

ART AND DESIGN

The Art and Design discipline provides foundational courses in Art History, 2D and 3D Design, Graphic Design, Illustration, Photography, Videography, Printmaking, Drawing, Painting, Ceramics, Metal arts, Product Design, User Experience (UX), Interface Design (UI), and Animation. In-person and online courses offer students substantial opportunities for the in-depth creative investigation, analysis, evaluation, production, and exhibition of artworks in variety of media. The Bend Campus' Pence, Ochoco, and Ponderosa Halls house dedicated studio art and design spaces equipped with a wide variety of professional quality and industry-standard art-making equipment, technology, and materials, all exclusively for student use. Exhibitions at the Pinckney Gallery in Pence Hall offer additional opportunities for students to display their work and view exhibitions by COCC faculty and staff, visiting artists, and members of the Central Oregon Art and Design community.

The Art and Design discipline offers transfer and certificate pathways for students planning to continue as art majors in baccalaureate programs, or to move directly into the workforce. One-year certificate programs include [Graphic Design](#), [Illustration](#), [Photography/Videography](#), and [UX/UI](#).

See the [Art and Design](#) page for program and contact information.

Degrees and Certificates

Career and Technical Education

One-Year Certificate of Completion

- [Graphic Design - One-Year Certificate of Completion \(CC1\)](#)
- [Illustration - One-Year Certificate of Completion \(CC1\)](#)
- [Photography/Videography - One Year Certificate of Completion \(CC1\)](#)
- [User Experience and Interface Design \(UX/UI\) - One Year Certificate of Completion \(CC1\)](#)

Transfer

Associate of Arts Oregon Transfer

- [Art and Design - Associate of Arts Oregon Transfer \(AAOT\)](#)

Courses

ARH 180 Co-op Work Experience Art History (1-4 Credits)

Prerequisites: Instructor approval.

Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. Repeatable for credit. P/NP grading.

ARH 199 Selected Topics: Art History (1-4 Credits)

This course is in development.

ARH 201 Art History: Western: Prehistory to Early Byzantine (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

Surveys the major periods of visual arts in the West, with a focus on the ancient world. Introduces students to the concepts of art and surveys the development of art in historical context from Prehistory through the early Byzantine Empire. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

ARH 202 Art History: Western: Early Medieval to Late Renaissance (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

Surveys the major periods of visual arts in the West, with a focus on the Middle Ages and the Renaissance. Introduces students to the concepts of art and surveys the development of art in historical context from the Early Middle Ages through the Late Renaissance. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

ARH 203 Art History: Western: Baroque to Early Modern (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

Surveys the major periods of visual arts in the West with an emphasis on the Baroque through early Modern eras. Introduces students to the concepts of art and surveys the development of art in historical context from the early 1600s through the turn of the 20th Century. Emphasizes selected works of painting, sculpture, architecture, and other arts studied in relation to the cultures producing them.

ARH 206 Art History: Western: Modern and Contemporary (4 Credits)

A specialized chronological survey of Modern and Contemporary art from the mid-19th Century to the present day. Explores the many eclectic developments in Modern art from its beginnings through the Postmodern contemporary era. Emphasizes major artists, movements, and critical concepts in modern art and theory, and relates those concepts to the art of the past as well as issues facing artists and society today.

ARH 207 Native American Art History (4 Credits)

Survey of the arts indigenous to Mesoamerican and North American Indian cultures emphasizing architecture, pottery, painting and the fiber arts.

ARH 208 Art History: Non-Western (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

A specialized survey of the art of Non-Western cultures around the world, from the Prehistoric past through the present day. This course will examine the artistic and cultural traditions of Islam, India, East Asia, the Pacific Islands, Sub-Saharan Africa, and the Americas. The course will focus on understanding select works of art and architecture within their original cultural, religious, and historical contexts, and will contrast various Non-Western artistic philosophies and values with those of the Western world.

ARH 269 Design and Illustration History (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

Introduces history of graphic design and illustration as a form of visual communication.

ARH 270 Photography History (4 Credits)

Recommended preparation: WR 065 or higher or minimum placement Wr/Comm Level 7.

