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

FD 100 — SEMINAR: FASH SUSTAIN, TRENDS
0 credits

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 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 133 — Materials and Construction I
2 credits; 4 lab hours
The course emphasizes sewing construction, fabric cutting/layout, and finishing techniques for creating garment prototypes as they relate to the design process. The student is introduced to sewing techniques using cottons, wools, and interfacings. Historical and contemporary examples of garments are referenced to understand construction techniques.

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 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 three-dimensional draping techniques combine to actualize market-appropriate original prototypes.
Prerequisite(s): FD 127 or FD 211.

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 242 — Digital Fashion Design Studio II
2 credits; 4 lab hours
Course 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 industry-standard 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 1600s to the 1850s 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 301 — Sustainable Design Concepts
3 credits; 2 lecture and 2 lab hours
Students develop and design apparel using sustainable design practice while incorporating innovative methods utilizing previously constructed products and unconventional materials. Students explore new possibilities expanding their own personal aesthetic. Students collaborate on a group project focused on sustainable and design practice, small economy, and community engagement. Students research and collaboratively develop wearable apparel and accessories for now or the near future specifically addressing the impact of climate change, environmental, and societal impact. In the culmination of this course students will engage in an individual research project that reflects an understanding of the design's impact from fiber to finished design.

FD 302 — Designing For Innovation
3 credits; 2 lecture and 2 lab hours
This class is designed as an elective for BFA students in the Fashion Department. Students develop design solutions using emerging technologies, including software, innovative materials and new methods of production. Incorporating advanced techniques in the initial module, students create innovative prototypes of functional solutions using methods and materials that can aid or support their wearer. Students collaborate on researching a new idea in design innovation, utilizing cutting-edge materials and/or tools. Students work together to develop and execute wearable items that address a need (i.e., health and wellness, seated design, service work, protection, agriculture). In the culmination of this course, students select or create a brand label and design an innovative product with an aesthetic true to the company's vision.

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 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 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 pattern-making skills in order to create master slopers that interpret design sketches into three-dimensional forms.

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 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 387 — Functional and Performance Apparel Design
2 credits; 1 lecture and 2 lab hours
In this course, students design active sportswear, focusing on functional and performance attributes while utilizing advanced 2D/3D CAD skills and rapid-prototyping. For the final project, students create a capsule collection, producing one outfit in fabric or two in 3D design software.

Prerequisite(s): FD 381.

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 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 foundation-fitting 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 and FF 495.
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 Design

1-3 credit

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