Design (DES)

DES 1100. Intro to Digital Design. 3 Hours.

Introduces software and principles related to digital design and visual communications, and the creation and reproduction of art. Teaches how to create and modify digital images, illustration, and page layout using current design software and printing techniques. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Define graphic communications and the principles and elements of design. 2. Define, identify and explain products produced by printing. 3. Demonstrate the design process. 4. Identify type classifications, point size, leading and alignment. 5. List software types and related applications including file types, file formats and image types. 6. Construct a multi-page layout and create a PDF. 7. Define pixels and resolution and explain the advantages and disadvantages of vector and raster images. 8. Create and manipulate a vector and raster image. Course fee required. FA, SP.

DES 1101. Adobe InDesign Certification. 1 Hour.

For students who have completed the Adobe InDesign Certification. Must show official documentation of completion to the registrar's office.

**COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate successful completion of the current Adobe InDesign certification course. 2. Demonstrate working knowledge of Adobe InDesign. 3. Evaluate proficiency in Adobe InDesign. FA, SP, SU.

DES 1102. Adobe Illustrator Certification. 1 Hour.

For students who have completed the Adobe Illustrator Certification. Must show official documentation of completion to the registrar's office.

**COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate successful completion of the current Adobe Illustrator certification course. 2. Demonstrate working knowledge of Adobe Illustrator. 3. Evaluate proficiency in Adobe Illustrator. FA, SP, SU.

DES 1103. Adobe Photoshop Certification. 1 Hour.

For students who have completed the Adobe Photoshop Certification. Must show official documentation of completion to the registrar's office.

**COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate successful completion of the current Adobe Photoshop certification course. 2. Demonstrate working knowledge of Adobe Photoshop. 3. Evaluate proficiency in Adobe Photoshop. FA, SP, SU.

DES 1111. Intro to Digital Design Skills Exam. 3 Hours.

Will post Pass on student transcript if student successfully completes the test out for proficiency in the Intro to Digital Design skills. **Course Learning Outcomes (CLOs) At the successful conclusion of this course, students will be able to demonstrate proficiency in the following skills:

1. Define graphic communications and the principles and elements of design. 2. Define, identify and explain products produced by printing. 3. Demonstrate the design process. 4. Identify type classifications, point size, leading and alignment. 5. List software types and related applications including file types, file formats and image types. 6. Construct a multi-page layout and create a PDF. 7. Define pixels and resolution and explain the advantages and disadvantages of vector and raster images. 8. Create and manipulate a vector and raster image. FA, SP, SU.

DES 1200. Image Making. 3 Hours.

This course explores traditional and experimental methods of image making. Students will be introduced to the fundamentals of image-based drawing and the elements of composition while experimenting with a variety of mediums, both analog and digital. Students will learn to distinguish the difference between connotative and denotative meaning in an image and how it functions within a design. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Describe a variety of methods of image making, both traditional and experimental. 2. Create original images using analog and digital mediums. 3. Demonstrate basic drawing and composition skills. 4. Apply appropriate image-making techniques for specific projects. 5. Explain and distinguish the connotation and/or denotation meaning of an image. 6. Demonstrate competency and quality of craftsmanship, ideas, and design. FA, SP.

DES 1300. Design I. 3 Hours.

Explores the elements of design from which advertising, computer graphics, and graphic arts are structured by building awareness and skill in creating designs, using the concepts of composition, proportion, alignment, contrasts, white space, typography, eye movement, and element control, emphasizing the value of these concepts to communicate ideas. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Describe the practice of design. 2. Demonstrate use of design principles in completed work. 3. Describe the parts of Gestalt Theory as it relates to design. 4. Use the appropriate design tools to complete a successful project. 5. Evaluate and critique personal work and the work of others. 6. Collaborate effectively in teams. 7. Demonstrate competency and quality of craftsmanship, ideas, and design. FA, SP.

DES 1600. Intro to 3-D Visualization. 3 Hours.

