed.

ART 205 THE HUMAN FIGURE (3)
Exploration of the human figure using two- and three-dimensional techniques: emphasis on the representational image. Prerequisite: ART 211. Lab/Class fee will be assessed.

ART 211 DRAWING: OBSERVATION AND INVENTION (3)
Continued exploration of drawing, with an emphasis on observationally based drawing and ideational drawing. The interplay between these two modes will be explored. Prerequisites: ART 103 or ART 111; ART Major or Minor. Lab/Class fee will be assessed.

ART 212 VISUAL CONCEPTS (3)
Conceptual issues in contemporary art and design. Multidisciplinary exploration of concepts in artistic production; projects emphasizing the link between form and concept. Prerequisites: ART 101, ART 103, and ART 104. ART Major or Minor. Lab/Class fee will be assessed.

ART 217 DIGITAL CONCEPTS: IMAGE AND SURFACE (3)
Utilizing digital tools for the design of graphic surface and image. Prerequisite: ART 101 or ART 103. Lab/Class fee will be assessed.

ART 218 METALS + JEWELRY I (3)
Introduction to metalsmithing and jewelry through lecture, demonstration, and studio problems in the design / creation of three-dimensional objects: jewelry and small-scale functional objects. Methods of joining and forming metal and alternative materials. Prerequisites: ART 103 and ART 104. Lab/Class fee will be assessed.

ART 219 DIGITAL CONCEPTS: STRUCTURE (3)
Utilizing digital tools for the design of graphic structures and systems. Not open to students who have successfully completed ART 321. Prerequisite: ART 101 or ART 217. Lab/Class fee will be assessed.

ART 229 PAINTING I (3)
Fundamentals of painting through lecture, demonstration and studio experience. Emphasis on color theory and applications: still life and landscape. Prerequisite: completion of, or concurrent enrollment in, ART 211.

ART 231 CERAMICS I (3)
Creative investigation of ceramic materials. Studio work, lectures and discussion on ceramic design, techniques and materials. Prerequisites: ART 103 and ART 104. Lab/Class fee will be assessed.

ART 232 CERAMIC SURFACE DECORATION (3)
An introduction to ceramic surface design using a variety of media, processes, and related aesthetic concerns. Prerequisite: ART 107 or ART 212 or ART 231.
ART 233 PHOTO IMAGING - DIGITAL WORKFLOW FOR NON-ART MAJORS (3)
Introduction to creative digital photographic workflow - the aesthetics, technology and history of photographic imaging - creative capture, archiving, optimizing, printing, presentation and exporting to the web. Requirements: digital camera [see recommendations], laptop computer [see min specs], Adobe Lightroom 2 software. GenEd I.E. Lab/Class fee will be assessed.

ART 234 PHOTO IMAGING - FILM (3)
Technical and aesthetic elements of the analog photographic process. A manually adjustable 35mm film camera is required. Prerequisite: ART 103. Lab/Class fee will be assessed.

ART 235 PHOTO IMAGING - CREATIVE WORKFLOW (3)
Introduction to creative digital photographic workflow using professional level capture devices - the aesthetics, technology and history of photographic imaging - creative capture, archiving, optimizing, printing, presentation and exporting to the web. Requirements: digital camera [see recommendations], laptop computer [see min specs], Adobe Lightroom 2 software, peripheral hard drive. Prerequisite: ART 103. Lab/Class fee will be assessed.

ART 236 PHOTO IMAGING - LIGHT (3)
An investigation into the manipulation of natural and artificial light for use in photo imaging capture and production. A manually adjustable digital SLR camera is required. Prerequisite: ART 235. Lab/Class fee will be assessed.

ART 237 PHOTO IMAGING - ALTERNATIVE PROCESS (3)
An investigation of alternative methods of photo image making - both analog and digital - and the contemporary application of each technology. A manually adjustable film or digital SLR camera is required. Prerequisite: ART 234 or ART 235. Lab/Class fee will be assessed.

ART 238 PHOTO IMAGING - MOTION (3)
An investigation into the creation and exhibition of time-based arts. Included will be the exploration of video capture and editing, multi-media presentation and real-time image delivery. Prerequisite: ART 235 or by consent. Lab/Class fee will be assessed.

ART 241 SCULPTURE I (3)
Lecture and studio problems in the aesthetic and technical considerations of contemporary sculpture. Prerequisite: ART 104. Lab/Class fee will be assessed.