Explores the evolution of photography from its invention in the 19th century to its contemporary artforms in the present day. Introduces key technologies, influential photographers, and socio-political contexts that shape the photographic image. Illustrates photography's impact on art, media, and society, as well as how it intersects with modern and postmodern visual ways of life. Emphasizes photography's function as both a documentary and a creative medium. Builds skill in critiquing technical, cultural, and artistic traits.

ARH 298 Independent Study: Art History (1-6 Credits)

Prerequisites: Instructor approval.

Recommended preparation: prior coursework in the discipline. Individualized, advanced study in art history to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading.

ARH 299 Selected Topics: Art History (1-4 Credits)

Provides a learning experience in art history not currently available; this course is in development to be proposed as a permanent course.

ART 101 Introduction to the Visual Arts (4 Credits)

Introduces approaches to the understanding and appreciation of the visual arts. Provides a foundation in basic concepts, vocabulary of the elements of art, and principles of design as well as materials, methods, and processes. Explores a wide variety of artworks from diverse cultures. May include some hands-on experience with various media.

ART 101AM Animation History and Current Practices (4 Credits)

Introduces animation history, production techniques, and current industry practices. Explores its spirit of experimentation and constant iterative renewal, as well as an ever-expanding interplay with industries including architecture, medicine, data science, and education.

ART 102 Introduction to Art and Design Careers (3 Credits)

Introduces a comprehensive range of art and design professions presented by industry professionals. Provides tools and resources for making informed career decisions. Covers assessing skills, values, interests, barriers, education, and training as well as portfolio requirements. Explores essential skills required for successful careers in art and design. Repeatable for credit.

ART 110 Beginning Graphic Design (4 Credits)

Recommended preparation: ART 141 or may be taken concurrently. Introduces standard graphic design concepts and principles. Introduces functionality of industry standard graphic design software. Includes projects that use these applications for the purposes of layout for various forms of digital output and print. Repeatable for credit.

ART 111 2-D Animation: Basics (4 Credits)

Recommended preparation: ART 101AM, ART 141, and ART 142. Recommended to be taken with: ART 112.

Introduces 2-D animation principles through practical, iterative exercises, emphasizing techniques that apply to any animation style. Covers visual problem solving for 2-D digital motion using industry standard software. Repeatable for credit.

ART 112 2-D Animation: Narrative and Scene Building (4 Credits)

Recommended preparation: ART 101AM, ART 141, and ART 142.

Recommended to be taken with: ART 111. Introduces principles of narrative story development and professional techniques for generating and presenting storyboards. Focuses on effective shot conception, sequence pacing, and staging methods using industry standard software. Repeatable for credit.

ART 113 3-D Animation: Basics (4 Credits)

Prerequisites: ART 111.

Recommended preparation: ART 101AM and ART 112. Recommended to be taken with: ART 114.

Introduces 3-D animation principles and techniques for production of shots, sequences, and digital motion graphics using industry standard software. Focuses on efficient workflows and iterative scene development. Repeatable for credit.

ART 114 3-D Animation: Modeling (4 Credits)

Prerequisites: ART 111.

Recommended preparation: ART 101AM and ART 112. Recommended to be taken with: ART 113.

Introduces 3-D modeling and texturing principles and techniques for primarily hard surface models using industry standard software. Focuses on efficient workflows and iterative model development. Repeatable for credit.

ART 115 Basic Design: 2-D (4 Credits)

Introduces concepts and principles of visual language and basic design in two dimensions. Applies the elements of art and principles of design to communicate ideas and solve problems. Emphasizes critical thinking and creative problem solving in a variety of two-dimensional artistic media. Repeatable for credit.

ART 116 Basic Design: Color (4 Credits)

Introduces concepts and principles of color theory related to the visual arts. Make informed color choices to communicate ideas through studying scientific research (theory) and hands-on projects (practice). Emphasizes critical thinking and creative problem solving in a variety of media. Repeatable for credit.

ART 117 Basic Design: 3-D (4 Credits)

Introduces concepts and principles of visual language and basic design in three dimensions. Applies the elements of art and principles of design to communicate ideas and solve problems. Emphasizes critical thinking and creative problem solving in a variety of three-dimensional artistic media. Repeatable for credit.

