TD: Textile Design

TD 101 — Experimental Screen Printing

3 credits; 2 lecture and 2 lab hours

Students experiment designing with screens and printing on fabric while working in an actual workshop surrounding. Includes screen making, color mixing, and printing techniques.

TD 103 — Embroidery

2 credits; 1 lecture and 2 lab hours

This course is an introduction to the art of hand embroidery and related forms of stitching. Students explore traditional and contemporary techniques to develop their own creative practice through class and individual projects. This course introduces embroidery as both a commercial application and a creative medium.

TD 111 — Computer-Aided Design Principles for Textile Design

1.5 credits; 3 lab hours

An introduction to the fundamentals of computer-aided textile design. Students use current, offthe-shelf graphics software to produce original designs, croquis and repeat layouts, coordinates, and color combinations while exploring color palettes, scale, and proportion. Web resources, scanning, file management, and printing options are explained, and presentation skills are emphasized.

TD 112 — Textile Color Fundamentals

2 credits; 1 lecture and 2 lab hours

Introduction to traditional color theories and systems through comparisons and analysis. Color experimentation for use in textile fashion and home furnishing fabrics is developed in opaque watercolour (gouache).

TD 113 — Textile Surface Design: Styles & Sources

2 credits; 1 lecture and 2 lab hours

An introduction to the design styles, design vocabulary, and research methods necessary for creating original textile surface designs. Through image-based lectures, discussions, museum visits, design projects, and presentation critiques, students explore themes in fashion and the applied arts that will serve as a foundation in their future design work.

TD 114 — Computer Aided Print Design

3 credits; 6 lab hours

Computer-aided design software skills and techniqus are applied to create original textile designs. Based on current market trend research, students create digital designs using a variety of layouts, repeats and seasonal palettes. They produce visualizations of their designs and printed presentations for their portfolio.

TD 115 — Introduction to Textile Surface Design

2 credits; 4 lab hours

Textile design painting techniques and terminology are explored through research and assembly of reference material. Students strengthen design skills and create painted designs in repeat for the fashion fabrics market.

TD 126 — Textile Design Studio Practices

3 credits; 6 lab hours

Students develop original design concepts for apparel fabrics painting with gouache and dye. Trend information and references from a variety of sources is researched and analyzed for design inspiration. Technical and design related aspects of printing, layout, repeat and color according to industry standards is examined and applied.

TD 131 — Woven Design I

1.5 credits; 3 lab hours

Introduction to creating woven fabrics on a table hand loom. Students learn basic weaving techniques, drafting of weaves, and the interrelation of yarns, color, and weave structure in a fabric design.

TD 132 — Woven Design II

1.5 credits; 3 lab hours

Continued creative and experimental application of techniques learned in TD 131. Using the fourharness table loom, students are introduced to complex threadings and warp color arrangements to create weave patterns and textures.

Prerequisite(s): TD 131 or approval of chairperson.

TD 138 — Introduction to Woven Design

2.5 credits; 1 lecture and 3 lab hours

This introductory course provides students an opportunity to create fabrics for apparel, home fashion, accessories and fine art. Hand looms are used to introduce weave structure, color and texture. Students translate ideas into original designs in the medium of weaving.

TD 141 — Nature Studies

1.5 credits; 3 lab hours

Study of design in nature as a source of inspiration for textile design. Students analyze growth and structure of plants and other forms of nature using live flowers and marine life as models for drawing and painting in representational techniques. (G6: Arts).

TD 142 — Advanced Nature Studies

1.5 credits; 3 lab hours

Painting from flowers and other nature forms with continued emphasis on observation, selection of color, structure, and design patterns. Students use forms in nature as a basis for stylized compositions in line and color. (G6: Arts)Prerequisite(s): TD 141.

TD 155 — Decorative Fabrics

2 credits; 4 lab hours

For one- year Textile/Surface Design students. The application of print design techniques to designing for home furnishings fabrics and wall coverings, using various media. Using professional methods and technical requirements, designs are created for residential, commercial, and industrial spaces.