Introduces three-dimensional modeling and rendering techniques on the computer, including various modeling processes, defining and applying textures, assembling scenes, and rendering images, which are applicable to realistic package and product designs, motion picture effects, video game assets, as well as graphics for desktop or Internet publishing projects. **Course Learning Outcomes (CLOs)** At the successful conclusion of this course students will: 1. Demonstrate fluency in the visual vocabulary and technical skills relevant to 3D (three-dimensional) design. 2. Demonstrate the ability to analyze, interpret, and translate ideas into proper 3D output. 3. Compose, manipulate, and critique 3D objects and renderings using multiple software solutions. 4. Create, construct, prototype, and produce original useful 3D objects utilizing 3D printers and laser cutters. 5. Produce a portfolio of work that meets employer and marketplace expectations. Prerequisites: DES 1300 (Grade C or higher) can be taken concurrently. FA.

DES 1610. Screen Printing. 3 Hours.

For students interested in the screen printing industry on the commercial level. Includes hands-on experiences for printing on various substrates using photographically/mechanically generated stencils, reproducing images with computers for positive reproduction, and multi-color screen printing on fabric. Instruction includes the use of vector image editing software. Offered based upon sufficient student need. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Explain the basics of the graphics and screen printing industry. 2. Demonstrate safe production practices. 3. Demonstrate the design process. 4. Construct digital illustrations. 5. Create screen and stencil systems. 6. Describe and demonstrate the screen printing production process.

DES 2100. Design Thinking. 3 Hours.

An introduction to design thinking, an empathy-based, human-centered, and rapid prototype-driven methodology for innovation. Students will explore challenges such as the creation of new products, technological innovation, services, business models, experiences, processes and/or systems through the design thinking process. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Describe the design thinking process. 2. Explain the differences between design thinking and conventional problem solving. 3. Demonstrate the design thinking process and the various tools, techniques and templates used in design thinking. 4. Apply the tools taught to real life environments and situations. 5. Distinguish unmet needs, unarticulated needs and undreamt needs. 6. Evaluate critical theories of design, systems thinking, and design methodologies. 7. Demonstrate sound thinking, creative inquiry, and diverse modes of reasoning through discussion and writing. 8. Solve problems and address social concerns with innovative approaches to design and exploratory methodologies. FA, SP.

DES 2200. Photography for Design. 3 Hours.

This course introduces students to the basics of digital photography as it relates to the field of graphic design. Topics include, but are not limited to: image selection, product, portfolio, editorial, and graphic design specific image-making. Students will have the opportunity to plan and execute a successful photoshoot and practice post-production editing techniques. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Use appropriate digital photography tools. 2. Apply the principles of design and composition to photography. 3. Plan and execute a successful photoshoot and practice post-production editing techniques. 4. Relate the history and impact of commercial photography. 5. Evaluate and critique personal work and the work of others. 6. Collaborate effectively in teams. 7. Demonstrate competency and quality of craftsmanship, ideas, and implementation. FA, SP.

DES 2300. Design II. 3 Hours.

An intermediate level course that expands the skills and knowledge acquired in Design I. The course emphasizes practical assignments that examine applied problem solving and professional solutions for graphic designers. Specific themes/topics for the course include visual grouping and hierarchy, visual identity development and application of Gestalt theory. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate creative thinking from the expression of an idea to the completion of a design. 2. Apply design fundamentals successfully. 3. Demonstrate an awareness of the history and context of design in relation to contemporary topics and social, political and cultural issues. 4. Communicate an understanding for the use of design for expression. 5. Communicate and apply technical proficiency in areas appropriate as a designer to produce a cohesive body of work. Course fee required. Prerequisites: DES 1100 (Grade C or higher) AND DES 1200 (Grade C or higher) (can be taken concurrently) AND DES 1300 (Grade C or higher). FA, SP.

DES 2710. Typography I. 3 Hours.

Study of basic layout, lettering, type design, identification of styles, and typographic history. Students learn how to use type as a basic element of graphic communication, how the use of different typefaces visually communicate a desired effect, and fundamental terminology of type specification. Consists of lectures, quizzes, and ongoing typographically-related projects intended to be of portfolio-quality. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Identify the basic anatomy of letterforms and articulate the nomenclature used in typography. 2. Outline the history and evolution of type to classify and compare typefaces. 3. Give examples of appropriate type selections for specific projects. 4. Integrate the use of typographic grids in construction of page and interface layouts. 5. Reorganize content and produce work that demonstrates visual hierarchy and expression through type. 6. Evaluate the function vs form relationship of type to legibility and use. Course fee required. Prerequisites: DES 1300 (Grade C or higher); AND IXD 1300 (Grade C or higher) (can be concurrently enrolled) or SE 1400 (Grade C or higher). FA, SP.

