## FD: Fashion Design-Apparel (See also AF, AP, AR, DP, FF, TL)

## FD 100 — SEMINAR: FASH SUSTAIN, TRENDS

0 credits

## FD 111 - Draping I: Fundamentals

3 credits; 6 lab hours
Introductory course explores the threedimensional draping approach to executing garment design. Projects introduce the important principles of grain, balance, and construction. Through critiqued design development on the dress form, students develop their own sense of proportion, silhouette, line, and style, while exploring current market trends. Course utilizes strong sewing skills. Prerequisite(s) or Co-requisite(s):FD 131 for evening/weekend students only.

## FD 112 — Draping II: Constructed Silhouettes

3 credits; 6 lab hours
This course enables students to execute jacket styles utilizing advanced draping techniques and explores how to incorporate tailoring details to enhance garment designs. Students learn to develop draped pattern styles that include mounted and semi-mounted sleeves, and various collar and pocket styles.
Prerequisite(s): FD 111.

## FD 113 - Apparel Design: Structured Silhouettes

4 credits; 8 lab hours
Students learn the principles of draping as a method of designing original garments in three-dimensional form. Draping techniques and construction skills are developed for more advanced structured garments, along with an understanding of silhouette, proportion, and current style trends.

## FD 114 — Apparel Design: Soft Silhouettes

3 credits; 6 lab hours
Students learn to drape soft silhouettes using muslin and soft fabrics. Creative designs are explored, from basic to classic to complex shapes. An original garment is designed and executed in fabric.

FD 115 - Introduction to Draping
2 credits; 1 lecture and 2 lab hours This course introduces the student to the basic principles of draping, keeping in mind the importance of grain, balance, and structure in a garment. An understanding of fundamental draping procedures and their application to current trends is addressed. Tools and materials essential for professional results are demonstrated and used.

## FD 116 - Apparel Design Workshop

2 credits; 1 lecture and 2 lab hours
A continuation of FD 115, this course further develops students' understanding of fundamental draping procedures and their application to current trends. As a final project, a term garment is developed that involves the selection of fabric, draping, and construction, and following industrial sample room procedures.
Prerequisite(s): FD 115 and FD 131.

## FD 117 — Design Studio I - Introduction to Draping

2 credits; 4 lab hours
This course introduces fashion design students to the basic principles and techniques of draping in fabric as a means to creatively interpret and develop contemporary designs. An emphasis on proportion, balance and shape as related to design aesthetics broadens students' understanding for actualizing and realizing three-dimensional design prototypes through manipulating muslin.

## FD 121 - Flat Pattern Design I

1.5 credits; 3 lab hours

Introductory flat pattern course explores the two-dimensional method to execute garment designs. Utilizing basic slopers, students develop original design concepts through the slash-and-spread and pivot techniques. Projects are evaluated on the dress form for fit, balance, style, creativity, and proportion. Course utilizes strong sewing skills.

## FD 127 - Design Studio II - Soft Draping

3 credits; 6 lab hours
In this course, Fashion Design students explore more advanced principles and techniques of unstructured draping using soft fabric for the creative interpretation and artistic development of contemporary designs. Emphasis on proportion, balance and shape as related to design aesthetics broadens students' understanding of actualizing and realizing three-dimensional design prototypes through manipulating soft fabrications.
Prerequisite(s): FD 117 or FD 111.

## FD 131 - Sewing Techniques I

1.5 credits; 3 lab hours

Students learn the basic professional techniques used in the construction of designers' sample garments. Sewing techniques--including cutting, construction, and finishing--are explored, using industrial equipment to create sample garments in cotton or cotton-type fabrics.

## FD 132 - Sewing Techniques II

1.5 credits; 3 lab hours

Builds upon skills learned in Sewing Techniques I. Students learn new and more complex design room construction, and develop advanced techniques currently used in the fashion industry.
Prerequisite(s): FD 131.

## FD 133 - Materials and Construction I

2 credits; 4 lab hours
As related to the fashion designer, course stresses hands-on construction, cutting, and finishing techniques for creating garment prototypes. It introduces materials (cottons, wools, interfacings), core characteristics, and handling. Visits to MFIT study rooms/exhibitions provide further opportunities to explore the influence of fabrication choices, construction details and techniques on silhouette development.

