

Textiles and Apparel (TXA)

TXA 301 Clothing the Planet 3 Hours

Study of the role textiles and apparel play in human lives. Introduction to the textile and apparel industries, and the broad perspective and core skill sets that characterize the field. Subjects include terminology, fibers and fabrics, textile technology, product development through fashion design and retail merchandising, global sourcing and manufacturing, international promotion and marketing, and textile conservation, exhibition, and collection management.

TXA 301C Introduction to the Fashion Industry 3 Hours

Explore the apparel and textiles industry with an emphasis on ethical and sustainable issues related to the industry. Examine a broad view of the interrelated fields of design, merchandising, product development, and textiles alongside emerging themes in the field.

TXA 103, 203, 303 Topics in Textiles and Apparel 1-3 Hours

TXA 205, 305 Textiles 2-3 Hours

Chemical and physical properties of fibers and yarns, fabric construction, and finishes.

TXA 105L Textiles Laboratory 1 Hour

TXA 212K Apparel Industry 2 Hours

Introduction to the integrated apparel design industry from the creative and merchandising perspective.

TXA 212L Apparel Product Development and Design Laboratory 2 Hours

TXA 313 Aesthetics: Theory and Practice 3 Hours

Introduction to the theoretical and practical aspects of the principles of design and visual literacy in the field of textiles and apparel. Introduction to the principles and theories that define what is aesthetically pleasing and the vocabulary necessary to identify, describe, and critique them.

TXA 314C Computer-Aided Design for Apparel 3 Hours

Explore computer technology used to create textile prints, weaves, illustrations, flat patterns, promotional pieces, and pattern markers.

TXA 214K, 314K Product Development 2-3 Hours

Introduction to all stages of product development involved in fashion and functional design with an emphasis on target market identification, cost analysis, material selection, and the organization of product development within the industry structure. Apply product development skills and strategies involved in fashion and functional design.

TXA 214L Product Development Laboratory 2 Hours

Application of product development skills and strategies involved in fashion and functional design. Emphasis on target market identification, cost analysis, material selection, and the position of product development within the industry structure.

TXA 316L Apparel I 3 Hours

Industrial techniques of pattern design and garment construction.

TXA 316Q Sewn Products Analysis 3 Hours

Evaluation of soft goods, including materials, quality of work, and costs.

TXA 316R Sewn-Product Analysis and Manufacturing 3 Hours

Explore apparel production and manufacturing processes, including an evaluation of soft goods, materials, quality of work, and costs. Examine conceptual framework of the manufacturing process for future apparel professionals. Discuss the apparel production cycle: how apparel products are designed, created, and distributed. Analyze garment design and construction features to understand their relationship to apparel cost and quality.

TXA 317D Fashion Design Thinking 3 Hours

Introduction to the process of primary and secondary research, design, and construction.

TXA 317R Merchandising Math I 3 Hours

Explore foundational concepts in retail math using Excel. Build analytical skills and a foundation in merchandising systems.

TXA 317T Textiles Fabrication 3 Hours

Apply textile theory and properties to create yarn and fiber based materials such as woven, knit, and non-woven textiles.

TXA 318E Fashioning America 3 Hours

Explore the history of the United States from pre-Civil War to contemporary society as reflected through targeted as well as changing styles in costume and dress. Examine the ability of dress as a device that can communicate political, social, economic, aesthetic and cultural change. Analyze clothing choices as related to exterior motivations including protection, gender, status and decoration. Relate the power of dress to particular demographic groups throughout history. Acquire a vocabulary with which to describe apparel and related items.

TXA 318T Medical Textiles 3 Hours

Explore special and functional textiles to address medical applications and public health challenges such as artificial organs and tissue scaffolds, medical aid devices, the use of antiviral and antibacterial materials, and personal protection equipment.

TXA 219C, 319C Applied Art in Visual Presentation 2-3 Hours

Explore the principles and elements of design as related to merchandising presentation, display planning, execution, and coordination.

TXA 119L Applied Art in Visual Presentation Laboratory 1 Hour

Application of the principles and elements of design as related to merchandise presentation, display planning, execution, and coordination.

TXA 319R Merchandise Presentations in Retail Environments 3 Hours

Explore an integrated approach to communicating, presenting and evaluating two-and three-dimensional design strategies for merchandise presentation (both digital and brick and mortar environments). Examine components of both design and execution rooted in a foundation of visual merchandising theory, skills, and terminology.

TXA 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S Topics in Textiles and Apparel 1-9 Hours

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program.

TXA 325K Culture, Gender, and Appearance 3 Hours

Social, economic, aesthetic, and political aspects of historic costume and of the evolution of modern dress.