DES 2780. Making and Materials. 3 Hours.

This class introduces students to making and building projects in a physical environment. Students explore multiple options for solving design problems then have the opportunity to choose materials based on the project needs. Students develop and practice and construction skills used in making quality design projects. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to:

1. Explore and test a variety of materials and tools used in making and building creative projects. 2. Pair appropriate tools and materials for desired design outcome. 3. Demonstrate print production techniques and best practices. 4. Explain and defend chosen materials and tools used. 5. Demonstrate competency and quality of craftsmanship, ideas, and design. Course fee required. Prerequisites: MATH 1030 or higher (Grade D- or higher) AND (DES 1100 (Grade C or higher) OR DES 1300 (Grade C or higher)). FA, SP.

DES 3000. Design III. 3 Hours.

Advanced application of design theory and processes, conceptual thinking and expansive form-making. Students will continue to develop their unique design voice and process, through further exploration of typography, imagery, and visual continuity to create complex portfolio-ready work. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Express fluency in the visual vocabulary and technical skills relevant to design. 2. Demonstrate the ability to analyze, synthesize, and develop probable solutions. 3. Integrate project processes and outcomes through both written and oral communication. 4. Demonstrate excellent craft and strong conceptual abilities through design artifacts. 5. Produce a portfolio of work that meets employer and marketplace expectations. Course fee required. Prerequisites: DES 2100 (Grade C or higher); AND DES 2200 (Grade C or higher); AND DES 2710 (Grade C or higher); AND DES 2780 (Grade C or higher). FA, SP.

DES 3300. Motion Graphics I. 3 Hours.

An exploration of motion graphics fundamentals including visual rhythm, kinetic typography and motion and time as it applies to visual communication in linear narratives. Includes the basic principles of video capture, editing and covers the integration of motion graphics and sound.

**COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate a basic working familiarity with appropriate software applications. 2. Describe the basic principles of Motion Graphics and Animation. 3. Apply the design process from storyboarding through the finished project. 4. Determine the appropriate techniques and processes to produce portfolio quality Motion Graphics work. 5. Develop competency in ideation, craftsmanship and ability to meet deadlines. Course fee required. Prerequisites: DES 1300 (Grade C or higher). FA, SP.

DES 3400. Information Design. 3 Hours.

Introduction to the field of information design, data visualization, infographics and instructional materials. Students will explore information design problems in both stand-alone and system applications; digital (interaction) media, print, and environmental communication. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Develop a deep understanding of visual organization and information design. 2. Develop skills to analyze and design effective data visualizations and communication. 3. Develop a visual narrative through the design process. 4. Negotiate the implications that information design skills hold for design management in the distillation of multivariate data. 5. Demonstrate ability to create impactful and relevant data visualizations and information graphics. Course fee required. Prerequisites: DES 2300 (Grade C or higher); AND DES 2710 (Grade C or higher). SP.

DES 3600. 3-D Visualization. 3 Hours.

Introduces three-dimensional modeling and rendering techniques on the computer, including various modeling processes, defining and applying textures, assembling scenes, and rendering images, which are applicable to realistic package and product designs, motion picture effects, video game assets, as well as graphics for desktop or Internet publishing projects. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate fluency in the visual vocabulary and technical skills relevant to 3D (three-dimensional) design.

2. Demonstrate the ability to analyze, interpret, and translate ideas into proper 3D output. 3. Compose, manipulate, and critique 3D objects and renderings using multiple software solutions. 4. Create, construct, prototype, and produce original useful 3D objects utilizing 3D printers and laser cutters. 5. Produce a portfolio of work that meets employer and marketplace expectations. Course fee required. Prerequisites: DES 1600 (Grade C or higher); AND DES 1100 (Grade C or higher). SP.

DES 3610. Portfolio Development I. 1 Hour.

This course helps students in their Junior year begin the process of compiling a professional portfolio. Students will be instructed on the following components of a professional portfolio including; identifying appropriate work for a professional portfolio, the self editing process of possible submissions for a professional portfolio and creating appropriate focus for their portfolios. Students will work with faculty and receive feedback on possible portfolio submissions and begin complying their work. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Identify and describe the traits of professional portfolio. 2. Analyze and assemble personal design work for portfolio creation. 3. Compare and contrast different types of portfolio presentations. 4. Make a professional portfolio of current work. 5. Articulate best practices for design professionals including contracting, pricing and copyright. Prerequisites: DES 2300 (Grade C or Higher); AND DES 2710 (Grade C or Higher); AND advanced standing. FA.

