

APPAREL, HOUSING, AND RESOURCE MANAGEMENT

Our Website (<http://www.ahrm.vt.edu>)

Overview

The mission of the Apparel, Housing, and Resource Management housed in the School of Design is to improve quality of life for individuals, families, and the broader community by creating and extending knowledge in apparel, housing, and resource management. We apply business, consumer, and design perspectives to teaching and learning, research, and outreach.

AHRM includes four majors Consumer Studies, Fashion Merchandising and Design, Property Management, and Residential Environments and Design.

Consumer Studies Major

Career Advisor: G. Cheng

The Consumer Studies major prepares students to enter a variety of careers in the public and private sectors. Central to these careers is the ability to analyze issues and problems from the perspectives of consumers, business, and government. Students learn to reasonably advocate consumer interests and to help consumers improve their well-being. They develop fundamental skills that are used to resolve problems faced by consumers in the market place and the work place.

Graduates enter careers related to consumer affairs, marketing and sales, business management, and human resources. Required courses build a thorough understanding of households in the dual roles of producers and consumers that function within an international economic marketplace affected by government policy and regulation. Students study current events to track changing conditions and public policy. Additional courses develop skills for effectively processing and conveying information. A choice of controlled electives enables a student to tailor study to consumer products and promotion or consumer financial services, and counseling.

Consumer Studies students are provided a variety of learning experiences on- and off-campus. Through involvement with student professional associations, as well as relevant state and national organizations, students can develop leadership and organizational skills and network with active professionals. There are opportunities to relate classroom learning to the "real world" with projects and visits with industry, legislators, and regulators. An individualized study experience, typically an internship related to personal career interests, is required.

Fashion Merchandising and Design Major

Career Advisor: S. Wilmot

Apparel fashion is an exciting and competitive field where designers, product developers, manufacturers and retailers create and merchandise products and services for target customers. The Fashion Merchandising and Design major prepares students for diverse career opportunities available to graduates of the program. Students may find employment with apparel or textile manufacturers or with a wide variety of retailers and fashion media, including magazines and social media websites. Products in apparel fashion range from fast fashion and haute couture to special-use apparel for athletes and extreme sports to accessories and

shoes. Graduates from the FMD major may be employed in the areas of product development and/or merchandising. Positions in merchandising include:

- assistant buyer,
- buyer,
- fashion journalist,
- internet merchant,
- merchandise manager,
- showroom manager,
- store manager, and
- visual merchandiser.

Positions in design and product development include:

- creative designer,
- technical designer,
- private label manager,
- sourcing analyst, and
- production manager.

The FMD curriculum is structured to build students' knowledge and skills in the design, development, production, marketing, sale, and use of apparel and other textile products. Individuals employed in today's fashion world need to understand both product design and development and merchandising management. In addition, students learn details about the business and economics of the textile and apparel industry and the cultural and historic aspects of apparel fashion. Supporting courses in accounting or statistics, management, and marketing enhance career preparation.

Many courses in the FMD major promote hands-on learning so that students gain industry type experiences in product development, computer-aided design, textile and apparel evaluation, merchandise planning, promotion, and consumer patronage behavior. Through coursework, internships, study tours, student organizations, and interaction with industry experts, students become prepared to enter the dynamic apparel fashion field.

Property Management Major

Career Advisor: K. Avery

Property management offers a fast-growing career encompassing positions in luxury and affordable apartment developments, senior living communities, mixed-use, and office and retail properties. Hundreds of management positions are available each year, and graduates of Virginia Tech's program are in great demand because they are equipped with skills that address the complexities of managing multimillion-dollar investments. Employment is available in various aspects of the industry including management, operations, marketing, human resources, training, development, and acquisitions.

The property management major offers a wide-ranging program of study that includes specific courses in property management, as well as supporting courses in housing, business, and real estate. All students complete at least one internship that is typically a paid internship with housing provided. The internships give students an opportunity to gain real-world experience, make valuable career contacts, and explore different aspects of property management. Property management's very active advisory board visits campus twice yearly, and many also attend the property management career fair held on campus each March. Board

members act as mentors and provide financial support for field trips, professional development, and scholarships. Property management seniors take the National Apartment Association's Certified Apartment Manager exam. Graduating with this credential places new employees a year or more ahead of other entry-level peers.