ART 121 Ceramics: Introduction to Hand Building (4 Credits)

Introduces basic hand building skills, simple glaze application, and an understanding of fundamental ceramic processes for students with little or no experience. Includes presentation of historical, cultural, and contemporary trends in ceramics. Repeatable for credit.

ART 122 Ceramics: Introduction to Wheel Throwing (4 Credits)

Introduces basic wheel throwing skills, simple glaze application, and an understanding of fundamental ceramic processes for students with little or no experience. Includes presentation of historical, cultural and contemporary trends in ceramics. Repeatable for credit.

ART 131 Beginning Drawing (4 Credits)

Recommended preparation: ART 115.

Emphasizes observing and developing fundamental drawing and composition skills. Uses still life material extensively. Covers historical and cultural approaches to drawing and drawing materials. Repeatable for credit.

ART 132 Intermediate Drawing (4 Credits)

Recommended preparation: ART 131.

Builds on drawing fundamentals from ART 131. Introduces use of color in drawings. Create and analyze projects that demonstrate critical and creative thinking. Demonstrate individual exploration of process and content. Repeatable for credit.

ART 140 Sequential Art: Non-Digital (4 Credits)

Recommended preparation: ART 115 or may be taken concurrently. Covers the development and fundamentals of sequential storytelling using traditional media and techniques. Includes narrative structure, character and environment interaction, and working with color and composition. Complete work in style and genre preferred. Repeatable for credit.

ART 141 Vector Art Illustration (4 Credits)

Recommended preparation: ART 115 or may be taken concurrently. Introduces professional techniques for generating vector art and graphics. Covers visual problem solving and the process of creating vector illustrations using industry standard software through the use of reference and research. Repeatable for credit.

ART 142 Digital Painting: Basic Techniques (4 Credits)

Recommended preparation: ART 115 or may be taken concurrently. Translate traditional drawing and painting techniques using digital tools on the computer. Includes use of pressure-sensitive electronic pen tablets, stylus, and industry-standard software to create digital art that implements various traditional mediums. Emphasizes concept and personal style development. Repeatable for credit.

ART 143 Scientific Illustration: Basic Techniques (4 Credits)

Recommended preparation: ART 131 and ART 234. Learn the basic techniques to visually interpret scientific principles. Attention to the tools and skills essential for creating accurate and effective scientific illustrations. Emphasis on keen observational skills and communicating accurate information using a variety of media. Repeatable for credit.

ART 157 Metal Arts: Basic Techniques (4 Credits)

Introduces basic hand-tool knowledge, soldering, and fabrication of metalworking, adornment, and vessels. Covers historical and contemporary art, jewelry, and metal smithing. Repeatable for credit.

ART 158A1 Metal Arts: Surfaces (4 Credits)

Includes methods used to change the surface of non-ferrous metals. Techniques used for projects may include reticulation, keum-boo, patinas, embossing, overlay, and fusing. Repeatable for credit. Prerequisite: ART 157.

ART 158B1 Metal Arts: Beginning Casting (4 Credits)

Prerequisites: ART 157. Introduces centrifugal, lost-wax casting process. Cast, sprue, and invest small-scale wax models sculpted using additive and subtractive methods. Repeatable for credit.

ART 158B2 Metal Arts: Intermediate Casting (4 Credits)

Prerequisites: ART 158B1. Builds on the skills learned in ART 158B1. Includes centrifugal, vacuum, cuttlebone, and sand casting. Explores the use of molds to duplicate textures to transfer onto wax, creating stone settings in wax, and controlling the wax burn-out. Repeatable for credit.

ART 159A1 Metal Arts: Forming (4 Credits)

Prerequisites: ART 157. Create non-ferrous metal projects using forming methods. Projects include jewelry, containers, and small-scale sculptures fabricated using folding, scoring, chasing, repousse, and other metalworking techniques used to form metal. Repeatable for credit.

ART 159C1 Metal Arts: Enameling (4 Credits)

Prerequisites: ART 157. Explores the use of color in various metals through the application of enameling techniques and processes. Repeatable for credit.