DES 3710. Typography II. 3 Hours.

Covers typography as a functional and experimental medium and typeface design. Students develop typographic solutions that explore verbal/ visual messages in designs for publication through design problem-solving for a diverse range of specifications, including audience, client needs, and budget constraints, using traditional and digital tools. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Explain the various systems used to classify typefaces and file formats. 2. Relate the principles and practice of typeface design & nomenclature. 3. Design an original typeface family including all glyphs, punctuation and diacritical marks. 4. Analyze, synthesize, and develop probable typographic design solutions. 5. Demonstrate excellent craft skills with strong conceptual abilities. 6. Collaborate on projects while working in teams. Course fee required. Prerequisites: DES 2300 (Grade C or higher); AND DES 2710 (Grade C or higher). FA.

DES 3780. Production Design. 3 Hours.

Overview of desktop publishing and digital imaging on the prepress industry. Topics include input and output, correct creation of digital files, data storage, proofing methods, and relevant terminology/communication with prepress and printing professionals. Also acquaints students with the variety of jobs offered in the field, file evaluation, and much more. Field trips to printers and other prepress service providers reinforce lectures/ projects. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate the ability to create print ready digital files for output. 2. Distinguish the difference between process and spot color systems. 3. Identify and decide between various printing and production techniques. 4. Analyze, synthesize, and develop probable design solutions. 5. Demonstrate excellent craft and strong conceptual abilities through design artifacts. Course fee required. Prerequisites: DES 2300 (Grade C or higher) and DES 2780 (Grade C or higher). SP.

DES 3800. Branding. 3 Hours.

Explores the history, psychology and purpose of corporate identity programs and the role of communication design in the current corporate environment by analyzing, investigating, and reporting on current company corporate objectives and target markets and then designing a sound multifaceted identity program. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate an understanding of thought process, practical consideration, and application of creating a brand. 2. Analyze and compare the difference between a logo and a brand. 3. Create an effective brand usage guide. 4. Evaluate and critique brand as a system. 5. Summarize design decisions both orally and in writing. 6. Collaborate on projects while working in teams. Course fee required. Prerequisites: DES 2200 (Grade C or higher); AND DES 2300 (Grade C or higher); FA.

DES 4300. Motion Graphics II. 3 Hours.

A continuation of the course DES 3300 Motion Graphics I. Students will learn intermediate and advanced techniques and principles of motion graphics design, video editing, animation, sound integration, pre-production, and post-production. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Outline the appropriate steps in project creation from planning, pre-visualization, creation, revision, and finalization. 2. Produce work using a user-centered, highly iterative design process. 3. Construct projects using the principles of non-linear motion graphics systems. 4. Analyze, synthesize, and develop probable design solutions with specified project parameters. 5. Collaborate on projects while working in teams. 6. Discuss the persuasive and informative advantages and responsibilities inherent in motion graphics, and synthesize solutions to ethical considerations. Course fee required. Prerequisites: DES 3300 (Grade C or higher). FA (odd).

DES 4600. Senior Project. 3 Hours.

For students pursuing a degree in Design. Emphasizes application of skills to commercial projects through design of or contribution to various private sector or university internet projects, print, and multimedia projects. Includes portfolio development. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Identify, devise and produce a meaningful design project with approval from the instructor. 2. Construct prototypes, user experiences, and final projects using the design thinking process. 3. Identify and assemble necessary resources for the completion of projects. 4. Demonstrate ability to collaborate on projects while working in teams. 5. Articulate project goals both orally and in writing. Course fee required. Prerequisites: Advanced standing. SP.

DES 4610. Portfolio Development II. 2 Hours.

This advanced level course instructs students in their Senior year to refine and complete their professional portfolio in preparation for entering the competitive job market. Students will work with advisors to compile, edit and constructively critique their portfolios. Students take this course at the culmination of their senior year in preparation for their senior showcase. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Analyze and assemble personal design work for portfolio creation. 2. Critique and discuss the portfolios of other designers. 3. Editorialize and evaluate personal design work. 4. Construct a professional portfolio and defend the choices made in the design and form. 5. Compose a professional resume. 6. Articulate the professional pathways for a designer. Course fee required. Prerequisites: DES 3610 (Grade C or higher); AND Senior Standing. SP.