Residential Environments and Design Major

Career Advisor: G. Galford

The Residential Environments and Design (RED) major focuses on the planning, design, and marketing of residential environments. Required courses emphasize design, human, social, and business factors, including current issues and practices, which influence the environment of housing. The diversity of the population with differing needs, the range of available products, the growth of regulation, the increased concern for health and safety, and the rapid changes in technology are among the factors that lead to a very complex marketplace in the residential industry.

There are many career opportunities for graduates of the RED major, which provide employment as well as business opportunities. Employment opportunities include certified kitchen and bath designers, manufacturing and sales of residential products, residential construction, home furnishings, appliances, and related industries. The future looks bright for those students who choose careers in the residential design industry. A number of trend and demographic indicators suggest that people will continue to spend money on their homes and need products and services from experts. There will be a strong, on-going need in the residential industry for well-educated professionals with specialized knowledge in design and the ability to think and solve complex problems.

The RED major's program in kitchen and bath design is accredited by the National Kitchen and Bath Association, and interested students can prepare to sit for the first level design certification examination. Students in the major are mentored by industry members of the Residential Environments and Design Industry Board. Classroom learning is expanded through field trips, guest speakers, community clients, internships, competitions, and other special projects.

- Consumer Studies Major (<https://catalog.vt.edu/undergraduate/architecture-arts-design/apparel-housing-resource-management/consumer-studies/>)
- Fashion Merchandising and Design Major (<https://catalog.vt.edu/undergraduate/architecture-arts-design/apparel-housing-resource-management/fashion-merchandising-design/>)
- Property Management Major (<https://catalog.vt.edu/undergraduate/architecture-arts-design/apparel-housing-resource-management/property-management/>)
- Residential Environments & Design Major (<https://catalog.vt.edu/undergraduate/architecture-arts-design/apparel-housing-resource-management/residential-environments-design/>)

Department Head: Lisa M. Tucker^{2,3,7}

Professors: L.M. Tucker^{2,3,7}, H.I. Chen-Yu, P.J. Fisher, and D.H. Kincade

Associate Professors: E.Z. Hopkins, E. Hwang, J.E. Lee, I.E. Leech, and E. Shin

Assistant Professors: J. Yoo, G.A. Galford, E. Shin, and D.C. Smith-Glaviana

Collegiate Assistant Professor: G. Cheng

Associate Professor of Practice: K. Avery

Assistant Professor of Practice: R. Walsh and S. Wilmot

Visiting Assistant Professor: M. Gawrys

Instructors: H. Illahe

- 1 Award for Excellence in Undergraduate Advising
- 2 Academy of Teaching Excellence inductee
- 3 Wine Award recipient
- 4 Sporn Award recipient
- 5 Alumni Award for Extension Excellence
- 6 Alumni Award for Research Excellence
- 7 Alumni Award for Teaching Excellence
- 8 Academy of Faculty Service
- 9 Commonwealth of Virginia Outstanding Faculty Award
- 10 Diggs Teaching Scholar Awards

Undergraduate Course Descriptions (AHRM)

AHRM 1014 - Design and Art for Consumers (3 credits)

Overview of art and design principles and elements with a focus on their application in the creation and promotion of apparel, housing, and residential technology products for diverse consumers. Review of historical art and design trends and theories in relation to these products. Interpretative strategies and methodologies in visual art and design. Exploration of the design process, including examinations of human factors and user needs.

Pathway Concept Area(s): 6A Critique & Practice in Arts, 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

AHRM 1104 - Introduction to AHRM and Student Resources (1 credit)

Introduction to the Department of Apparel, Housing, and Resource Management (AHRM), majors and curriculum requirements. Introduces students to experiential learning opportunities, undergraduate research, and career opportunities. Exploration of programs and services to enhance awareness of opportunities and support systems available for student success.