ART 159C2 Metal Arts: Setting (4 Credits)

Prerequisites: ART 157. Explores the use of color in metalwork through stone selection and setting techniques. Repeatable for credit.

ART 161 Photography: Darkroom Basics (4 Credits)

Recommended preparation: ART 115. Introduces traditional black-and-white photography, including camera operation, composition, film processing, printing, presentation, and developing personal voice as an artist. Repeatable for credit.

ART 165 Videography: Basic Techniques (4 Credits)

Recommended preparation: ARH 270 and ART 265. Covers the basic aspects of video production, while emphasizing students' personal and creative expression. Includes the theory and practice of visualization, the grammar of visual storytelling, the aesthetics of various video production styles, camera techniques, lighting, sound recording, video editing post-production, and other fundamentals related to learning the craft of video production. Repeatable for credit.

ART 166 Photography: Lighting Techniques (4 Credits)

Prerequisites: ART 265. **Recommended preparation:** ARH 270. Recommended to be taken with: ART 267. Explores the basic fundamentals of photography lighting. Introduces lighting setups for various genres of photography, including fine art and commercial. Examines the concept of artistic vision, lighting styles, conditions, exposure, and composition. Repeatable for credit.

ART 180 Co-op Work Experience Art (1-4 Credits)

Prerequisites: Instructor approval. Provides experience in which students apply previous classroom learning in an occupational setting. Credits depend on the number of hours worked. Repeatable for credit. P/NP grading.

ART 181 Beginning Painting (4 Credits)

Recommended preparation: ART 115 and ART 131. Introduces materials and techniques of painting, using alkyd oil, acrylic, and/or water-soluble oil paints. Provides essential painting skills such as building canvas supports, stretching canvas, and preparing painting grounds. Employs multiple subject matter opportunities for paintings.

ART 184 Beginning Watercolor (4 Credits)

Explores the unique qualities of watercolor as a painting medium. Emphasizes fundamental skills, color, and composition while painting from a variety of subjects. Repeatable for credit.

ART 185 Intermediate Watercolor (4 Credits)

Recommended preparation: ART 131 and ART 184. Continues exploration watercolor's unique qualities as a painting medium. Emphasizes fundamental skills, color, and composition while painting from a variety of subjects. May be repeated for credit.

ART 190 Figurative Clay Sculpture (4 Credits)

Recommended preparation: ART 121 and ART 234. Introduction to modeling the human form in clay from clothed and unclothed models using traditional additive and subtractive processes. Historical treatments of the figure and contemporary approaches will be referenced. Repeatable for credit.

ART 191 Sculpture (4 Credits)

Recommended preparation: ART 117. Introduces the 3D format and exposes students to an overview of processes, tools, and materials used in sculpture. Explores the relationship of ideas to materials and construction techniques using additive, subtractive, and construction processes. Repeatable for credit.

ART 199 Selected Topics: Art (1-3 Credits)

This course is in development.

ART 230 Intermediate Graphic Design (4 Credits)

Prerequisites: ART 110 and ART 141.

Recommended preparation: ART 115 and ART 116 or may be taken concurrently.

Explores developing innovative solutions to problems of visual communication in graphic design. Emphasizes concept and creation of designs with targeted intention. Introduces graphic design practice, theory, methodologies, and delivery systems including branding, typography, print and digital advertising, packaging, and promotional design. Builds upon technical skills gained in ART 110 and ART 141. Repeatable for credit.

ART 234 Figure Drawing (4 Credits)

Recommended preparation: ART 131.

Introduces drawing the clothed and unclothed figure using a variety of techniques and media. Uses models for the study of the human figure and portrait. Addresses representational and expressive approaches. Repeatable for credit.

ART 240 Digital Illustration: Concept (4 Credits)

Prerequisites: ART 141 and ART 142.

Recommended preparation: ART 115 and ART 116 or may be taken concurrently.

Explores visual communication, the process of concept illustration, and rendering with industry-standard software. Introduces character, environmental, and storyboard illustration. Emphasizes development of preliminary art. Repeatable for credit.