## FD 134 - Materials and Construction II

2 credits; 4 lab hours
This course advances students' knowledge about materials, core properties and construction techniques that inform their choices made for silhouette creation and hands-on prototype development. Visits to the Museum at FIT study rooms and exhibitions provide further opportunities to explore fabrications. Students make garments using high-end construction details and techniques.
Prerequisite(s): FD 133.

## FD 135 - Materials and Construction (for 1-Year AAS)

3 credits; 6 lab hours
This course stresses hands-on construction, cutting, and finishing techniques for creating garment prototypes.
Students are introduced to materials including cottons, wools, silks, piles and interfacing, core characteristics and handling. Visits to FIT Museum study rooms and exhibitions further opportunities to explore the influence of fabrication choices, construction details and techniques for silhouette development.

## FD 211 — Draping III: Soft Silhouettes

3 credits; 6 lab hours
This course involves creative draping techniques with emphasis on soft silhouettes and structure in design. Introduction to dolman sleeve styles, cowls, pants, and cut-and-sew knits are included. The variations in style expand students' creative, critical thinking, and technical skills into different areas of design, while draping in fabric.
Prerequisite(s): FD 112.

## FD 212 — Design Studio IV: Advanced Draping

3 credits; 6 lab hours
This course further develops creative and technical skills in apparel design. Advanced draping projects enable students to explore design through a variety of fabrication, draping, and construction techniques. Students also learn how design resources and presentation skills can help them articulate their ideas.
Prerequisite(s): FD 113 and FD 114, or FD 211, or FD 217.

## FD 217 — Design Studio III - Structured Draping

3 credits; 6 lab hours
Fashion design students advance their artistic principles using three-dimensional draping techniques to creatively interpret and realize contemporary structured jackets. Students explore concepts including mounted and semi-mounted sleeves, collar and pocket variations, finishing and details, and silhouette development as related to design aesthetics. Two-dimensional patternmaking and threedimensional draping techniques combine to actualize market-appropriate original prototypes.
Prerequisite(s): FD 127 or FD 211.

## FD 221 — Flat Pattern Design II

1.5 credits; 3 lab hours

This course allows students to proceed from the study and application of the basic principles of patternmaking to a more comprehensive view of design within flat pattern methods and principles. Basic torso slopers are developed with the sleeve and are combined to form the kimono/dolman sloper.
Prerequisite(s): FD 121.

## FD 227 — Design Studio IV: Advanced Draping

3 credits; 6 lab hours
Further development of creative and technical skills in apparel design. Advanced draping projects explore design concepts through use of a variety of fabrication, draping and construction techniques. Added focus on design resources and presentation skills lead to articulation of design ideas. Prerequisite(s): FD 112 or FD 113 or FD 217.

FD 231 - Haute Couture Sewing Techniques
2 credits; 4 lab hours
Introduces students to the finest sewing techniques practiced in couture workrooms; provides the basis for understanding haute couture. Students learn techniques in cutting, hand stitching, seam and hem finishes, pocket construction, pressing, and finishing.

## FD 232 - Haute Couture Decorative Techniques and Embellishments

2 credits; 4 lab hours
Expands knowledge of the couture by exploring various decorative techniques. Students learn how to hand bead as well as apply rocailles, sequins, pearls, and faux gems on different types of fabrics. In addition, students create embellishments from ribbons and fabric; hand embroider original designs; and learn techniques in quilting, pleating, and trapunto.
Co-requisite(s): FD 231.
FD 241 - Apparel Product Data Management
1.5 credits; 3 lab hours

Introduction to product data management.
Students learn to facilitate the communication and coordination of pre-product development tasks by linking design, engineering, costing, and manufacturing information through a centralized database of product-related information.

## FD 242 - Digital Fashion Design Studio II

 2 credits; 4 lab hoursCourse provides an in-depth study of industry-standard fashion design studio processes for actualizing creative design concepts. Module A: Utilizing fashion digital illustration industry practices, students effectively execute design ideas. Module B: Students adopt a variety of fashion designer responsibilities as they research, develop, and communicate creative information across multiple platforms.
Prerequisite(s): FF 115.