Instructional Contact Hours: (1 Lec, 1 Crd)

AHRM 2014 - Design for Consumers Studio (3 credits)

Exploration and application of design principles and elements in two-dimensional and three-dimensional designs that support the development and promotion of products for diverse consumers, including apparel, housing, residential technologies. Application of skills, tools, and methods to the creation of design. Utilization of the design process to develop plans for consumer products for diverse users. Design Lab/Studio.

Prerequisite(s): AHRM 1014

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (0 Lec, 5 Lab, 3 Crd)

AHRM 2404 - Consumer Rights (3 credits)

Role of consumers in society and in national and international markets. Consumer rights, responsibilities, policies, regulations and redress. Consumer decision making and planned buying. Current consumer issues such as: product safety, food, health care, housing, environmental impact, banking, credit and insurance from an intercultural perspective.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

AHRM 2954 - Professional Development (2 credits)

Professional Development guides students through the field study process and skill development, focusing on key areas such as resumes and cover letters, interview techniques, professional etiquette and communication, professional development plans, and self-evaluative assessments. Students will learn to research companies, internships, and job opportunities using various resources and gain proficiency with application platforms and online tools (i.e., LinkedIn, Handshake). Additionally, students will learn effective networking strategies and participate in mock experiences to simulate real-world scenarios.

Instructional Contact Hours: (2 Lec, 2 Crd)

AHRM 3464 - Appalachian Communities (3 credits)

The concept of community in Appalachia using an interdisciplinary approach and experiential learning. Interrelationships among geographically, culturally, and socially constituted communities, public policy, and human development. Pre: Junior standing.

Instructional Contact Hours: (3 Lec, 3 Crd)

Course Crosslist: APS 3464, GEOG 3464, HD 3464, HUM 3464, SOC 3464, UAP 3464

AHRM 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

AHRM 4954 - Integrative Seminar (1 credit)

An integration of knowledge from the Consumer Studies, Fashion Merchandising and Design, Property Management, and Residential Environments and Design disciplines. Emphasis on interdisciplinary connections, ethical decision-making, career development, workplace culture, mentorship, networking, and digital wellness. Critical analysis of real-world issues and examples relevant to the AHRM disciplines. Engagement with departmental resources in support of professional transition.

Instructional Contact Hours: (1 Lec, 1 Crd)

AHRM 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

Undergraduate Course Descriptions (CONS)

CONS 2304 - Consumer and Family Finances (3 credits)

Overview of consumer and family finances, including budgeting, goal setting, cash management, credit, insurance, taxes, housing, investment alternatives, and retirement plans. Fundamental tools for financial decision making through the coverage of time value of money, calculations for consumer loans, and tools for financial decisions across the lifecycle. Explore ethical issues surrounding financial decisions.

Pathway Concept Area(s): 5F Quant & Comp Thnk Found., 10 Ethical Reasoning

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 2964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 2974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 2974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 2984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 3404 - Consumer Education Strategies (3 credits)

Analysis of the role of effective consumer education strategies in consumer decision-making. Planning, developing, testing, and evaluating consumer education programs using a variety of strategies, including social marketing, for selected community partners and operating the Consumer Education Laboratory.

Prerequisite(s): AHRM 2404

Instructional Contact Hours: (2 Lec, 2 Lab, 3 Crd)

CONS 3504 - Resource Management for Individuals and Families (3 credits)

Introduction to resource management concepts and theories with application to personal and family life goals. Discussion of values, goals, decision making, planning, and communication in relation to the management process. Application of the management process to the use of resources, time, finances, stress, and the environment.

Prerequisite(s): CONS 2304 and AHRM 2404

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 3984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4304 - Advanced Consumer Family Finances (3 credits)

Advanced financial topics for consumers and families. Identification of employee benefit components including health care, incentive plans, insurance, and retirement. Analysis of consumers insurance needs. Discussion and comparison of retirement and investment tools used by consumers, including public and private retirement components. Interpretation of research directions and policy influences related to employee benefits, insurance, investments, and retirement saving. Investigation of special topics in retirement. Pre: Senior Standing.

Prerequisite(s): CONS 2304

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 4314 - Debtor-Creditor Relationships (3 credits)

Examination of legal and operational aspects of debtor-creditor relationship from the perspective of businesses and debtors. Overview of the types of credit, access to credit, factors contributing to debt problems, and alternatives available for resolution. Focus on collection processes of federal and state bankruptcy laws and regulations.