ART 245 INTRODUCTION TO PRINTMAKING (3)
Basic intaglio and relief processes: collograph, dry point, linocut, and monoprinting, with an overview of other printmaking media. Prerequisite: Completion of, or concurrent enrollment in, ART 211. Lab/Class fee will be assessed.

ART 258 PHOTO IMAGING - DIGITAL I (3)
Digital photographic image capture, manipulation, and production. A manually adjustable digital SLR camera is required. Not open to students who have successfully completed ART 359. Prerequisites: ART 235 and ART 217. Lab/Class fee will be assessed.

ART 301 STAINED GLASS (3)
Directed studio problems in stained glass: cutting, foiling, soldering, brass frame, and patina. Prerequisite: ART 102 or ART 103 or consent of instructor. Lab/Class fee will be assessed.

ART 307 MATERIALS: CONCEPT AND PROCESS (3)
Examination of the properties and characteristics of materials and methodology in the design and creation of objects through lecture, demonstration, and directed studio problems. Prerequisite: ART 218 [Jewelry I or Metals + Jewelry I] or ART 231. Lab/Class fee will be assessed.

ART 308 CERAMICS: THE RAKU PROCESS (3)
The utilization of specific clays, glazes, and firing techniques which relate to this both ancient, yet contemporary, ceramic process. Lab/Class fee will be assessed.

ART 309 CERAMICS II: UTILITARIAN POTTERY (3)
Studio experience in wheel throwing and hand building techniques with emphasis on utilitarian art forms. Lectures, discussion and demonstrations. Prerequisite: ART 231. Lab/Class fee will be assessed.

ART 310 CERAMICS: HANDBUILDING (3)
Studio experience utilizing a variety of handbuilding techniques: problems in both utilitarian and sculptural considerations. Prerequisite: ART 107, ART 231, or consent of instructor. Lab/Class fee will be assessed.

ART 311 WOOD: CONCEPT AND PROCESS (3)
Lecture and directed studio problems in the fabrication and lamination of wood. Prerequisite: ART 104. Lab/Class fee will be assessed.

ART 312 CERAMICS: SPECIAL PROCESS (3)
An exploration of a variety of techniques including lustres, low-fire glazes and underglazes, decals, Egyptian paste, mold making and slip casting. Prerequisite: ART 231 or written consent of instructor.

ART 313 ENAMELING: GLASS ON METAL (3)
Lecture, demonstration, and directed studio problems in vitreous enameling: application and firing methods, stenciling, sgraffito, painted enamels, champleve, basse-taille, and alternative approaches. Emphasis on image development and color theory. Prerequisites: ART 103 and ART 104. Lab/Class fee will be assessed.

ART 315 CASTING: MATERIALS AND PROCESS (3)
Studio experience utilizing a variety of handbuilding techniques: problems in both utilitarian and sculptural considerations. Prerequisite: ART 218, or consent of instructor. Lab/Class fee will be assessed.

ART 316 GRAPHIC DESIGN I (3)
Lecture, demonstration, and directed studio problems in 2 dimensional surface development, hollow fabrication, and beginning stone setting. Prerequisite: ART 218. Lab/Class fee will be assessed.

ART 317 GRAPHIC DESIGN II (3)
Directed studio problems in the casting process: traditional lost wax bronze casting, RTV mold making, casting new, alternative, and experimental materials. Prerequisite: ART 218. Lab/Class fee will be assessed.

ART 318 METALS + JEWELRY II (3)
Intermediate lecture, demonstration, directed studio problems in 2 dimensional surface development, hollow fabrication, and beginning stone setting. Prerequisite: ART 218. Lab/Class fee will be assessed.

ART 319 METALSMITHING (3)
Lecture, demonstration and directed studio problems in raising, forging, joining and finishing various metals with emphasis on design and creation of hollowware and flatware. The historic and aesthetic aspects of the media are considered. Prerequisite: ART 218/ART 318. Lab/Class fee will be assessed.

ART 320 FIBERS: STRUCTURES I (3)
Non-loom fiber construction including twining, coiling, crochet, felting, basketry. Functional and sculptural forms, historical and aesthetic considerations. Prerequisite: ART 104 or consent of instructor. Lab/Class fee will be assessed.
ART 322 DIGITAL CONCEPTS: MOTION (3)
Directed studio experience using a variety of digital programs emphasizing motion and elements of animation. Prerequisite: ART 217. Lab/Class fee will be assessed.