## FD 243 — Apparel Design Studio Patternmaking

3 credits; 6 lab hours
This course introduces students to master pattern design, including basic and advanced techniques for original design, sloper, and pattern development according to professional standards. They learn accurate industry-standard terminology, pattern identification, and tool usage. They test patterns in muslin for fit and proportion of basic and complext design prototypes. Prerequisite(s): FD 114 or FD 127 or FD 112.

## FD 244 — Design Development: Digital Communication and Management

1.5 credits; 3 lab hours

This course is an in-depth survey from concept to completion of the industrystandard for design-to-manufacturing procedures and practices. Utilizing digital apparel management programs and tools, students learn to effectively execute design ideas and communicate design information across multiple platforms for various design and development stages.
Prerequisite(s): FF 245.

## FD 281 - Corsetry in Fashion I

2.5 credits; 1 lecture and 3 lab hours

Students study the history of corsetry from the 1600 s to the 1850 s and learn how the body is manipulated to create a fashion silhouette. Through museum visits and online market research, students analyze the differences between corsetry and class draping and develop technical patterns to create period corsets using traditional construction techniques.
Prerequisite(s): DP 112 or FD 112 or FD 113 or FD 127.

FD 282 - Corsetry in Fashion II
2.5 credits; 1 lecture and 3 lab hours Students explore the history of corsetry from 1850 to the present and the interpretation of structured undergarments in contemporary fashion trends. Further developing the technical skills learned in FD 281, students create a period corset and design a contemporary corset and garment. Prerequisite(s): FD 281 or approval of chairperson.

## FD 321 - Computerized Pattern Design

1.5 credits; 3 lab hours

This course builds on students' patternmaking skills and enables them to advance to a more comprehensive study of design using computerized patternmaking methods and principles. Students learn the operation of the System Management and PDS (Pattern Design System) computerized flat pattern design and technical illustration programs.

## FD 341 — Design with High-Tech Fabrics

1.5 credits; 1 lecture and 1 lab hour

Students examine the relationship between high-tech fabrics and contemporary sportswear, outerwear, and performance design. The course concentrates on the qualities and functions of high-tech fabrics and their adaptability for specific functions or fashion looks. Students also learn the special construction techniques and machines needed for these fabrics.

## FD 342 - CAD for Fashion Design and Development

2 credits; 1 lecture and 2 lab hours Using fashion designer methodology, students digitally create fabrics and explore textile possibilities for garments they have designed, using fashion industry proprietary/simulation CAD software. Students learn the fundamentals of merging garment and fabric design to create collections with an overall balance of color, pattern, texture, proportion, and function. Requires approval of Chair if transfer/ exchange student.

## FD 343 - 2D/3D Experimentation

2.5 credits; 1 lecture and 3 lab hours

This course provides students with opportunities to develop 3D design ideas through the exploration of creative 2D patternmaking and 3D draping techniques. Assignments challenge students to experiment, combine, and adapt their patternmaking and draping knowledge in inventive ways. They conduct extensive design research, perform self-assessments, and gain skills in peer review.

## FD 356 — Fully-Fashioned Knit Design:

## Stoll M1 Plus

2 credits; 4 lab hours
Students will create Knitwear Programs through the study and hands on use of Stoll M1 Plus CAD system proprietary software. Emphasis will be placed on the construction of knitted fabrics in both single and double bed. Topics include drawing tool functions, modules, basic knit structures, jacquards, and fully fashioned garments.
Working in tandem with TS 461: Weft Knit Fabrication and Finishing Techniques, students will design and develop a fully fashioned garment from concept through to a finished knitting program ready for production.
Prerequisite(s): FD 358
Corequisite(s): TS 461.

FD 357 — Introduction to Knitwear Design
3 credits; 6 lab hours
Using knitwear industry methods, students learn specialized patternmaking, construction and specification development for sweater knit silhouettes in Module A. They develop and machine knit original design swatches in Module B. Through hands-on research and development, knitwear industry sustainable practices are introduced. Students develop original designs for sweater knit garments.