Prerequisite(s): CONS 2304 and AHRM 2404

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 4324 - Financial Counseling (3 credits)

Examination of debt and budgeting problems affecting families. Utilizes a problem-solving approach. Includes financial counseling strategies for coping with financial crises and becoming proactive in family financial management.

Prerequisite(s): CONS 2304

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 4404 - Consumer Protection (3 credits)

Analysis of the effectiveness of consumer protection efforts. Examination of government laws, regulations, and agencies at the federal, state, and local levels, as well as the effectiveness of both business and private consumer protection efforts.

Prerequisite(s): AHRM 2404 and CONS 2304

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 4414 - Professionalism in Consumer Affairs (3 credits)

Roles, functions and responsibilities of consumer affairs professionals employed in business, government, and non-profit public/consumer interest organizations. Professional advocacy within employing organizations, managing consumer complaint handling systems and major consumer and career issues are analyzed.

Prerequisite(s): AHRM 2404

Instructional Contact Hours: (3 Lec, 3 Crd)

CONS 4964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4964H - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4984H - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4994 - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

CONS 4994H - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

Undergraduate Course Descriptions (FCS)

FCS 2964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 2974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 2974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 2984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4964H - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4984H - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4994 - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

FCS 4994H - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

Undergraduate Course Descriptions (FMD)

FMD 1204 - Clothing and People (3 credits)

The study of the influence of culture and society on dress and dress practices, similarities and differences in the dress among groups and individuals, and the role of dress in reflecting and shaping intra- and inter-cultural interactions. The analysis of the construction and communication of personal and social identity (based on age, physical disability, gender, sex, sexual identity, race, ethnicity, religion, cultural and group/subcultural affiliations, etc.) through dress (clothing, accessories, body modifications) using fashion and social science theories and the intersection of various identities and positions in shaping human experience related to dress and appearance. Examination of diversity, equity, inclusion, and social justice issues and solutions related to dress and appearance within the United States and the global fashion industry.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 11 Intercultural & Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 1224 - Introduction to the Fashion Industry (3 credits)

Development, structure and operations of textile and apparel manufacturers, marketers and retailers in the fashion industry and the product types including menswear, womenswear, childrenswear and accessories. Identification of fashion careers and major fashion markets and vendors both domestic and international. Basic processes and principles governing forecasting fashion acceptance, movement and change as influenced by economic, sociological, psychological, political and technological factors. Sources of industry information such as trade journals, industry websites and company publications.

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 2014 - Digital Drawing (3 credits)

Basic principles and methods for digital drawing with consideration toward diverse populations in the global marketplace. Practice and skill development using a variety of computer tools to express design ideas via digital rendering by targeting diverse populations and understanding current global challenges. Hands-on experience via design projects.

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural & Global Aware.

Instructional Contact Hours: (2 Lec, 3 Lab, 3 Crd)

FMD 2204 - Introduction to Textiles (3 credits)

Structure, properties and basic production of textiles and textile components: natural and manufactured fibers; yarns; woven, knit, nonwoven fabrics; mechanical and chemical finishes; colorants and coloration methods. Influence on performance of apparel and interior textile products. Sophomore standing and one semester of Pathways Concept 4 (Reasoning in the Natural Sciences) is required.

Corequisite(s): FMD 2214

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 2214 - Apparel Textiles Laboratory (1 credit)

Identification and characterization of textiles and textile components including: fabrics, finishes and coloration. Influence of these structural parameters on performance of apparel textiles. Sophomore standing and one semester of Pathways concept 4 (Reasoning in the Natural Sciences).

Corequisite(s): FMD 2204

Instructional Contact Hours: (3 Lab, 1 Crd)

FMD 2224 - Fashion Presentation Techniques (3 credits)

Basic principles and methods for executing fashion illustrations, proportions of the fashion figure, design details, portfolio development, identifying target markets and fabric renderings with consideration toward diverse populations in the global marketplace. Exploration and practice in color with work in pencil, color pencil, pastel, and watercolor. Practice and skill development using a variety of manual and computer tools to illustrate construction details and create technical flats. Emphasis placed on the use of correct industry terminology.