ART 323 PERCEPTUAL PAINTING (3)
Personal voice, ideas of perception, and skill development in observational painting. Prerequisite: ART 229.

ART 324 ABSTRACT PAINTING (3)
Exploration of a variety of models of abstraction, including hybrid abstraction/representation, through painting. Prerequisite: ART 229.

ART 325 PAINTING MEANING: EXPRESSION, NARRATIVE, AND PERSONAL CONTENT (3)
Exploration of how paintings hold meaning for artist and viewer. Finding subject matter, developing ideas, and painting from sources other than direct observation. Prerequisite: ART 229.

ART 326 FIBERS: SURFACES I (3)
Design problems executed with dye and ink on fabric using resist techniques, hand painting and printing. Prerequisite: ART 103 or consent of instructor. Lab/Class fee will be assessed.

ART 327 SOCIAL DESIGN AND ENTREPRENEURSHIP (3)
Examination of the cross-disciplinary social design movement and conscious capitalism model. Students identify and design solutions to address social issues. Prerequisites: ART 101, ART 103, ART 104, ART 211, or ENTR 110; major standing.

ART 328 FIBERS: STRUCTURES II (3)
Basics of hand weaving on the loom. Aesthetic and historical aspects of the media. Prerequisite: ART 103 or consent of instructor. Lab/Class fee will be assessed.

ART 331 WATERCOLOR I (3)
Fundamentals explored through lecture, demonstration and studio experience: still life, landscape and the figure. Prerequisite: completion of, or concurrent enrollment in, ART 211. Class/lab fee will be assessed.

ART 332 PAPERMAKING (3)
Two and three dimensional creative problems in the making of paper.

ART 334 PHOTO IMAGING - CONCEPTS I (3)
The aesthetic of black-and-white image-making using advanced analog and electronic imaging techniques. Prerequisites: ART 236, ART 238, and ART 258/ART 359. Lab/Class fee will be assessed.

ART 335 PHOTO IMAGING - CONCEPTS II (3)
The aesthetics of color image-making using advanced analog and electronic imaging techniques. Prerequisites: ART 236, ART 238, ART 258. Lab/Class fee will be assessed.

ART 337 FIBER: SURFACE II (3)
Contemporary design and color studies in piecing, appliqué, quilting, and embroidery by hand and machine. Aesthetic, historical and cultural considerations. Prerequisite: ART 103 or consent of instructor. Lab/Class fee will be assessed.

ART 338 PHOTO IMAGING - ADVANCED MOTION (3)
Continued investigation of social, political, and aesthetic use of time-based media in contemporary art. Advanced editing, sound and lighting techniques with an emphasis on conceptual process. Prerequisite: ART 238.

ART 339 METAL: CONCEPT & PROCESS (3)
Lecture and directed studio problems in metal fabrication and lost wax casting. Prerequisite: ART 104. Lab/Class fee will be assessed.

ART 340 MODELING: CONCEPT & PROCESS (3)
Lecture and directed studio problems in clay modeling emphasizing the human figure and moldmaking. Prerequisite: ART 104. Lab/Class fee will be assessed.

ART 342 CARVING: CONCEPT AND PROCESS (3)
Lecture and directed studio problems in stone, wood and other media. Prerequisite: ART 104. Lab/Class fee will be assessed.

ART 344 EXPERIMENTAL DRAWING AND PAINTING (3)
Experimental processes, materials, and forms in drawing and painting. Prerequisites: ART 323 or ART 324 or ART 325 or ART 372.

ART 345 NEW DIRECTIONS/PRINT (3)
Utilizing technology to link printmaking to digital, photo, Xerox and hand-drawn images. Prerequisite: ART 217 or consent of instructor. Lab/Class fee will be assessed.

ART 346 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART I (3)
Development of skills and technical expertise in 2-D, 3-D, 4-D computer based and time based. Emphasis on individual expression, uniqueness, and personal direction. Prerequisite: ART 329. Lab/Class fee will be assessed.

ART 347 SCREEN PROCESS I (3)
Multicolor projects include paper, stencil, drawing fluid, filler blockout, crayon resist, direct photo emulsion using water-based inks. Prerequisite: completion of, or concurrent enrollment in, ART 211. Class/lab fee will be assessed.

