# APPAREL, MERCHANDISING AND DESIGN (A M D) 

## Courses primarily for undergraduates:

## A M D 120: Apparel Construction Techniques

(3-0) Cr. 3. SS.
Assemble components and completed garments with the use of basic sewing equipment. Learn basic construction techniques, applications and vocabulary. Students will need access to a home sewing machine, iron, computer and the internet. Not available for credit for A M D majors.

## A M D 121: Apparel Assembly Processes

(1-4) Cr. 3. F.S.
Prereq: A M D 204 concurrent recommended
Principles of garment assembly. Use of mass production equipment and methods to analyze, develop and assemble garments.

## A M D 131: Fashion Products and Markets

(3-0) Cr. 3. F.
Fashion industry from concept to consumer. Focus on fashion-driven consumer goods. Development and prototyping of fashion products for a target market.

A M D 165: Dress and Diversity in Society
(3-0) Cr. 3. F.S.
Examination of diversity among consumers and introduction to forecasting trends in dress. Introduction to social justice issues. Meets U.S. Diversity Requirement

## A M D 178: Introduction to Apparel Design Studio

(1-4) Cr. 3. F.S.
Introduction to the elements and principles of design in fashion and apparel including skill development in fashion illustration, technical drawing, and fabric rendering using traditional media. Application of written and verbal presentations to communicate fashion and apparel design concepts and terminology. Fashion presentation and introduction to portfolio development.

## A M D 204: Textile Science

(3-2) Cr. 4. F.S.
Prereq: A M D 131
Textile fibers, yarns, fabrication, coloration, and finishes. Quality and performance application to textile products. Lab work included.

A M D 206: Design Selective Advancement
Cr. R. Repeatable, maximum of 2 times. F.S.
Prereq: Completion or enrollment in A M D 121, A M D 131, A M D 178, and A
M D 204 and enrollment in major
Project review and skill assessment related to 2-dimensional and 3dimensional visualization, apparel assembly, basic product knowledge, design problem solving, illustration, textiles. Offered on a satisfactory-fail basis only.

## A M D 210: Computer Applications in Digital Design and Data

 Management(2-2) Cr. 3. F.S.
Prereq: A M D 131, A M D 245 or concurrent; AESHM 113N
Applications of basic skills in Photoshop, Illustrator, PLM-type software, Excel, and databases. Introduction to digital product design and line development. Focus on elements and principles of design. Introduction to digital portfolio development for design and merchandising. Online lectures.

A M D 225: Patternmaking I: Drafting and Flat Pattern (1-4) Cr. 3. F.S.
Prereq: A M D 121, A M D 204, A M D 206.
Application of patternmaking tools and their functions, measurement techniques, pattern labeling, and patternmaking communication documents. Sloper drafting and flat pattern manipulation methods for women's apparel. Design and construction of original garments using drafted slopers and flat pattern manipulation methods to enable the analysis of fit.

## A M D 231: Product Development and Manufacturing

(3-2) Cr. 4. F.S.
Prereq: A M D 204
Analysis of apparel product development, sourcing, and manufacturing processes. Focus on materials and specifications relative to quality, performance, cost, and price. Applications of software for PLM.

## A M D 245: Aesthetics and Brand Image

(3-0) Cr. 3. F.S.
Prereq: A M D 131, A M D 165, A M D 204 or concurrent
Elements and principles of design. Analysis of sensory, expressive, and symbolic aspects that build brand image, with a focus on fashion products and promotional settings.

## A M D 257: Museum Studies

(3-0) Cr. 3. F.
Prereq: Sophomore standing
Overview of museums including history, functions, and philosophy.
Collection and curatorial practices. Funding and governance issues. Hands-on object research and exhibit development. Required field trip.

A M D 275: Retail Merchandising
(3-0) Cr. 3. F.S.
Prereq: 3 credits in Math
Principles of merchandising as applied to retail-, service-, events-, and hospitality-related businesses. Study of the planning, development, and presentation of apparel- and hospitality-related products, services, and experiences. Industry and market research, planning of new offerings, and development of promotional and competitive strategies for various retail formats.

## A M D 278: Fashion Illustration

(0-6) Cr. 3. F.S.
Prereq: A M D 178, A M D 210 or concurrent enrollment, A M D 245 or concurrent enrollment. Permission of instructor.