FD 358 - Advanced Knitwear Design: Creative Development and Execution
1.5 credits; 3 lab hours

In this advanced course, students further their design development through knitwear industry field trips, advanced methods of draping and assembling. Sustainable knitwear practices are incorporated into design aesthetic. Students create an original collection of garments using multiple weights of knitwear fabrics.
Prerequisite(s): FD 357.

## FD 359 - Advanced Knitwear and Full Fashion Creative Design Development

2 credits; 4 lab hours
In this course, full-fashion garment development, double-bed ribbing methods, pointelle and advanced novelty stitch design principles, execution and development is covered. Students use manual knit machinery to create novelty swatches and execute a creative full-fashion garment. Emphasis is placed on appropriate design solutions for full-fashion development and designing advanced novelty-knitting structures.
Prerequisite(s): FD 357.

## FD 364 - Outerwear and Performance Apparel Design

2 credits; 4 lab hours
Students study the creation of women's performance apparel, which takes into account the principles of extreme movement, as well as the aesthetic and technical needs of the serious outdoor sports enthusiast. Using their knowledge of advanced new fibers, fabrics, trims, and performance construction techniques, students design performance apparel for a specific sport.

## FD 365 - Explorations in Children's Wear Design

2 credits; 1 lecture and 2 lab hours
This course introduces fashion design students to the classifications and size ranges within the childrenswear market. Students gain an understanding of all aspects of the childrenswear market. Developmental stages of childhood are expolored in relation to aspects of creative design. Students research key classifications and digitally present their research.

## FD 366 - Fundamentals of Children's

## Wear Design

2 credits; 4 lab hours
This course introduces students to the fundamentals of childrenswear. They create original design for children in different size ranges while emphasizing proportion and fit. Garments are constructed using current industry-specific methods and machinery.

## FD 368 - Special Occasion Bridal Design

3 credits; 6 lab hours
Through various research opportunities, students are introduced to the world of bridalwear and special occasion markets. They advance their forecast skills, track trends, and compare and contrast the differences of designer's styles. By applying draping, patternmaking, foundation, fit, understructure and sewing techniques, students create a modern bridal design.

## FD 369 - Sportswear Development Concepts

3 credits; 6 lab hours
Students develop casual sportswear as related pieces. They incorporate advanced design components in the creation of key pieces in their own design aesthetic. Working in teams, they research sportswear brands and collaboratively design and execute a cohesive group of innovative pieces for a brand label, maintaining the designer/company's aesthetic.

## FD 371 - Intimate Apparel Sewing Techniques

2 credits; 4 lab hours
This course introduces students to the construction techniques involved in the development of intimate apparel products. Students create a prototype from a sloper, using professional sewing methods and application techniques.

## FD 372 - Control Shapewear Design

2 credits; 4 lab hours
Students explore the design and construction techniques of control garment fitting prototypes. Through market research and demonstrations, students create original concepts and produce prototypes utilizing specialized construction methods.

## FD 374 — Flat Pattern Design for Special Occasion

1.5 credits; 3 lab hours

Through lectures, demonstrations, and hands-on application, students learn to make patterns for after-five, evening, bridalwear and other special occasion dresses. Students develop their flat patternmaking skills in order to create master slopers that interpret design sketches into three-dimensional forms.

## FD 375 - Textile Lace and Technology I

1.5 credits; 3 lab hours

Students learn about textile lace and embellishment technology and its relationship in the design, styling, and marketing of apparel products. Through lectures, field trips, market research, and construction demonstrations, students explore both the domestic and international textile market along with aesthetics, performance, and cost/price relationships.

## FD 376 - Intimate Apparel Couture

3 credits; 6 lab hours
This course introduces students to the intimate apparel industry. They explore the design and construction techniques from shapewear to sleepwear. Through demonstration and laboratory, students create original design concepts that reflect their design aesthetic utilizing specialized draping, patternmaking, fitting, and machinery with emphasis on couture methodology.
Prerequisite(s): FD 381.