ART 348 ARTIST PRINT (3)
Advanced studio experience in printmaking with emphasis on personal direction. May be repeated for a maximum of 6 units. Prerequisite: ART 245. Lab/Class fee will be assessed.

ART 349 RELIEF PROCESS I (3)
Traditional and experimental techniques in printmaking: woodcut, collagraph, subtractive relief process using oil and water-based materials. Prerequisite: completion of, or concurrent enrollment in ART 211, or consent of instructor. Class/lab fee will be assessed.

ART 350 ETCHING AND INTAGLIO PROCESSES (3)
Etching, engraving, aquatint, lift ground, wood intaglio, and beginning color printing. Prerequisite: completion of, or concurrent enrollment in, ART 211. Class/lab fee will be assessed.

ART 351 WRITING ABOUT ART (3)
Expository writing about the visual arts, including critiques, articles, press releases and other formats. Emphasis on effective writing with aesthetic insight. Requires grade of C or better to fulfill Core or GenEd requirement. Prerequisites: ENGL 102 or ENGL 190; and (ARTH 221 or ARTH 222 or consent of instructor). Core: Advanced Writing Seminar or GenEd I.D.

ART 352 PAINTERLY PRINTMAKING (3)
Explores the traditional, contemporary, and experimental techniques of making unique prints which are called either monotypes or monoprints. Various techniques are demonstrated and prints are created with and without the use of a press. Prerequisite: ART 103. Lab/Class fee will be assessed.

ART 353 LITHOGRAPHIC PROCESS I (3)
Personal expression through printing from litho stones and plates. Prerequisite: completion of, or concurrent enrollment in, ART 211. Class/lab fee will be assessed.

ART 355 TYPOGRAPHY (3)
Theory, concepts, and aesthetics of type. Prerequisite: ART 217 and ART 219. Lab/Class fee will be assessed.
ART 356 ARTIST BOOKS (3)
Exploration of book making and the book as an art form. Individual projects highlighting aspects of artist books, discussion, and critiques. Prerequisite: ART 211. Lab/Class fee will be assessed.

ART 357 PHOTO IMAGING - FORMATS (3)
Field experience in photographic imaging technology. May be repeated for up to 6 units. Prerequisites: ART 236, ART 238, and ART 258/ART 359. Lab/class fee will be assessed.

ART 358 PHOTO IMAGING - DIGITAL II (3)
Advanced digital photographic image capture, manipulation, and production. A manually adjustable digital SLR camera is required. Not open to students who have successfully completed ART 459. Prerequisite: ART 258. Lab/class fee will be assessed.

ART 360 DIGITAL ART: 2D (3)
Study experience in producing two dimensional art images on the computer. Includes lecture, demonstration, and lab work. Not open to students who have successfully completed ART 460. Prerequisite: ART 217. Lab/class fee will be assessed.

ART 361 DIGITAL OBJECT DESIGN (3)
Ideas and technologies for developing 3-D models. Prerequisite: ART 217. Lab/class fee will be assessed.

ART 362 DIGITAL ART: 3D (3)
Studio experience in producing three dimensional art images on the computer. Not open to students who have successfully completed ART 460. Prerequisite: ART 217. Lab/class fee will be assessed.

ART 363 INTERACTIVE MEDIA: THEORY AND APPLICATION (3)
Focus on interactive design and media theory through research, studio practice, and discussion. Utilizes software applications with emphasis on conceptual process, image processing, and usability. Prerequisite: ART 217. Lab/class fee will be assessed.

ART 365 DESIGN FOR THE WWW (3)
Authoring techniques as related to interactivity, information design and digital imaging. Prerequisite: ART 217.

ART 366 CONCEPT MODEL MAKING (3)
Making 3-D material models out of a range of materials using precision fabrication techniques to depict innovative design ideas for products. Lab/class fee will be assessed.

ART 367 THEORY AND APPLICATION OF MATERIALS AND PROCESSES FOR INDUSTRIAL DESIGN (3)
Theory, analysis and application of how materials and processes are chosen for the design and fabrication of products. Prerequisite: ART 368 or consent of instructor.

ART 368 INDUSTRIAL DESIGN I (3)
Product and furniture design; idea development, design of computer models, construction of 3-D material models and presentation. Prerequisites: ART 104, ART 111, ART 241.