TD 157 — Wallcovering Design

1.5 credits; 3 lab hours

This course focuses on the creative development of original wallcoverings. Through the study of historical documents and references, students explore design and production methods needed to create multi-layered compositions. They learn about the wallcovering market through the introduction of home furnishing trends, design styles, and current production standards.

TD 161 — Fundamentals of Screen Printing

2 credits; 4 lab hours

Screen printing is the most widely used technique for printing in the textile industry. This course introduces the process of screen printing as both a commerical application and a creative medium. Students use imagery, drawing style, color an placement to produce original textile designs. Manual and digital techniques are applied to create artwork and print designs in repeat.

TD 183 — Screen Printing: T-Shirts and Related Products

2 credits; 4 lab hours

Using modern screen print technology, students create original engineered designs for T-shirts and related products. Color-mixing principles and screen printing techniques are taught.

TD 202 — Advanced Professional Practices

3 credits; 6 lab hours

Students develop original designs and coordinates using design trends as inspiration. A stronger awareness of the textile/surface design industry is established via lectures, demonstrations and market visits,. Preparation of student portfolios and professional presentation is emphasized. Prerequisite(s): TD 126.

TD 203 — Textile Arts in India

2 credits; 4 lab hours

A short term study abroad course in Rajasthan, India exploring textile artisan culture. Students work alongside local artisans, maintain a sketchbook, and create a design collection based on research from tours, academic lectures, workshop presentations, and museum visits.

TD 204 — Designing with Emerging Materials (Interdisciplinary)

3 credits; 2 lecture and 2 lab hours

This is an interdisciplinary course cross-listed with SC 204. An introduction to basic skills and knowledge in science and textile design, enabling design innovation. An exploration of textile concepts and integration of the handmade with emerging materials and technologies. Design-led experimental research with biomaterials, biopigments, nanomaterials, and other advanced materials used to envision and prototype sustainable solutions to real world challenges. Prerequisite(s): mathematic proficiency (see beginning of Science section).

TD 211 — Surface Design in Paris

3 credits; 3 lecture hours

Students learn how to do extensive surface design research while abroad in Paris. Through on-site visits to design studios, galleries, libraries, museums, stores, and trend forecasting companies, students research an area of design interest for hard and/or soft product. Students keep a journal/ sketchbook, give weekly oral presentations, and write a paper about the project outcomes of their research. Approximately three weeks in the summer. (Formerly SD 211) Prerequisite(s): HA 112.

TD 212 — CAD and Design Fundamentals for Printed Textiles

1.5 credits; 3 lab hours

This course introduces students to design and CAD fundamentals for printed textitle design. Design and production processes are explained. Students research trend information to create collections of repeating designs for specific markets.

TD 224 — Computer-Aided Print Design

1.5 credits; 3 lab hours

Using Adobe Photoshop, students scan images and create original designs, repeats, colorways, and coordinates targeting specific markets. Emphasis is on creative use of the software, awareness of industry trends, and the development of an original portfolio of digitally produced designs.

TD 227 — Painting on Fabric

2 credits; 1 lecture and 2 lab hours

Students paint directly on silk, cotton, and synthetic fabrics, using appropriate pigments or dyes for setting colors permanently. Explores use of hand-painted fabrics for home furnishings, fashion, and studio applications.

TD 228 — Techniques for Fashion Fabrics

2 credits; 4 lab hours

Students learn the research, design, and technical skills needed to create textiles for the apparel and home furnishings markets. Emphasis is placed on research methods and experimentation with materials, techniques, and color to create textural effects using a variety of mixed media. (Formerly SD 228)

Prerequisite(s):SD 122, SD 125, TD 122, or TD 125.

TD 238 — Woven Design and CAD

3 credits; 6 lab hours

Students are introduced to the computer process for designing wovens using proprietary weaving software. Hand woven collections are developed using complex harness structures. Trend analysis is used to inspire collections.

Prerequisite(s): TD 138.