TXA 325L History of Dress and Cultural Change I 3 Hours

Social, economic, aesthetic, and political aspects of costume evolution from ancient times through the Renaissance.

TXA 325M History of Dress and Cultural Change II 3 Hours

Social, economic, aesthetic, and political aspects of costume evolution from the Baroque period through modern times.

TXA 126, 326 Apparel II 1,3 Hours

Advanced apparel construction techniques using industry standards and portfolio development.

TXA 226L Apparel II Laboratory 2 Hours

Advanced apparel construction techniques using industry standards and portfolio development.

TXA 327 Clothing and Human Behavior 3 Hours

The social, psychological, and nonverbal significance of clothing and the influence of clothing on behavior.

TXA 327C Social Psychology of Dress and Appearance 3 Hours

Explore cultural, social, and psychological significance of dress and appearance. Examine theories related to the ways individuals communicate and interpret the self, identity, and social roles through dress and appearance in contemporary society.

TXA 328 Research Methods in Textiles and Apparel 3 Hours

Basic research methodology and academic writing.

TXA 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S Topics in Textiles and Apparel 1-9 Hours

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TXA 331 Textiles and Apparel in a Global Market 3 Hours

Overview of the textiles and apparel industry including apparel industry standards, labor costs, economics, distribution, and structure in the modern global marketplace. Subjects include the analysis of consumption patterns and retailing systems to inform product development; exploring cross-cultural comparisons between global consumer markets; understanding importing and exporting systems and other procedures involved in modern supply chain activities; and grasping the collaborative nature of innovation and design, manufacturing and distribution, retailing, and customer satisfaction leading to sales in the global market.

TXA 331E Textiles and Apparel in the Global Marketplace 3 Hours

Explore global textile and apparel industries and the factors affecting global sourcing from product concept to distribution with an emphasis on global issues. Examine the textile and apparel complex and its history, international trade and the effects of trade policy, the sourcing process, selection of sourcing locations and partners, sourcing regions of the world, and current trends.

TXA 340E Paris: Fashion, History, and Techniques 3 Hours

Explore workshops and tours focused on fashion, its history, and techniques.

TXA 340T Sustainable Textile Manufacturing 3 Hours

Explore sustainable textile manufacturing practices including renewable fiber manufacturing, textile circular manufacturing, and apparel recycling.

TXA 341E Accessory Design, Product Development, and Merchandising 3 Hours

Connect with industry partners to explore design and product development processes through the brand's commercial lens.

TXA 342E New York: Apparel Industry 3 Hours

Explore significant apparel-related businesses such as major retailers, fashion designers, lifestyle brands, apparel and beauty product manufacturers, and licensing firms. Interact with industry leaders such as C-Suite Leaders, Directors, Presidents, VP's Merchants, and museums such as The Metropolitan Costume Institute.

TXA 350 Advanced Apparel Design Portfolio 3 Hours

Extensive sociological, cultural, and historic visual research for apparel design. Through a range of projects that incorporate computer-aided design, product illustration, technical packets, proposed production plans, and target market identification, students will produce a professional level, hard copy and online, portfolio that will help prepare them for a career in the apparel industry.

TXA 350D Advanced Apparel Portfolio 3 Hours

Examine sociological, cultural, and historic visual research for apparel design. Explore a range of projects that incorporate computer-aided design, product illustration, technical packets, proposed production plans, and target market identification.

TXA 151 Pre-Internship Seminar 1 Hour

Preparation course for students seeking internships. Subjects include application, internship interview process, effective professional communication, ethical decision making, leadership development, site expectations, and the impact of business environments on personal and career effectiveness in the field of textiles and apparel.

TXA 351D Advanced Apparel Design 3 Hours

Expand range of expertise in developing design proposals to include knitted or printed textiles, other apparel categories, menswear, size inclusivity, children's wear, and accessories. Focus on expanding depth and breadth of skills as relevant to career opportunities.

TXA 351R Merchandising Technology 3 Hours

Examine various technologies relevant to merchandising and retailing.

TXA 352C, 652C Field Experience in Textile Conservation Internship 3,6 Hours

Participation in an approved internship after completion of all conservation science stream coursework. Students will be placed in an appropriate site under the supervision of an available professional such that students may experience collection management, artifact storage and conservation, exhibit planning/installation, environmental monitoring, and/or other museum or conservation activities. A formal agreement between the faculty supervisor and internship sponsor will govern activities and be monitored throughout the experience through assignments, regular electronic communication, and a site visit.

TXA 352D Field Experience in Apparel Design 3 Hours

Application of apparel design techniques and principles in a professional environment.