## FD 381 - Stretch Fundamentals

2.5 credits; 1 lecture and 3 lab hours

This course introduces students to the special characteristics inherent in working with fine gauge knits and stretch-woven fabrications. Exploring a combination of draping, fitting, sloper developing, and patternmaking techniques, students create garments using specialized machinery. Using their understanding of stretch fundamentals, they design and execute an original stretch lifestyle group.

## FD 383 - Haute Couture Embellishments

2.5 credits; 1 lecture and 3 lab hours

Students are introduced to the methodology of the couture industry through an overview of key hand and machine embellishment techniques. Through experimental learning, students gain and understanding of incorporating courture embellishments to enhance and elevate original design development.

## FD 384 - Active Sport Design

2 credits; 1 lecture and 2 lab hours
The requirements and principles of movement in specific sports in relation to fit and function of active sport apparel is covered. Students create original designs based on the technical and aesthetic needs of the serious sports enthusiast, select active sport textiles, and construct two outfits for sports of their choice.
Prerequisite(s): FD 351 or FD 381.

## FD 385 - Performance and Outerwear Design

2.5 credits; 1 lecture and 3 lab hours This introductory outerwear course underscores how fashion, function and technology are intertwined when creating casual and performance apparel. Attention to proportion, silhouette and functional details development, high tech fabric selections, choice of hands-on construction and trim methodology, planning, and fitting techniques guide student design development through effective first prototype execution.

## FD 386 - Swimwear Design

2 credits; 1 lecture and 2 lab hours
Students are introduced to swimwear design and the history of swimwear, with emphasis placed on development in the USA. They create original designs using advanced flat pattern or draping techniques and underwire bra construction techniques. Garments are constructed in appropriate performance textiles selected by students using specialized machinery. Prerequisite(s): FD 351 or FD 381.

## FD 391 — Children's Wear Licensing Practicum

1.5 credits; 3 lab hours

This course familiarizes students with all aspects of designing licensed children's wear products. Students spend three hours per week for ten weeks at a children's wear host company, and three hours per week for five weeks with an apparel faculty mentor.

FD 400 - 3D Garment Visualization
2 credits; 1 lecture and 2 lab hours
Using fashion designer methodology students digitally create garment patterns and fabrics prototypes while explore textile possibilities for garments they have designed, using fashion industry proprietary/simulation CAD 3D software. Students learn the fundamentals of merging garment and fabric development to create collections with an overall balance of color, pattern, texture, proportion and function. (Current software Clo3d).

## FD 451 - Knitwear Design: Full Fashion and Pointelle

2 credits; 4 lab hours
An introduction to full fashion knitting and the principles of pointelle design. Students use jersey and rib structures to create full fashion garments. Emphasis is placed on appropriate design solutions for full fashion garments and designing pointelle patterns.

## FD 453 - Simulated Knitwear Design

2 credits; 4 lab hours
Using simulated technology with knitwear design methodology, students creatively design and effectively develop a digital sweater collection. Relevant technologies such as Kaledo, Adobe Illustrator and Microsoft Excel are incorporated. Prerequisite(s): FD 342 or FD 355 or FD 359.

## FD 461 - Tailoring Techniques

2 credits; 4 lab hours
This course enables students to elevate their basic sewing skills to an advanced level. Students learn to construct a jacket utilizing hand-tailored methods. Through lectures and demonstrations, students evaluate different levels of quality garments to better understand construction and costing.

## FD 462 - Designer Sportswear Incubator

2.5 credits; 1 lecture and 3 lab hours In this research and development course, students stretch the possibilities of shaping, seaming, handling, and manipulating select fabrics to create innovative, wearable designer sportswear silhouettes and details. Cutting-edge techniques and developments, combined with the inspirational examples of high-end designer role models further challenge individual experimentation that reflects the students' personal aesthetic vision.
Prerequisite(s): FD 369.

## FD 467 - Children's Wear Niche Market

2 credits; 4 lab hours
Students are exposed to specialized and profitable areas of the childrenswear market. In-dept market research and field trips familiarize students with new niche markets. Advanced methods of patternmaking and construction are explored. Students use their newly gained knowledge to create original niche garments.