ART 370 SPECIAL TOPICS IN ART (3)
In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: 18 units of art courses. Lab/class fee will be assessed.

ART 372 ADVANCED DRAWING I (3)
Continued studio experience in drawing for advanced students. Emphasis on independent problems and personal direction. Prerequisites: ART 211 and ART 229.

ART 373 ILLUSTRATION PRINCIPLES FOR DESIGNERS AND ILLUSTRATORS (3)
Drawing and painting techniques to develop technical assurance with emphasis on observation, composition and imagination. Prerequisite: ART 211 or consent of instructor. Lab/class fee will be assessed.

ART 377 EXHIBIT DESIGN (3)
Theory, concepts, planning, graphics, spatial aesthetics and model construction for various professional exhibits. Management, design and installation of art exhibits. Prerequisites: ART 103 or permission of instructor. Class/lab fee will be assessed.

ART 380 INFORMATION + INTERFACE DESIGN (3)
Introduction to information architecture and user interface design for interactive media applied art and design application. Introduction to design projects with a focus on current interactive media design concept and theory. Prerequisites: ART 365, ART 234 or ART 235, and consent of instructor.

ART 383 LETTERPRESS & BOOKBINDING (3)
The art of Letterpress, on a hand-operated printing press, and bookbinding. Prerequisite: ART 217 or ART 219. Lab/class fee will be assessed.

ART 385 ART + DESIGN FOR COMMUNITY (3)
Directed studio. Interdisciplinary service-learning course combining creative practice, civic engagement, and collaborative learning with a focus on community-based creative projects. Off-campus experiences required. May be repeated for a maximum of units provided a different topic is taken each time. Prerequisite: Instructor/Department Consent.

ART 400 CERAMIC RAW MATERIALS (3)
Lecture and laboratory investigation of ceramic materials as they apply to glazes, clay slips and clay bodies. Tests and problems in ceramic raw materials. Prerequisites: ART 309, ART 310 or equivalent. Lab/class fee will be assessed.

ART 402 LIFE DRAWING AND ANATOMY I (3)
The study of anatomical structure of the human figure for art students. Drawing from the nude and draped model. Prerequisite: ART 211. Lab/class fee will be assessed.

ART 407 CERAMICS III: CLAY SCULPTURE (3)
Advanced studio experience utilizing a variety of ceramic techniques. Assigned problems in sculptural directions for students experienced in handbuilding and the potter’s wheel. Prerequisite: ART 309 or consent of instructor. Lab/class fee will be assessed.

ART 409 CERAMICS IV: VESSEL (3)
Studio experience utilizing a variety of ceramic techniques. Problems in utilization directions based on the vessel. Prerequisite: ART 407 or consent of instructor. Lab/class fee will be assessed.

ART 410 ELECTROFORMING AND ENAMELING (3)
Lecture, demonstration, directed studio problems in the electroforming process, continued investigation of vitreous enameling: three-dimensional form, new, alternative, and experimental techniques. Prerequisite: ART 313 or consent of instructor. Lab/class fee will be assessed.

ART 412 LIFE DRAWING AND ANATOMY II (3)
Continued study of anatomical structure of the human figure for art students. Emphasis on musculature. Drawing from the nude and draped model. Prerequisite: ART 402. Lab/class fee will be assessed.
ART 413 ENAMELING II (3)
Continued studio experience in enameling. Emphasis on advanced techniques of cloisonne, pique-à-jour, independent work and personal experience are encouraged. Prerequisite: ART 313. Lab/Class fee will be assessed.

ART 414 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor; student must make arrangements in advance of registration with instructor of choice.

ART 415 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

ART 416 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

ART 417 GRAPHIC DESIGN II (3)
Communication graphics synthesizing formal, conceptual and technical skills. Emphasis on creative concept development using type and image. Prerequisite: Must have completed Graphic Design screening. Lab/Class fee will be assessed.

ART 419 METALS + JEWELRY III (3)
Advanced lecture, demonstration, directed studio problems in hollow forming techniques including hydraulic die forming, hinge making, innovative design, and intermediate stone setting. Prerequisite: ART 318. Lab/Class fee will be assessed.

ART 422 DESIGNING FOR PRODUCTION (3)
Experience designing and manufacturing multiples. Historical and contemporary object production and production methodologies. Various aspects of business, pricing, market analysis. Prerequisites: ART 318 and ART 319.