Development of fashion plates and focused apparel lines/collections. Proficiency in drawing the fashion figure, technical drawings/flats, and apparel using a variety of media. Continuation of fashion presentation and portfolio development

## A M D 290: Independent Study

Cr. 1-2. Repeatable, maximum of 4 credits. F.S.SS.
Prereq: Freshmen or Sophomore Classification; Permission of instructor, adviser, and department chair.
Independent study on topics of special interest to the student, facilitated by approved faculty member. Total number of A M D 290 and A M D 490 credits applied to graduation cannot exceed 9 credits.

## A M D 305: Quality Assurance of Textiles and Apparel

(Dual-listed with A M D 505). (2-2) Cr. 3. F.
Prereq: A M D 231, one course in natural science (chemistry with lab preferred); STAT 101, STAT 226, or STAT 401
Principles of product and materials evaluation and quality assurance. Developing specifications and using standard practices for evaluating materials, product characteristics, performance, and quality.

## A M D 310: Computer Aided Apparel Patternnmaking

(0-6) Cr. 3. F.S.
Prereq: A M D 210, A M D 225; Permission of instructor.
Computer-aided patternmaking technology used in pattern drafting, grading, marker making, and 3-D virtual prototyping.

A M D 321: Computer Integrated Textile and Fashion Design (0-6) Cr. 3. F.S.
Prereq: A M D 210, A M D 278 or concurrent enrollment. Permission of instructor

Analysis and advanced use of computer-aided design software for textile and fashion design for various target markets. Digital presentation and portfolio development.

## A M D 325: Patternmaking II: Draping

(0-6) Cr. 3. F.S.
Prereq: A M D 206, A M D 225; permission of instructor.
Principles of patternmaking through basic draping techniques on industry standard body forms. Apparel design through analysis of fit and design; problem solving and interaction of fabric characteristics with style features.

## A M D 328: Design Seminar

(Dual-listed with A M D 528). Cr. arr. Repeatable. F.S.SS.
Prereq: Vary with topic.
Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term.

## A M D 329: Digital Textile Printing for Apparel Design

(2-2) Cr. 3. F.S.
Prereq: A M D 321; A M D 325 or concurrent
Overview of the use of digital printing in the textile and apparel industry, color matching, repeat print patterns, engineered prints, and creation of apparel prototypes.

## A M D 354: History of European and North American Dress

(3-0) Cr. 3. F.
Prereq: 3 credits from Hist or Art H
Survey of history of dress from ancient times up to the American
Civil War; focus on European and North American dress. Emphasis on connection of dress to the social, cultural, environmental, and technological contexts of the Western world.
Meets International Perspectives Requirement.

## A M D 356: History of Twentieth Century Fashion

(3-0) Cr. 3. S.
Prereq: 3 credits HIST or ART H; A M D 204 recommended.
Survey of major design and technological developments from the American Civil War through the 20th Century. Emphasis on fashion as a system of design and production, culture of consumption, fashion change, and trends in art, society, and culture.

## A M D 362: Cultural Perspectives of Dress

(3-0) Cr. 3. S.
Prereq: A M D 165 or 3 credits in anthropology, psychology, or sociology. Analysis of multiple factors related to dress in selected societies, including technology, cultural identity, aesthetics, social organization, ritual, stability and change. Applications to fair trade and social responsibility.
Meets International Perspectives Requirement.

A M D 372: Sourcing and Global Issues
(3-0) Cr. 3. F.S.
Prereq: A M D 231, A M D 275; ECON 101 or ECON 102 recommended
Evaluation of key issues facing textile and apparel industries in global markets considering ethical, economic, political, social, and professional implications. Sourcing strategies in a global environment. Corporate and consumer social responsibility and sustainability.
Meets International Perspectives Requirement.

## A M D 376: Merchandise Planning and Buying

(3-2) Cr. 4. F.S.
Prereq: A M D 275; COM S 113; 3 credits from ACCT 284, MATH 104, MATH 105, MATH 140, MATH 150, or equivalent.

Calculations and computer application in the planning and control of merchandise. Emphasis on retail math as it pertains to assortment planning, the six-month buying plan process, and other buying concepts and strategies. Online modules.

## A M D 377: Visual Presentation and Promotions

(3-0) Cr. 3. F.S.
Prereq: A M D 245 or AESHM 342; AESHM 340 or MKT 340
Principles of visual aspects of brand development and management; emphasis on branding, visual merchandising, design/layout of retail spaces. Includes applications such as visual communication and documentation using Adobe Creative Suite(R), hands-on display projects, and brand case studies.