TD 251 — Techniques for Decorative Fabrics and Surfaces

3 credits; 6 lab hours

A focus is placed on the design aspects, techniques and technical requirements of home furnishings, decorative fabrics and surfaces. Large-scale layouts, research sources and current trending information are used in the creation of original designs. Students experiment with a variety of art materials and mixed media techniques including finishes, textures and embellishments to create original designs and simulate effects from design references. Prerequisite(s): TD 126 or TD 115.

TD 253 — Advanced Decorative Fabrics

2 credits; 4 lab hours

Exploration of the design and technical skills required in the home furnishings textile industry. Through on-site field trips and research, students explore and analyze design inspiration. Students learn the technical aspects of painting, layout, repeat and color. Through new approaches to layouts, techniques and colors, students are sensitized to the needs of home textile for the interior design industry.

Prerequisite(s): TD 155 or TD 251.

TD 262 — Advanced Screen Printing

3 credits; 6 lab hours

Emphasizing the development of personal style and professionalism in a modern screen printing environment, this course explores advanced methods of desiging and printing yardage fabric. Students choose a market and produce a collection of autographically or digitally produced designs printed in repeat and in multiple color ways.

Prerequisite(s): TD 161.

TD 263 — Advanced Screen Printing: T-Shirts and Related Products

2 credits; 4 lab hours

Advanced modern design techniques and industrial trends for T-shirts, apparel, accessories and home products are explored. Emphasis placed on mixed-media and multi-color projects, and the use of specialty inks on a variety of surfaces. Manual and digital methods used for design creation. Prerequisite(s): TD 183 or TD 101.

TD 271 — Textile/Surface Design Using Adobe Illustrator

2 credits; 1 lecture and 2 lab hours

Students learn to use Adobe Illustrator for application to textile and surface design and gain proficiency in working between Adobe Illustrator and Adobe Photoshop. Target markets and the creative use of software for portfolio development are emphasized. Prerequisite(s): TD 114 or TD 224.

TD 299 — Independent Study in Textile Design

1-3 credit

Prerequisite(s): a minimum 3.5 GPA and approval of instructor, chairperson, and dean for Art and Design.

TD 302 — Fashion Studio for Print Design

1.5 credits; 3 lab hours

This course uses proprietary software for designing repeats and print collections. CAD workflow practices, color matching, color-reduction, colorways and technical data are integrated with digital processes for designing repeats and print collections. Focused concept development and trend-forecasting research are used to create portfolio quality digital collections that meet industry standards.

Prerequisite(s): TD 111 or TD 114 or TD 224.

TD 312 — Computer Graphics for Textile Design I

2 credits; 1 lecture and 2 lab hours

Introduction to creating artwork on the computer, including scanning and cleaning images, original patterns, colorways, repeats, and woven fabrics. Designs are applied to fashion silhouettes for merchandising collections targeting specific markets. Portfolio-quality presentations are produced using digital printouts.

TD 313 — Advanced Photoshop and Illustrator

3 credits; 6 lab hours

This advanced class builds on students' existing knowledge of Adobe Photoshop and Illustrator to expand their skill level. Students create a design collection and presentation boards. Focus is placed on professional workflow, color management and preparation for traditional and digital production in the textile/surface design industry.

Prerequisite(s): TD 224 or TD 114 and TD 271.

TD 333 — Fundamentals of Jacquard Design

3 credits; 6 lab hours

Introduction to the fundamentals of jacquard design for the creation of woven fabrics using complex weave structures. Students use the latest software technology to create a portfolio of innovative designs for today's textile industry.

Prerequisite(s): TD 334.

TD 334 — Complex Dobby Wovens

3 credits; 6 lab hours

Advanced drafting skills are applied to the creation of woven designs on harness dobby looms. Students use the latest software to create fabric simulations and to plan designs. Utilizing hand weaving, students explore materials, develop color, and consider end use for their fabrics. Prerequisite(s): TD 238.

TD 353 — Custom Rug and Carpet Design

2 credits; 4 lab hours

This course covers design of tufted and printed carpeting for custom, commercial, and mass markets. Students study repeats and technical requirements in carpet design, trends in construction, color coordination for various types of interiors, and the application of all types of printing and tufting equipment used in industry. Guest speakers and field trips are included.