ART 241 Digital Illustration: Narrative (4 Credits)

Prerequisites: ART 141 and ART 142.

Recommended preparation: ART 115 and ART 116 or may be taken concurrently.

Explores visual communication, the process of narrative illustration, rendering with industry standard software. Introduces companion (book), sequential (graphic novel/comics), and editorial illustration. Focuses on developing illustrations in conjunction with written concepts. Emphasizes professional presentation of work. Repeatable for credit.

ART 243 Digital Illustration: Scientific (4 Credits)

Prerequisites: ART 141, ART 142, and ART 143.

Recommended preparation: ART 110, ART 115, and ART 116 or may be taken concurrently.

Explores the intersection of traditional and digital scientific illustration using industry-standard software. Emphasizes advanced observational accuracy and effective communication. Builds on the foundations learned in ART 143 and digital techniques covered in ART 141 and 142. Repeatable for credit.

ART 253 Ceramics: Intermediate Ceramics (4 Credits)

Recommended preparation: ART 121 and ART 122.

Builds upon technical skills gained in ART 121 and ART 122 with attention to design elements. Includes presentation of historical, cultural, and contemporary trends in ceramics. Develops a unique body of work for presentation or exhibition. Repeatable for credit.

ART 261 Photography: Intermediate Darkroom (4 Credits)

Prerequisites: ART 161.

Builds on darkroom basics in traditional black-and-white photography, including camera operation, composition, film processing, printing, presentation, and developing personal voice as an artist. Repeatable for credit.

ART 265 Photography: Digital Basics (4 Credits)

Introduces the photographic process including camera settings and techniques with an emphasis on creative expressions. Emphasizes exposure, depth-of-field, motion, composition, and image quality using a DSLR or Mirrorless camera. Repeatable for credit.

ART 266 Ceramics: Raku (2 Credits)

Recommended preparation: ART 121 or ART 122.

Introduces basic hand-building and wheel-throwing techniques, glazing, and firing processes for raku firing ceramics. Includes presentation of historical, cultural, and contemporary trends in raku fired ceramics. Repeatable for credit.

ART 267 Photography: Digital Editing (4 Credits)

Prerequisites: ART 265.

Recommended preparation: ARH 270. Recommended to be taken with: ART 166.

Introduces industry-standard photo editing software and techniques including manipulating, enhancing, retouching digital images. Prepares students for career requirements through development of suitable images for portfolios and retouching tests. Repeatable for credit.

ART 268 Videography: Intermediate (4 Credits)

Prerequisites: ART 165.

Recommended preparation: ARH 270; ART 166; and ART 265.

Builds on the the skills learned in ART 165 including camera techniques, sound, and editing. Explores development of an independent short film production in the roles of writer, producer, videographer, and editor. Emphasizes taking a film project through the production process, including pre- and post-production. Repeatable for credit.

ART 269AC Photography: Fine Art & Commercial (4 Credits)

Prerequisites: ART 265 and ART 267.

Recommended preparation: ARH 270 and ART 166.

Introduces two pathways in photography for career development, Fine Art and Commercial. Focuses on artistic and conceptual aspects of photography, employing photography as a medium of self-expression and creativity in fine art. Utilizes technical skills in the service of commercial photography to photograph material for print, sales, or digital advertising. Repeatable for credit.

ART 269PJ Photography: Photojournalism (4 Credits)

Prerequisites: ART 265 and ART 267.

Recommended preparation: ARH 270 and ART 166.

Develops basic skills needed for effective online and print photography for use in newspapers, magazines, web journals, and blogs. Focuses on developing appropriate behavior and craft needed to meet publication deadlines. Presents a variety of photojournalistic work, such as news photographs, human interest and feature pictures, political campaigns, live performances, press conferences, sporting events, or as stories that explore contemporary social issues. Emphasizes importance of print quality, picture editing, image content, captioning, journalistic ethics, and business practices for freelance and staff photojournalists. Repeatable for credit.

ART 270 Beginning Printmaking (4 Credits)

Recommended preparation: ART 131.