## A M D 393: Apparel, Merchandising, and Design Workshop

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.
Prereq: A M D Junior or Senior Classification and Permission of Instructor. Intensive 2 to 8 week workshop exploration. Topics vary each time offered. Maximum of 6 credits applied to graduation.

## A M D 404: Advanced Textile Science

(Dual-listed with A M D 504). (2-2) Cr. 3. S.
Prereq: A M D 204, CHEM 163 and CHEM 163L or equivalent
Theories and principles of textile science. Textile product serviceability. Effect of fiber structure on properties and performance. New developments in textiles.

## A M D 415: Technical Design Processes

(2-2) Cr. 3. F.
Prereq: A M D 225; A M D 231
Garment development and analysis of fit, performance, quality, cost. Exploration of alternative materials, construction methods, grading; specifications and portfolio development.

## A M D 426: Creative Design Processes

(1-4) Cr. 3. Alt. F., offered irregularly.S.
Prereq: A M D 206, A M D 321, A M D 325 or concurrent
Exploration of the creative process and sources of inspiration with emphasis on wearable art; experimentation of advanced design problem solving, alternative materials, fabric manipulation, and pattern-making techniques.

## A M D 431: Apparel Production Management

(3-0) Cr. 3. S.
Prereq: A M D 231; A M D 121 recommended; A M D 372 or concurrent. Procedures and experiences related to application and use of process controls: method analysis, work measurement, costing, pricing, and production planning. Resource management, technology applications, and quality assurance.

A M D 457: Textile Conservation and Collection Management
(Dual-listed with A M D 557). (3-0) Cr. 3. Alt. F., offered irregularly. Prereq: A M D 204
Condition assessment, repair, and stabilization of textiles and apparel in museum collections. Dry and aqueous cleaning. Examination of storage and exhibition techniques, materials, and conditions. Experience with cataloging and management practices.

A M D 467: Consumer Studies in Apparel and Fashion Products (3-0) Cr. 3. F.
Prereq: A M D 165; AESHM 340 or MKT 340; STAT 101 or STAT 104 or STAT 226;

Application of concepts and theories from the social sciences to the study of consumer behavior related to dress, textile and apparel products, and retail experiences. Experience in conducting consumer research.

A M D 475: Retail Information Analysis
(2-2) Cr. 3. S.
Prereq: A M D 376
Evaluation of information needed to make effective retail decisions. Use of technology in analyzing and interpreting retail systems data. Application of concepts related to forecasting, consumer demand, assortment planning, market research, data mining, database interface, pattern recognition, supply-chain/logistics management, retail technology applications such as Visual Retailing, PLM, and Sourcing Simulator.

A M D 477: Omni-Channel Retailing
(3-0) Cr. 3. S.
Prereq: 3 credits in marketing or A M D 275 or AESHM 287
A customer-centric view of marketing with a focus on the retailercustomer relationship and omni-channel strategies. Analysis and evaluation of integrated retail applications and strategies using digital media, including store formats, e-commerce, catalog, mobile, crowdsourcing, and social media

## A M D 490: Independent Study

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

Independent Study. Maximum of 9 credits of both A M D 290 and A M D 490 can be applied toward graduation.

A M D 490A: Independent Study: Textile Science
Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490B: Independent Study: Historical, Cultural, and Museum Studies of Dress and Textiles

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490C: Independent Study: Textile and Apparel Design Cr. arr. Repeatable. F.S.SS.

Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490E: Independent Study: Merchandising, Aesthetics, and Entrepreneurship
Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490F: Independent Study: Sociological, Psychological, and Consumer Behavioral Aspects of Dress

Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490H: Independent Study: Honors
Cr. arr. Repeatable. F.S.SS.
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

A M D 490J: Independent Study: Product Development, Innovation, and Sourcing
Cr. arr. Repeatable. F.S.SS
Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 490S: Independent Study: Production and Quality Assurance

 Cr. arr. Repeatable. F.S.SSPrereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 490W: Independent Study: Fashion Show, Fashion Public Relations and Marketing

Cr. arr. Repeatable. F.S.SS
Prereq: Prereq: 6 credits in A M D. Permission of the instructor, adviser, and department chair

## A M D 495: Senior Design Studio

(Dual-listed with A M D 595). (0-6) Cr. 3. F.
Prereq: A M D 310, A M D 325 and A M D 329. Permission of instructor Creation of an apparel line from target market research to prototypes through the use of manual techniques and CAD technologies. The line is to be included in a professional portfolio and pieces submitted to a juried exhibition.