TXA 352E Historic Apparel Collections and Exhibit Management 3 Hours

Explore the history of fashion, design thinking, visual display design, and execution.

TXA 352M Field Experience in Retail Merchandising 3 Hours

Application of merchandising techniques and principles in a professional environment.

TXA 353 Field Experience I 3 Hours

Application of merchandising strategic planning in a professional environment with faculty and site director supervision.

TXA 353D Apparel Design Mentorship 3 Hours

Connect with a Textiles and Apparel design alum - a professional designer- as a mentor. Build awareness of current apparel industry practices and standards expected for entry level design positions.

TXA 354C Material Properties and Deterioration 3 Hours

Overview of the major mechanisms of textile deterioration from a variety of sources including light, dirt, various insects and microorganisms, as well as mechanical wear and tear. Examination of the peculiarities of these deterioration phenomena through the study of the basic chemical and physical properties of the fibers constituting the textiles.

TXA 354D Instrumental Methods for Conservation Assessment 3 Hours

Overview of primary instrumental methods for evaluating historical textiles in terms of physical characteristics, chemical content, strength loss, structural deterioration, color change, and overall structural integrity and status of impact of environmental factors. Focus on instrumental features, measuring procedures, and interpretation of instrumental data.

TXA 354E Conservation Planning and Preventive Treatments 3 Hours
Implementation and management of textile conservation. Subjects include general requirements for preserving historical textiles, procedures for planning textile conservation projects, and major physical and chemical methods of preventive and postdamage treatments for historical textiles.

TXA 354F Advanced Exhibit Planning and Installation 3 Hours
Planning and implementation of a full museum exhibit including budget, selection and preparation of artifacts, prop construction, signage, educational and promotional materials, donor/supporter communication, and opening event. Serves as a pre-internship/capstone course for conservation science majors.

TXA 155, 355 Topics in Problems Course 1,3 Hours
Intensive study of selected problems of an interdisciplinary nature.

TXA 355C Computer-Aided Design for Apparel 3 Hours
Computer technology used to create textile prints, weaves, illustrations, flat patterns, promotional pieces, and pattern markers.

TXA 355D Textiles Artifact Management and Conservation 3 Hours
Principles and techniques in the identification, documentation, conservation, and exhibition of textile-based artifacts.

TXA 355K Textile and Apparel Economics 3 Hours
Economic and regulatory aspects of the textile and apparel industries.

TXA 355N History of Textiles 3 Hours
Role of textiles in the social, economic, aesthetic, and technological development of society; including production and design of textiles throughout history.

TXA 355P Problems in Retail Merchandising 3 Hours
Intensive study of selected problems related to field experience; development of analytical and problem-solving skills for retailing.

TXA 356 Internship 3 Hours
Reflect on the internship and faculty mentorship.

TXA 359H Honors Reading Course 3 Hours
Supervised individual reading on special subjects.

TXA 360 Textile Testing 3 Hours
Analyze and evaluate textile performance.

TXA 260L, 360L Advanced Textiles 2-3 Hours
Composition, structure, and properties of textile products; contributions of textile research.

TXA 361 Consumer Behavior in the Marketplace 3 Hours
Internal and external factors that influence consumer behavior in the marketplace. Application of concepts and theories from the social sciences to the areas of textiles, clothing, and appearance; experience in conducting market and consumer research.

TXA 361T Biopolymers and Biomaterials 3 Hours
Examine bio-fibers, bio-materials, and membrane formation and applications from a textile foundation.

TXA 362D CLO 3D 3 Hours
Explore technology, pattern-making and garment construction intertwined with a modern approach to garment design. Utilize CLO 3D software for 3D rendering and flat pattern design on a virtual croquis.

TXA 362T Smart Textiles and Apparel Systems 3 Hours
Explore advanced technologies of conductive yarns, e-textiles and wearable technology integration.

TXA 363D Jewelry Design and Technology 3 Hours
Explore 3D CAD software, such as Fusion 360 to create renderings and models. Utilize technology equipment such as 3D printing and laser cutting to create a real life sample of original designs.

TXA 363T Nanotechnologies in Textiles 3 Hours
Examine the role of nanotechnology in the evaluation, development and fabrication of textiles and fibers. Explore characterization tools used in nanotechnology, general chemistry employed in fabrication, and properties found in different nano-materials, nano-fibers, nano-coatings. Discuss products in the market and functionality. Propose potential innovations with nanotechnologies in textiles.

TXA 164K Topics in Advanced Problems in Clothing 1 Hour
Creative application of flat pattern or draping processes.

TXA 264L Topics in Advanced Problems in Apparel Laboratory 2 Hours

TXA 165, 265, 365 Advanced Topics in Textiles and Apparel 1-3 Hours

TXA 366D Flat Pattern 3 Hours
Explore the creative application of flat pattern processes.