## FD 472 - Structural Design Fitting Techniques

1.5 credits; 3 lab hours

An introduction to professional foundationfitting techniques as used in the intimate apparel industry. Students learn fitting on a foundation fit model using retail samples and garments of their own design. Through in-class visits and demonstrations by industry experts, students participate in fitting prototypes to explore proper proportion, fit, and comfort.
Prerequisite(s): FD 376 or FD 368
Corequisite(s): FD 481.

## FD 475 - Leather Apparel Design

2 credits; 4 lab hours
This course introduces students to the use of leather, suede, and other animal skins for women's apparel design. The course explores the application of design principles exclusive to designing apparel with leather skins. Students create designs through draping and flat pattern utilizing industrial methods.

## FD 480 - Special Topics in Fashion Design

0 credits

## FD 480A - Special Topics in Fashion Design: 3D Garment Visualization

2 credits; 1 lecture and 2 lab hours
Using fashion designer methodology students digitally create garment patterns and fabrics prototypes while explore textile possibilities for garments they have designed, using fashion industry proprietary/simulation CAD 3D software. Students learn the fundamentals of merging garment and fabric development to create collections with an overall balance of color, pattern, texture, proportion, and function. (Current software Clo3D).
Prerequisite(s): FF 493 or FF 494 or FF 495 or FF 496 or FF 497.

## FD 481 - Structural Design

2.5 credits; 1 lecture and 3 lab hours

This course introduces students to structural design concepts and specialized techniques integral to the foundation industry and applicable to the intimate apparel and special occasion markets. Through demonstration and laboratory, students create original design projects that reflect their design aesthetic and incorporate advanced fitting techniques to industry standards.
Prerequisite(s): FD 376 or FD 368.

## FD 485 — Senior Thesis: Sportswear Design

3 credits; 6 lab hours
In this capstone course, students design, create, develop and prepare professionally executed sprotswear for the juried senior thesis fashion show. They refine their looks through fittings done on professional models. Under instructor guidance in tandem with guest designer/industry critic feedback, students' personal vision is advanced through finalized visual presentations.
Prerequisite(s): FF 497.

## FD 486 - Senior Thesis: Special Occasion Design

3 credits; 6 lab hours
In this capstone course, students design, create, develop and prepare professionally executed special occasion for the juried senior thesis fashion show. They refine their looks through fittings done on professional models. Under instructor guidance in tandem with guest designer/ industry critic feedback, students' personal vision is advanced through finalized visual presentations.
Prerequisite(s): FF 496.

## FD 487 — Senior Thesis: Intimate Apparel Design

3 credits; 6 lab hours
In this capstone course, students design, create, develop and prepare professionally executed intimate apparel for the juried senior thesis fashion show. They refine their looks through fittings done on professional models. Under instructor guidance, in tandem with guest designer/industry critic feedback, their personal vision is advanced through finalized visual presentations. Prerequisite(s): FF 494.

## FD 488 - Senior Thesis: Childrenswear Design

3 credits; 6 lab hours
In this capstone course, students design, create, develop and prepare professionally executed childrenswear for the juried Senior Thesis Fashion Show. Students refine their fashion show looks through fittings done on professional models. Under instructor guidence in tandem with guest designer/ industry critic feedback, students' personal vision is advanced through finalized visual presentations.
Prerequisite(s): FF 493.

## FD 489 - Senior Thesis: Knitwear Design

3 credits; 6 lab hours
In this capstone class, students design, create, develop and prepare professionally executed knitwear for the juried senior thesis fashion show. They refine their fashion show looks through fittings done on professional models. Under instructor guidance in tandem with guest designer/ industry critic feedback, students' personal vision is advanced through finalized visual presentations.
Prerequisite(s): FD 356.
Corequisite(s): TS 491.

## FD 498 - Children's Wear Practicum

1.5 credits; 3 lab hours

This course familiarizes students with all aspects of designing licensed childrenswear products. Students spend 3 hours per week for 10 weeks at a childreswear host company, and 3 hours per week for 5 weeks with an apparel faculty mentor.
Prerequisite(s): FD 366.

## FD 499 — Independent Study in Fashion

 Design1-3 credit
Prerequisite(s): a minimum 3.5 GPA and approval of instructor, chairperson and dean for Art and Design.