## A M D 496: Fashion Product Development and Prototyping

(3-0) Cr. 3. S.
Prereq: A M D 231, A M D 245, A M D 275
Applying consumer, aesthetic, and quantitative trend information to develop value-added fashion products and product lines with merchandising/promotion campaigns for diverse target markets. Multifunction team projects. Development of a prototype and presentation to industry representatives.

## A M D 499: Undergraduate Research

Cr. 1-3. Repeatable. F.S.SS.
Prereq: Senior classification, 15 credits in A M D. Permission of instructor, adviser, and department chair
Research experience in textiles and clothing with application to a selected problem.

Courses primarily for graduate students, open to qualified undergraduates:

A M D 504: Advanced Textile Science
(Dual-listed with A M D 404). (2-2) Cr. 3. S.
Prereq: A M D 204, CHEM 163 and CHEM 163L or equivalent
Theories and principles of textile science. Textile product serviceability. Effect of fiber structure on properties and performance. New developments in textiles.

## A M D 505: Quality Assurance of Textiles and Apparel

(Dual-listed with A M D 305). (2-2) Cr. 3. F.
Prereq: A M D 231, one course in natural science (chemistry with lab preferred); STAT 101, STAT 226, or STAT 401

Principles of product and materials evaluation and quality assurance.
Developing specifications and using standard practices for evaluating materials, product characteristics, performance, and quality.

## A M D 510: Foundation of Scholarship in Apparel, Merchandising, and Design

(3-0) Cr. 3. F.
Prereq: Graduate classification or permission of instructor
Overview of scholarship in apparel, merchandising, and design with emphasis on current and future directions. Fundamentals of writing literature reviews. Examination of ethical issues in scholarship and academic life. Introduction to creativity, sustainability, and entrepreneurship. Development of teaching units.

A M D 521: Digital Technologies in Textile and Apparel Design
(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: Research Methods course. Permission of instructor.
Digital technologies in textile and apparel design. Theories and practices of mass customization and personalization, digital textile printing, 3D body scanning, creating avatars from body scans, and fitting digital apparel designs.

## A M D 525: Experimental Patternmaking

Cr. 3. Alt. F., offered even-numbered years.
Prereq: AMD 121 or equivalent, AMD 225 or equivalent, AMD 510 or taking concurrently, permission of instructor
Research, analyze, and apply experimental patternmaking techniques to original garments suitable for entry into a juried competition/exhibitions. Compare, contrast, and organize a framework of research patternmaking principles through content analysis or other appropriate research techniques. Documentation of learning and design process.

## A M D 528: Design Seminar

(Dual-listed with A M D 328). Cr. arr. Repeatable. F.S.SS.
Prereq: Vary with topic.
Focus on artisanal textile, apparel, or surface and structural design techniques. Design processes for specialty fabrics and markets. Topics vary by term

## A M D 545: Consumer Aesthetics and Retail Branding

(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: One course in design elements and principles, psychology, consumer behavior, or marketing

Examination of hedonic nature of consumer experience and its application to experiential design and branding of retail/hospitality establishments. Emphasis on consumer behavior, environmental psychology, and marketing literature.

## A M D 554: Dress History Research Methods

Cr. 3. Alt. S., offered odd-numbered years.
Using a variety of sources and methods of analysis, students will develop their ability to read and interpret primary and secondary sources and to understand the methodology underpinnings and process of constructing dress history.

A M D 557: Textile Conservation and Collection Management
(Dual-listed with A M D 457). (3-0) Cr. 3. Alt. F., offered irregularly. Prereq: A M D 204
Condition assessment, repair, and stabilization of textiles and apparel in museum collections. Dry and aqueous cleaning. Examination of storage and exhibition techniques, materials, and conditions. Experience with cataloging and management practices.

A M D 565: Sustainability: Theory and Practical Application
(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: 3 credits in research methods; basic knowledge of apparel industry and product development; permission of instructor. Overview of current sustainability theory, research, and methodology. Emphasis on the evaluation and discussion of current sustainability literature and sustainable practice of apparel, textiles, and related products and services through people, processes, and the environment. Development and presentation of original scholarly and creative design work under various sustainability frameworks.