TXA 367D Draping 3 Hours
Examine advanced apparel design. Explore the creative application of draping processes.

TXA 368D Capstone Collections 3 Hours
Examine advanced apparel design. Explore the creation of an apparel collection.

TXA 370 New York City Fashion and Sustainability 3 Hours
Examine multiple facets of the apparel industry in New York City, including fashion design, manufacturing processes and technology, retailing and sales, marketing, and post-consumer services. Explore the industry through the lens of sustainability highlighting current innovations for the purpose of reducing fashion's environmental impact.

TXA 376 Principles of Retail Merchandising 3 Hours
Retail strategic planning and implementation for soft goods and apparel.

TXA 376R Concepts and Innovations in Retailing 3 Hours
Develop understanding of retail strategy, channels of distribution, private labels, innovation in retail, and the key issues impacting growth in retail firms including exposure to issues facing retailers in international settings.

TXA 377 Merchandising Systems 3 Hours
Application course focusing on the calculation and analysis of the selling price, profitability, assortment planning, purchasing, and inventory control. Includes spreadsheet application and exercises.

TXA 377R Merchandising Math II 3 Hours

TXA 378H Topics in Textiles and Apparel: Honors Seminar 3 Hours

TXA 379H Honors Tutorial Course 3 Hours
Supervised individual research on a special topic in textiles and apparel; oral presentation and preparation of a scholarly paper covering the research. May be based on laboratory, library, or field research.

TXA 379R Strategic Brand Management 3 Hours
Examine strategic brand management and trademark protection. Explore the process of how an institution strategically manages a product category and grants rights to a specific group of licenses.

TXA 392 Topics in Research Problems in Textile and Apparel Technology 3 Hours
Directed research in various topics in the area of textile and apparel technology.

TXA 394 Topics in Recent Advances in Textile and Apparel Technology 3 Hours
An in-depth study of textile and apparel topics. Students may read original research papers and carry out fieldwork assignments.

TXA 394.1 Advances in Product Development and Technical Design 3 Hours
Development of specification, sizing, grading systems, and quality control methodology.

TXA 394.10 Global Textile and Apparel Business Dynamics 3 Hours
Elements of competitive strategy and planning methods within the textile complex, with an emphasis on the concepts of strategy in a mature industry, defining business in a global industry, allocating resources through strategic planning methods, and implementing strategy in single- and multi-business firms.

TXA 394.11 Market Research in Textiles 3 Hours
Study and analysis of quantitative methods employed in market research in the textile industry, including the function of market research and its proper orientation to management and decision making.

TXA 394.12 Color Science 3 Hours
The basis of modern techniques for color specification, measurement, control, and communication. Applications of color science to textiles, plastics, color reproduction, computer-based imaging, and display systems. Basic concepts are taught using computer color graphics.

TXA 394.2 International Sourcing and the Global Economy 3 Hours
Economic, social, and public issues related to international production and sourcing of textiles and apparel.

TXA 394.3 E-Commerce and Direct Marketing 3 Hours
Recent developments and evaluation of nontraditional retailing of apparel.

TXA 394.4 Textile Instrumentation 3 Hours
Application of image analysis, neural networks, and wavelet transforms to textile and apparel products.

TXA 394.5 Digital Design and Printing 3 Hours
Principles and elements of digital design and printing. Recent developments in digital knits, weaves, prints, and nonwoven textiles.

TXA 394.6 Textile Functional Finishes 3 Hours
Study of the application and adaptation of functional finishes to textiles.

TXA 394.7 Textile Microscopy and Image Analysis 3 Hours
Basic techniques for characterizing fiber properties visually with a microscope and using technology and computer analysis.

TXA 394.8 Digital Modeling of Textiles 3 Hours
Recent developments in two- and three-dimensional modeling.

TXA 394.9 Production Mechanics and Properties of Woven Fabrics 3 Hours
The relationship between the mechanics of production and mechanical properties of woven fabric; the unit operations required to prepare yarns for weaving and the mechanisms employed in weaving; fabric structure, geometry, and mechanical properties; designing for specific fabric properties.

TXA 395 Topics in Textiles and Apparel: Seminar 3 Hours
Lectures and discussions on current topics in textiles and apparel.

TXA 395.1 Mass Customization of Apparel 3 Hours
The principles and implementation of newly developed three-dimensional technology for apparel mass customization.

TXA 395.2 Advanced Functional Textiles 3 Hours
Current science and technology concerning functional textiles. Emphasis is on the relationship between materials, development, structure, and properties.

TXA 698 Thesis 6 Hours