Prerequisite(s): AHRM 1014

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (2 Lec, 3 Lab, 3 Crd)

FMD 2264 - Apparel Product Development (3 credits)

Study of the pre-production stage of product development in the apparel industry, including planning a line based on market, consumer, and product research, forecasting trends in color, style and materials, developing and selecting designs and styles, and wholesale marketing of a line to retail buyers. Also includes the use of diverse inspiration sources for creating a design, application of computer-aided design to design and style development, and identification of career opportunities and qualifications for professional positions in the industry. Sophomore Standing required.

Prerequisite(s): FMD 2224

Instructional Contact Hours: (2 Lec, 2 Lab, 3 Crd)

FMD 2964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 2974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 2974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 2984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 3024 - History of Costume (3 credits)

Study of the evolution and development of Western costume for adults and children from ancient times to the present with a focus on historical, socio-cultural, political, economic, and psychological factors/influences on changes in fashion and design style features. Use of terminology to describe each period's fashion and clothing design style features. Evaluation of similarities and differences between fashion and clothing design style features of different time periods. Discussion of theories of fashion change and fashion revival theories that explain the revival/reoccurrence of features of historic costume styles in contemporary fashion and design.

Prerequisite(s): FMD 1204 and FMD 2204

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 3034 - Historic Costume and Textile Collection Management (3 credits)

An active learning approach to managing and digitizing historic costume and textile collections; conserving historic textiles; and designing and curating historic costume and textile exhibitions. Researching, documenting, interpreting, handling and storing artifacts. Mounting and displaying a professional costume and textile exhibit appropriate for general public viewings and sharing via oral or poster presentations. Community-engagement methods. Design Lab/Studio

Instructional Contact Hours: (2 Lec, 2 Lab, 3 Crd)

FMD 3104 - Fashion Retailing Concepts (3 credits)

Detailed investigation and analysis of the fundamentals of fashion merchandising concepts emphasizing problem solving at the retail level.

Prerequisite: one semester of Pathways Concept 5 (Quantitative and Computational Thinking) required. Pre: Junior Standing.

Prerequisite(s): FMD 1224

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 3204 - Introduction to Textile Evaluation (3 credits)

Analysis of the performance properties of fabrics. Importance of evaluation to product development, quality control, and specification of care requirements.

Prerequisite(s): FMD 2204 and FMD 2214

Instructional Contact Hours: (2 Lec, 3 Lab, 3 Crd)

FMD 3224 - Apparel Assembly (3 credits)

Systematizing and assembling garment applications for the apparel industry. Conceptual study of simple to complex apparel construction techniques, stitch and seam types, cost-effective measures, applications with manual manipulation, computers, tools, and equipment.

Instructional Contact Hours: (2 Lec, 3 Lab, 3 Crd)

FMD 3234 - Pattern Drafting for Apparel (3 credits)

Apparel product development using basic and advanced flat pattern drafting techniques and skills. Concepts and application of specifications, flat pattern drafting techniques, garment fit and alteration, pattern grading, and marker layout principles used in apparel engineering, product development, and production, along with the development of skill in using a variety of related manual and computer tools.

Prerequisite(s): FMD 3224

Instructional Contact Hours: (2 Lec, 3 Lab, 3 Crd)

FMD 3244 - Small Business Apparel Retail Development (3 credits)

Comprehensive study of small business concepts as applied to the textile and apparel retail industry. Analysis of the entrepreneurial mindset and strategies for business entry with emphasis on small business development, including concept and opportunity identification, merchandising and management, operations and control, advertising and promotion, and financial planning for a textile and/or apparel retail business.