Introduces relief printmaking techniques and the art of producing multiple prints. Distinguishes the hand-pulled print from mechanical duplication, situating the art of printmaking within a historic context. Integrates drawing, design principles, and conceptual frameworks as a uniquely independent form of artistic communication. Repeatable for credit.

ART 271 Intermediate Printmaking (4 Credits)**Recommended preparation:** ART 131 and ART 270.

Builds on relief printing fundamentals from ART 270. Introduces color processes to relief printmaking. Addresses site-specificity in the context of the multiple. Includes working collaboratively, while promoting the exploration of individual ideas and concepts. Repeatable for credit.

ART 273 Printmaking: Mixed Media Monotype (4 Credits)**Recommended preparation:** ART 270 and ART 271.

Introduces experimental printing methods in single and multiple colors. Incorporates bookmaking into the art of printmaking. Emphasizes individualized, personal expression and exploration. Repeatable for credit.

ART 281 Intermediate Painting (4 Credits)**Recommended preparation:** ART 181.

Continues exploration of the materials and techniques of painting with alkyd oil, acrylic, and/or water-soluble oil paints. Emphasizes color theory and personal expression. Repeatable for credit.

ART 289 Custom Framing for Art (4 Credits)

Introduces the art of custom framing for all types of artwork. Techniques for identifying types of art and how to properly display and protect them. Create custom frames, hand-cut mats, glazing, and mounting using framing-specialized tools. Conversational practices will be emphasized. Repeatable for credit.

ART 291 Mold Making for Sculpture (4 Credits)**Recommended preparation:** ART 117, ART 191, and/or ART 121.

Emphasizes development of intermediate skills and technical knowledge in mold making processes. Includes a variety of molds, such as plaster molds for ceramic slip casting, block molds, two-part molds, and complex molds. Examines themes that include Mold Making and Casting in Art and Industry, Historical Uses of Mold Making, and Contemporary Materials and Processes. Repeatable for credit.

ART 295 Portfolio Development and Business Practices (4 Credits)**Recommended preparation:** ART 110, ART 141, ART 265.

Develop a visual art portfolio and other written materials suitable for professional opportunities. Introduces strategies appropriate for all types of visual artists and the business of art and entrepreneurship, as well as strategies for work-place and/or client communication including preparation for job interviews and portfolio reviews. Recommend an already-developed body of artwork for course success. Repeatable for credit.

ART 296 Creative Team (1 Credit)**Prerequisites:** Instructor Approval Required.**Recommended preparation:** ART 110, ART 141, and ART 265.

Provides experience for students to apply previous classroom learning as a creative team to develop art, designs, illustrations, and photography for various assigned professional work. Repeatable for credit. P/NP grading.

ART 297 Capstone Project: All Media (1 Credit)**Recommended preparation:** Completion of secondary level course in chosen medium.

Provides advanced, individualized development in visual arts. Develop a unique project in chosen medium. Provides opportunity for in-depth concept, research, development, and final presentation of long term project. Repeatable for credit.

ART 297GD Capstone Project: Graphic Design (1 Credit)**Prerequisites:** ART 110.

Recommended preparation: ART 230 or may be taken concurrently. Provides advanced, individualized development in graphic design. Develop a unique design project. Provides opportunity for design campaign to go through marketing strategy, development, and final presentation. Repeatable for credit.

ART 297IL Capstone Project: Illustration (1 Credit)**Prerequisites:** ART 141 and ART 142.

Recommended preparation: ART 143 or 240 and ART 241 or 243 or may be taken concurrently.

Provides advanced, individualized development in illustration. Develop a unique concept, narrative, or scientific illustration project. Provides opportunity for in-depth concept, research, development, and final presentation of long term project. Repeatable for credit.

ART 297MA Capstone Project: Metal Arts (1 Credit)**Prerequisites:** ART 157.

Provides advanced, individualized development in metal arts. Develop a unique project or series. Provides opportunity for in-depth concept, research, development, and final presentation of long-term project. Repeatable for credit.

ART 297PM Capstone Project: Printmaking (1 Credit)**Prerequisites:** ART 270.**Recommended preparation:** ART 271.