ART 426 FABRIC DESIGN: DYEING II (3)
Directed and independent studio problems in fabric, design, batik, tie-dye, stencilwork, and handpainting. Prerequisite: ART 326 or consent of instructor.

ART 431 WATERCOLOR II (3)
Intermediate studio experience: landscape, still life, figure and photographic imagery. Prerequisite: ART 331. Lab/Class fee will be assessed.

ART 435 PHOTO IMAGING - PORTFOLIO (3)
Advanced research into the aesthetic of Photo Imaging portfolio organization, construction and representation through the use of print and deelectronc imaging technology. May be repeated for up to 9 units. Prerequisites: ART 334 and ART 335 and ART 357. Lab/Class fee will be assessed.

ART 436 PERSONAL DIRECTION IN PAINTING (3)
Continued studio experience for advanced students with emphasis on personal direction. May be repeated for a maximum of 9 units. Prerequisites: Two of the following: ART 323, ART 324, ART 325, ART 344.

ART 438 HOLLOWWARE AND FORGING (3)
Advanced lecture, demonstration, and directed studio problems in hollowware and flatware focusing on raising, seaming, fabrication, and forging techniques for silver and non-ferrous metals. Prerequisite: ART 319. Lab/Class fee will be assessed.

ART 441 ADVANCED SCULPTURE I (3)
Lecture and directed studio problems in advanced sculpture media and concepts. Prerequisite: any 300-level sculpture course. Lab/Class fee will be assessed.

ART 443 ADVANCED SCULPTURE (3)
Continued lecture and directed studio problems in advanced sculptural media and concepts. Prerequisite: ART 441 or ART 414/ART415/ART 416.

ART 445 EXPERIMENTAL DIRECTIONS (3)
Lecture and directed studio problems: recent sculptural trends, concepts and technologies, including installation, performance, environments, computers, etc. Prerequisite: ART 241 or consent of instructor.

ART 446 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART II (3)
Continued studio experience for advanced students with emphasis on personal direction. Prerequisite: ART 446.

ART 447 SCREEN PROCESS II (3)
Advanced color projects using direct photo emulsion emphasizing integration of hand drawn images with photo and computer-generated images with non-toxic inks. Prerequisite: ART 347 or consent of instructor. Lab/Class fee will be assessed.

ART 449 RELIEF PROCESS II (3)
Traditional and experimental processes. Advanced color assignments using oil and water-based inks. Prerequisite: ART 349 or consent of instructor. Lab/Class fee will be assessed.

ART 450 INTAGLIO PROCESS II (3)
Multiple plate color and simultaneous color/intaglio/relief techniques and collagraph using experimental materials. Prerequisite: ART 350. Lab/Class fee will be assessed.

ART 453 LITHOGRAPHY PROCESS II (3)
Personal expression; advanced printing including stone-plate and photo plate. Multiple color printing. Prerequisite: ART 417. Lab/Class fee will be assessed.

ART 456 TYPOGRAPHY II (3)
Advanced research and exploration of type solutions. Prerequisite: ART 417. Lab/Class fee will be assessed.

ART 457 GRAPHIC DESIGN III (3)
Problems in graphic communication on the Macintosh, emphasizing individual portfolio development. Prerequisite: ART 417. Lab/Class fee will be assessed.

ART 461 DIGITAL OBJECT DESIGN II (3)
Studio problems in digital 3D modeling and rendering. Introduction to computer-aided machining and rapid prototyping. Course can be repeated for a maximum of 6 units. Prerequisite: ART 361. Lab/Class fee will be assessed.

ART 462 DIGITAL ILLUSTRATION (3)
Studio experience in producing illustration on the computer. Prerequisites: ART 360 and ART 373. Lab/Class fee will be assessed.

ART 463 INTERACTIVE MEDIA: EXPERIMENTAL (3)
Experimental processes in interactive media. Emphasis on developing conceptual art that explores interactive media in relation to contemporary practices. Prerequisite: ART 363. Lab/Class fee will be assessed.
ART 465 GRAPHIC DESIGN SOCIAL ISSUES (3)
Examination and production of graphic design as an agent of social and political expression. Prerequisites: ART 317 and ART 355. Lab/Class fee will be assessed.