## A M D 567: Consumer Behavior and Appare

(3-0) Cr. 3. Alt. F., offered odd-numbered years. Prereq: A M D 467 or MKT 447; STAT 401
Application of concepts and theories from the social sciences to the study of consumer behavior. Experience in conducting research; manuscript writing

## A M D 572: Sourcing and Global Issues

(3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: A course in merchandising, marketing, or economics
Evaluation of textile and apparel industries in global markets considering ethical, economic, political, social, and professional implications.
Sourcing strategies in a global environment. Corporate and consumer social responsibility and sustainability. Experience in conducting research using secondary data.
Meets International Perspectives Requirement.
A M D 576: Industry Applications in Merchandising and Management (3-0) Cr. 3. Alt. S., offered even-numbered years.
Prereq: A M D 376 or equivalent; A M D 275 or equivalent; or permission of instructor
Using the case study method, students apply merchandising theory, principles, and practices to industry scenarios. Emphasis on problem solving, creative thinking, data analysis, and data interpretation involved in business operations. Focus on the development of leadership skills while functioning in small and large groups.

A M D 577: E-Commerce for Apparel and Hospitality Companies
(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: Course in marketing or permission of instructor
Analysis of technology and consumer trends, industry practices, and marketing strategies for e-commerce including big data, data mining, and social media. Evaluation and development of apparel or hospitality company websites. Theory application to the development of multichannel business strategies.

## A M D 590: Special Topics

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590A: Special Topics: Textile Science
Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590B: Special Topics: Historical, Cultural, and Museum Studies of Dress and Textiles

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and
instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590C: Special Topics: Textile and Apparel Design
Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590E: Special Topics: Merchandising, Aesthetics, and Entrepreneurship

Cr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590F: Special Topics: Sociological, Psychological, and Consumer

 Behavioral Aspects of DressCr. arr. Repeatable.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590J: Special Topics: Product Development, Innovation, and Sourcing

Cr. arr. Repeatable. F.S.SS.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

A M D 590S: Special Topics: Production and Quality Assurance Cr . arr. Repeatable. F.S.SS.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 590W: Special Topics: Fashion Show, Fashion Public Relations and Marketing

Cr. arr. Repeatable. F.S.SS.
Prereq: Permission of director of graduate education, adviser, and instructor(s)
Individually designed A M D-related projects that reflect the special interests of the student.

## A M D 595: Senior Design Studio

(Dual-listed with A M D 495). (0-6) Cr. 3. F.
Prereq: A M D 310, A M D 325 and A M D 329. Permission of instructor.
Creation of an apparel line from target market research to prototypes through the use of manual techniques and CAD technologies. The line is to be included in a professional portfolio and pieces submitted to a juried exhibition.

## A M D 599: Creative Component

Cr. arr. Repeatable.
Prereq: 9 graduate credits in A M D

## Courses for graduate students:

## A M D 611: Seminar

Cr. 1-3. Repeatable.
Prereq: 6 graduate credits in A M D. Permission of instructor
Discussion of scholarship and current issues. Topics vary

## A M D 625: Design Theory and Process

(2-4) Cr. 4. Alt. S., offered odd-numbered years.
Prereq: Permission of instructor.
Analysis and application of design theory and creative processes, including strategies for solving aesthetic, functional, and/or technologyfocused design problems. Creation and dissemination of design scholarship.

## A M D 665: Social Science Theories of Appearance

(3-0) Cr. 3. Alt. S., offered odd-numbered years.
Prereq: 6 credits in sociology or psychology
Analysis of social science theories and concepts applicable to appearance research. Emphasis on qualitative research and philosophy of knowledge, including postmodern, symbolic interaction, semiotic, and feminist theories. Collection and analysis of qualitative data.

## A M D 676: Merchandising Theory and Research Applications

(3-0) Cr. 3. Alt. F., offered even-numbered years.
Prereq: A M D 275 or equivalent; statistics course recommended.
Review of current merchandising theory, research, and methodology Emphasis on the evaluation and discussion of current and seminal merchandising literature, understanding research processes, interpretation of findings, assessing implications of research for future directions in merchandising, and the development and presentation of original scholarly work.

## A M D 690: Advanced Topics

Cr. arr. Repeatable.
Prereq: Enrollment in doctoral program, permission of instructor; and approval of D.O.G.E

A M D 699: Research
Cr. arr. Repeatable.