TD 356 — Tabletop and Related Products

3 credits; 6 lab hours

Original design concepts are created for ceramic products, glassware and paper products for the home furnishings, giftware and tabletop industries. Decorative product designs are rendered in perspective to scale. Sources, product requirements, current trending information, sustainability issues and licensing is covered.

TD 357 — Applied Surface Design for the Home

3 credits; 6 lab hours

Students research design possibilities to create color/pattern-coordinated designs for a spectrum of home products. Critiques are in direct consultation with industry.

TD 361 — Screen Printing Scarves

3 credits; 6 lab hours

Students apply research of historic and contemporary references to develop of designs for hand printed scarves. Unique innovative concepts, including a focus on the use of color, are explored within a professional studio context.

Prerequisite(s): TD 161 or TD 101.

TD 362 — Screen Printing for Accessories Design

2 credits; 4 lab hours

Screen printing provides and array of unique applications for accessory design; original motifs, printed on a variety of materials including fabric and leather, custom design lining fabrics and multicolor prints with textural effects for a variety of products. Students develop original designs which they hand screen print in a professional studio setting.

TD 412 — Computer Graphics for Textile Design II

2 credits; 1 lecture and 2 lab hours

Advanced use of graphic design software with emphasis on woven fabric designs, knits, and tonal prints. Designs are texture-mapped onto garments and home furnishings images for specific markets, resulting in a digital portfolio.

Prerequisite(s): TD 312.

TD 413 — CAD for Portfolio Presentation

2 credits; 0 lecture and 4 lab hours

Students create a collection of digital textile designs that coordinate with the theme developed in TD 462. Using CAD programs, students develop this collection for the Textile/Surface Design BFA Senior Exhibition. Using these digital designs and other portfolio quality CAD designs, students build an online portfolio.

Prerequisite(s): TD 313.

TD 414 — Digital Knit Design

3 credits; 6 lab hours

This course utilizes a variety of digital media to develop knit fabric collections and strengthen computer design skills. Through lectures, research and hands-on projects, students become familiar with knit design materials, terminology and development techniques. Using proprietary CAD software, students create knit fabric designs, yarm simulations, communicate color and pattern, and develop a professional portfolio for the apparel and home fashion markets.

TD 452 — Custom Carpet and Rug Design

3 credits; 6 lab hours

Production of designs for area rugs and carpet for residential and commercial markets. Skills developed for both conventional and digital designs. Fiber use and manipulation as applied to hand tufted, hand knotted, printed and woven qualities are explored.

Prerequisite(s): TD 251.

TD 462 — Portfolio Collection

3 credits; 6 lab hours

Preparation of a professional portfolio collection inspired by research and influenced by market trends. Students' collections include coordinated designs for fashion, home, contract, or product, and incorporate printed, woven, fiber art, knit, and software applications.

TD 471 — Advanced CAD with Adobe Photoshop and Fashion Studio

1.5 credits; 3 lab hours

Students develop advanced skills in Adobe Photoshop applied to surface design. Fashion Studio software is incorporated into the course, with the objective of designing product for a global marketplace using current trend information. (Formerly SD 471) Prerequisite(s): SD 224 or TD 224.

TD 473 — Advanced Digital Studio

3 credits; 6 lab hours

Students use proprietary textile design software to develop engineered fashion prints based on trend forecasting information. Technical aspects such as color separation for screen print and color matching for digital print production are applied. Students follow professional design studio practices to create fashion collections.

Prerequisite(s): TD 313.

TD 481 — Screen Printing: Scarves

2 credits; 4 lab hours

Studies the requirements, limitations, and possibilities of designs for scarves. Students prepare screens, mix colors, and print a variety of fabrics with emphasis on techniques and fashion trends.

TD 491 — Internship

3 credits

A 12-week internship in industry, scheduled individually for a minimum of 126 hours at the worksite and 9 hours on campus. Students have the opportunity to intern in the product design, home furnishings, or apparel industry.

TD 499 — Independent Study in Textile Design

1-3 credit

Prerequisite(s): a minimum 3.5 GPA and approval of instructor, chairperson, and dean for Art and Design.