DES 4650. Publication Design. 3 Hours.

Explores creative, functional, and aesthetic aspects of editorial design with emphasis on page layout. Students will focus on the significance of consistency and thematic continuity, developing aesthetic awareness, and integrating design principles. Students will refine and further develop visual judgment in the arrangement of type and images to effectively convey visual messages. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate a high level of typographic detail and design principles in completed work. 2. Demonstrate an understanding of what elements are necessary for various publication types. 3. Construct multi-page, multi-dimensional publications. 4. Develop self-initiated publications including original text and imagery. 5. Identify and implement appropriate publication for provided content. 6. Develop multiple types of publications of portfolio quality design and craftsmanship. Course fee required. Prerequisites: DES 2200 (Grade C or higher); AND DES 2300 (Grade C or higher). FA.

DES 4750. Package Design. 3 Hours.

The course explores the various facets and theories of package design while applying design principles to create effective packaging solutions for a variety of products. Students will take design projects from concept phase to three-dimensional working prototypes. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Analyze and identify the elements of successful branding and package design. 2. Describe current production methods and terminology. 3. Relate various legal, regulatory, pricing, materials and construction issues. 4. Construct professional mockups and prototypes. 5. Evaluate and critique packaging design and construction. 6. Complete multiple types of packaging concepts of portfolio quality design and craftsmanship. Course fee required. Prerequisites: DES 1600 (Grade C or higher); AND DES 2300 (Grade C or higher); AND DES 2710 (Grade C or higher); AND DES 2780 (Grade C or higher). SP.

DES 4900R. Independent Research. 1-3 Hours.

For students pursuing a degree in Design with advanced standing who wish to pursue a specific focus of study related to their degree emphasis and/ or research interest not otherwise available in the current Design curriculum. Students are closely supervised by appropriate faculty in the design and successful completion of the course. The course is dependent upon a formal contractual arrangement with the faculty member that is submitted at the beginning of the semester in which coursework is undertaken, and is contingent upon the department chair's approval. Students meet with the faculty mentor each week and provide progress reports for feedback. Students are required to meet the university requirement of 45 hours of work per credit. Variable credit 1.0 - 3.0. Repeatable up to 3 credits subject to graduation restrictions. Offered by arrangement. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Analyze and solve design challenges. 2. Categorize and synthesize a project exploring new topics and emerging areas of the industry. 3. Articulate project goals both orally and in writing. 4. Critique and articulate research and project findings to instructors and peers. Course fee required.

DES 4910R. Special Topics in Applied Technology. 3 Hours.

For students wishing instruction that is not available through other regularly scheduled courses in this discipline. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Develop solutions to design problems using a specific framework or methodology. 2. Extrapolate the specialized insights and practices of a specific technology system to a wider field of practice. 3. Apply general purpose problem solving skills to a specific problem domain. Prerequisites: Instructor permission.

DES 4920. Internship. 3 Hours.

Designed to integrate Design students into working environments that increase aptitude, skills, and networking. The internship setting will nurture a mentor learning relationship with the student, and assist them in preparation for after graduation. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Analyze and solve design problems from an employment perspective. 2. Survey new topics and emerging areas of the practice of design. 3. Evaluate and critique personal work and the work of others. 4. Demonstrate ability to effectively collaborating on projects while working in teams. 5. Communicate findings and research to instructor and employers. Prerequisite: DES 2300 (Grade C or higher); AND Instructor Permission. FA, SP, SU.

DES 4990. Special Topics in Design. 0.5-3 Hours.

For students wishing instruction that is not available through other regularly scheduled courses in this discipline. Occasionally, either students need some type of non-traditional instruction, or an unanticipated opportunity for instruction presents itself. This course may include standard lectures, travel and field trips, guest speakers, laboratory exercises, or other nontraditional instruction methods. Repeatable for credit as topics vary, up to 6 credits. Offered by arrangement. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Identify, complete and analyze portfolio quality work. 2. Describe and assess specialized insights and practices to design challenges using the design thinking method. 3. Articulate findings both orally and in writing. Course fee required. Prerequisites: Instructor permission.