Provides advanced, individualized development in printmaking. Develop a unique project or series. Provides opportunity for in-depth concept, research, development, and final presentation of long-term project. Repeatable for credit.

ART 297PV Capstone Project: Digital Photo/Video (1 Credit)**Prerequisites:** ART 265.**Recommended preparation:** ART 267.

Provides advanced, individualized development in digital photography and/or video production. Provides opportunity for in-depth concept, research, development, and final presentation of long-term project. Repeatable for credit.

ART 298 Independent Study: Art (1-6 Credits)**Prerequisites:** Instructor approval.

Recommended preparation: prior coursework in the discipline. Individualized, advanced study to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading.

ART 299 Selected Topics: Art (1-6 Credits)

This course is in development.

DSGN 101 Introduction to Product Design (4 Credits)

Explores the multidisciplinary field of product design, emphasizing problem-solving and creativity through design thinking and the design process. Examines a range of product categories and analyzes historical and contemporary designs to build a comprehensive understanding of the discipline. Emphasizes sustainable practices, material selection, manufacturing technologies, and the psychology of design. Develops foundational skills in iterative design methodologies to conceptualize and refine innovative product ideas. Repeatable for credit.

DSGN 103 User Experience (UX) Research Methodologies (4 Credits)**Recommended to be taken with:** DSGN 104.

Introduces students to methods for understanding their user in order to guide their design decisions. Emphasizes how to conduct user research using different research methodologies, the design of studies and interviews, and how to analyze research and present research findings. Teaches the fundamentals of user research methodologies.

DSGN 104 UX Design Principles (4 Credits)**Recommended to be taken with:** DSGN 103.

Introduces the fundamental design principles of User Experience (UX). Emphasizes how to analyze and apply principles to UX design. Builds on concepts from UX Research Methods.

DSGN 130 Product Design Fundamentals (3 Credits)**Recommended to be taken with:** DSGN 101.

Preparation for safely operating and maintaining a product workshop. Provides hands-on training setting up efficient production workflow plans for product fabrication. Develops skills to design and fabricate products, branding, packaging, and presentations. Repeatable for credit.

DSGN 140 3D Modeling: Parametric (4 Credits)

Introduces essential tools and techniques for parametric 3D modeling using industry-standard CAD software. Focuses on creating detailed 3D models, precise technical drawings, and photorealistic product renderings for effective communication in the design and manufacturing industries. Emphasizes hands-on application to develop technical and creative skills. Repeatable for credit.

DSGN 150 Design for Production (3 Credits)**Prerequisites:** DSGN 130 and DSGN 140.

Provides the tools and techniques to generate computer-aided manufacturing (CAM) files for production. Preparation for analyzing design and material data to determine machine tooling and machining speeds and feeds. Provides hands-on training designing for production and safely operating CNC routers, laser engravers, and 3D printers. Repeatable for credit.

DSGN 180 Co-op Work Experience Design (1-4 Credits)**Prerequisites:** Instructor approval.

Provides experience in which students apply previous classroom learning in an occupational setting for design. Credits depend on the number of hours worked. P/NP grading. Repeatable for credit.

DSGN 197PD Portfolio Development: Product Design (1 Credit)**Prerequisites:** DSGN 101; DSGN 130; DSGN 140 and DSGN 150.

Develop a product design portfolio. Create a resume, website, and branded materials. Learn how to search for job opportunities, apply for grants and scholarships, and interview for jobs. Review career pathways, as well as art school and university requirements. Developed body of design work suggested for the course. Repeatable for credit.

DSGN 199 Selected Topics: Design (1-4 Credits)

Provides a learning experience in Design not currently available; this course is in development to be proposed as a permanent course. Repeatable for credit.

DSGN 201 Professional Practices & Portfolio Development (4 Credits)

Covers the professional aspects of design, including client communication, project management, ethical practices, and effective collaboration. Emphasizes the development of a professional portfolio that showcases students' design abilities and projects, as well as how to present their work in both digital and physical formats. Designed to prepare students for the professional world through a combination of theoretical understanding and practical application of skills and knowledge. Repeatable for credit.