ART 466 DESIGN FOR THE WWW II (3)
Advanced web authoring techniques and research as related to interactivity, information design, and web usability. Prerequisites: ART 365 and ART 355. Lab/Class fee will be assessed.

ART 468 INDUSTRIAL DESIGN II (3)
Product solutions and idea development related to operation and manufacturing, including human factors and ergonomics analysis. Prerequisite: ART 368.

ART 469 INDUSTRIAL DESIGN III (3)
Advanced issues in product design, including experimentation in group projects and individual designs. Prerequisites: ART 366, ART 367, ART 468.

ART 471 PROGRAMMING FOR DESIGNERS (3)
Introduction to programming for design applications. Script language projects with a focus on current art and design concept and theory. Prerequisite: ART 365.

ART 472 ADVANCED DRAWING II (3)
Continued studio experience in drawing for advanced students. Emphasis on conceptual approaches, independent problems, and personal direction. May be repeated for a maximum of 6 units but not in the same semester. Prerequisite: ART 372.

ART 473 ILLUSTRATION CONCEPTS FOR DESIGNERS AND ILLUSTRATORS (3)
Developing contextual understanding of imagery in design through problem solving skills and visual/verbal vocabulary. Prerequisite: ART 373. Lab/Class fee will be assessed.

ART 474 ADVANCED ILLUSTRATION (3)
Advanced studio experience utilizing a variety of contemporary and experimental media, emphasizing creative exploration and building a professional portfolio. Prerequisite: ART 473. Lab/Class fee will be assessed.

ART 475 SIMULATION DESIGN (3)
Introduction to the concept and theory of simulation design including applied projects designing simulation objects, virtual environments, and scripted content. Prerequisite: ART 365.

ART 476 ANIMATION I (3)
Exploration of animation techniques and processes including character / narrative development, 3D and 2D environments, and creative process. Lab application related to drawing, 2D digital animation, visual effects, stop motion animation, and interactive media. Prerequisite: ART 322.

ART 477 ANIMATION II (3)
Exploration of advanced animation techniques and processes including character / narrative development, 3D environments, and creative processes. Lab application related to drawing / 3D modeling for animation, visual effects and interactive media. Prerequisite: ART 476.

ART 478 ELEMENTS OF GAME DESIGN (3)
Exploration of game development and processes including terminology, history, genres/platforms, concept art, character development and illustration techniques. Lab application related to design, concept art, illustration, animation, and interactive media. Prerequisite: ART 362.

ART 480 INFORMATION + INTERFACE DESIGN II (3)
Advanced projects in information architecture, user interface design and usability for interactive media design applications. Prerequisites: Art +Design major; ART 380; consent of instructor.

ART 483 PACKAGE DESIGN (3)
Designing packages with understanding of marketing, social, ethical and environmental impact. Prerequisites: ART 317 and ART 355. Lab/Class fee will be assessed.

ART 490 INTERNSHIP IN ART (2-3)
A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Graded S/U. Prerequisite: consent of instructor.

ART 491 INTERNSHIP IN ART (2-3)
A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Graded S/U. Prerequisite: consent of instructor.

ART 492 INTERNSHIP IN ART (2-3)
A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Graded S/U. Prerequisite: consent of instructor.

ART 494 TRAVEL AND STUDY ABROAD (3-6)
Countries and topics to be selected by the department and instructors sponsoring the program. For information, contact the Department of Art early in the semester preceding the semester of travel study. Prerequisites: consent of instructor and interview.

ART 496 GRAPHIC DESIGN: PORTFOLIO (3)
Directed studio. Critiques and professional development culminating in a presentation / portfolio. Prerequisites: ART 456 & ART 457, senior standing; consent of instructor. Lab/Class fee will be assessed.

ART 497 SENIOR PROJECT (3)
Directed studio. Critiques culminating in a presentation/portfolio. Prerequisite: consent of instructor. Lab/Class fee will be assessed.

ART 498 BFA PROJECT (3)
Directed studio for BFA students. Critiques culminating in presentation of work. Prerequisites: consent of instructor. Lab/Class fee will be assessed.

ART 499 HONORS THESIS IN ART (4)
Honors in studio art. An exhibition of work resulting from Independent Study and Honors studio courses, accompanied by a supporting paper defining the philosophy and purpose of the project, under the direction of a thesis adviser. Prerequisite: approval of adviser and admittance to department Honors Program.