DSGN 202 User Interface Design (UI) (4 Credits)**Prerequisites:** ART 141 and DSGN 104.**Recommended to be taken with:** DSGN 203.

Introduces professional techniques for generating UI designs and workflows for a design. Covers visual and workflow problem solving and the process of creating component libraries, screen layouts, and using industry standard software to create a design. Repeatable for credit.

DSGN 203 Usability Testing (4 Credits)**Prerequisites:** DSGN 103 and DSGN 104.**Prerequisites with concurrency:** DSGN 202.

Introduces the concept of usability testing for UI design. Emphasizes how to plan, create, and complete a usability study. Repeatable for credit.

DSGN 230 Product Design Studio I (4 Credits)**Prerequisites:** DSGN 140.

Provides an immersive learning experience that emphasizes digital design with advanced tools for manufacturing and creative exploration and that is structured around core concepts such as design thinking, sustainable and inclusive design practices, and the understanding of current manufacturing technologies. Covers the multifaceted factors that drive product design, from initial idea generation to conceptual realization and encourages the fusion of creativity with practical design skills. Repeatable for credit.

DSGN 240 3D Modeling: Organic (4 Credits)

Explores 3D modeling techniques with a focus on organic and sculptural forms. Emphasizes aesthetics, surface refinement, and complex geometry using industry-standard software. Builds skills to create dynamic, intricate designs tailored for real-world applications in product design.

DSGN 245 3D Printing: Design & Production (4 Credits)

Explores foundational design principles for 3D printing using industry-standard tools. Focuses on optimizing designs for additive manufacturing, emphasizing creativity and problem-solving through digital applications. Develops skills in conceptualizing, modeling, and preparing innovative designs ready for 3D printing. Repeatable for credit.

DSGN 250 3D Printing: Materials & Technology (4 Credits)

Examines the properties and applications of sustainable materials in 3D printing. Explores innovative material use and its impact on functionality, aesthetics, and sustainability. Analyzes cultural and ethical considerations in material selection for modern design through digital exploration. Repeatable for credit.

DSGN 257 Metal Arts: Production (3 Credits)**Prerequisites:** ART 158B1.

Introduces tools and techniques for creating multiple metal objects using production processes. Repeatable for credit.

DSGN 260 3D Printing: Product Development (4 Credits)

Focuses on the complete process of developing 3D printed products, from concept to prototype. Emphasizes design thinking, iterative methodologies, and the integration of aesthetics and functionality. Builds skills to create market-ready designs for 3D printing through online design tools. Repeatable for credit.

DSGN 296PD Creative Team: Product Design (1 Credit)**Prerequisites:** Instructor Approval Required.**Recommended preparation:** DSGN 130 and DSGN 140 .

Provides experience for students to apply previous classroom learning as a creative team to develop product designs for various assigned professional work. P/NP grading. Repeatable for credit.

DSGN 297PD Capstone: Product Design (4 Credits)

Prerequisites: DSGN 140.

Offers a culminating learning experience for students that blends advanced, individualized development with practical application of design skills and knowledge. Requires the design and development of a unique product or product line, encompassing all stages from initial concept to manufacturing readiness and includes in-depth market research, concept development, digital product design and evolution, brand development, packaging design, and preparation for outsourced manufacturing.

Synthesizes the entire product design process to allow students to showcase their accumulated skills and creativity and prepare them for the professional world of product design. Repeatable for credit.

DSGN 297UX Capstone Project: UX/UI (4 Credits)

Prerequisites: DSGN 203.

Provides advanced, individualized development in UX design. Develop two new features to add to the project started in DSGN 203. Provides opportunity for creating an app with multiple features, iterative development, and final presentation. Repeatable for credit.

DSGN 298 Independent Study: Design (1-6 Credits)

Prerequisites: Instructor approval required.

Recommended preparation: Prior coursework in the discipline.

Individualized, advanced study in product design to focus on outcomes not addressed in existing courses or of special interest to a student. P/NP grading. Repeatable for credit.

DSGN 299 Selected Topics: Design (1-4 Credits)

Provides a learning experience in Design not currently available; this course is in development to be proposed as a permanent course. Repeatable for credit.