Prerequisite(s): FMD 2264 and FMD 3104

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 3264 - Draping (3 credits)

Study and application of basic and advanced draping techniques for patternmaking in the apparel industry, including darts in skirts and bodices, princess lines in bodices, yokes, pleats and gores in skirts, and asymmetrical structures for whole garments; selection of fabrics appropriate for garment styles; evaluation of garment fit, design and construction. Includes students design and construction of garments suitable for juried design competitions or exhibitions. Design Lab/Studio. Pre: Junior Standing

Prerequisite(s): FMD 3224

Instructional Contact Hours: (5 Lab, 3 Crd)

FMD 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4014 - 3D Digital Apparel Design (3 credits)

Implement design solutions using technologically advanced software to create styling on avatars with photorealistic 3D rendering. Transform skills acquired in digital illustration and flat pattern drafting courses into comprehensive tools to create real-life simulated garments. Manipulate or create digital assets (flat patterns, fabric, stitching, trim, etc.) to produce an original style for digital portfolio. Design Lab/Studio (2H, 2L, 3C)

Prerequisite(s): FMD 2264 and FMD 3234

Instructional Contact Hours: (2 Lec, 2 Lab, 3 Crd)

FMD 4024 - Portfolio (3 credits)

The development and production of a professional apparel portfolio in both paper and ePortfolio format. Pre: Senior Standing required; 3234 or permission of the instructor.

Prerequisite(s): FMD 3234 or FMD 3264

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4034 - Historic Costume and Textile Collection Management (3 credits)

An active and experiential learning approach to historic costume and textile collection management, including describing collection scope, policies, and organizational systems, selecting appropriate basic preservation and conservation techniques used for the care of historic clothing and textiles related to controlling the environment, handling and storage, and cleaning, using standard museum practices when accessioning, dating, labeling, cataloging, mounting/mannequin dressing, and photographing textile artifacts, developing methods for community engagement, and designing and installing historic dress exhibitions. Design Lab Studio.

Instructional Contact Hours: (2 Lec, 2 Lab, 3 Crd)

FMD 4124 - Clothing Behavior Patterns (3 credits)

Study of clothing behavior of individuals in relationship to their needs, values, attitudes, interests, and self-concepts. Overview of principles and theories related to individuals emotional, mental, and physical activities when obtaining, using, maintaining, and disposing of apparel products so as to satisfy their needs and desires. Application of principles and theories related to clothing behavior to the analysis of consumer and the development of effective merchandising strategies.

Prerequisite(s): FMD 3104 and (PSYC 1004 or SOC 1004)

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4134 - Fashion E-Tailing (3 credits)

Analysis of technologies, consumer trends, and strategies in fashion e-tailing. Identification of merchandising models, major features, challenges, and trends in fashion e-tailing, including big data, virtual and augmented technologies, and mobile- and social-commerce. Development of a strategic plan for an online fashion venture.

Prerequisite(s): FMD 3104

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4214 - Economics of the Textile and Apparel Industry (3 credits)

Study of the various segments of the textile and apparel industry. Analysis of the market structure and functioning of each segment and of factors currently affecting the industry.

Prerequisite(s): (AHRM 2204 or FMD 2204) and (ECON 2006 or ECON 2006H) or (AAEC 1005 and AAEC 1006)

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4224 - Fashion Analysis and Communication (3 credits)

Functions of fashion analysis, promotions, forecasting, media, and communications in the fashion industry. Assessment of effective promotional activities based on consumer, market, and trend research of fashion products. Development of fashion promotion, forecasting, and communication plans. Pre: Senior standing.

Prerequisite(s): FMD 2264

Instructional Contact Hours: (2 Lec, 1 Lab, 3 Crd)

FMD 4234 - Apparel Quality Evaluation (3 credits)

Study of quality of ready-to-wear apparel and factors that influence variations in the aesthetic and functional performance of the end product, including consumer perceptions and expectations, manufacturing processes and trends, and the physical components of the end product.

Prerequisite(s): FMD 3204 and FMD 3224

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4244 - New York Fashion Study Tour (3 credits)

Integrative study of methods of operating at all levels within the fashion industry. Special emphasis on design, merchandising, and promotional activities. Seminars on campus and at pre-arranged appointments during a five-day stay in New York. AHRM major; Junior standing. Twelve hours of AHRM/FMD courses required.

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4264 - Fashion Merchandising and Design Strategies (3 credits)

Analysis of consumer characteristics as part of a forecast/market study to prepare new fashion merchandise lines based on key findings from forecasts. Formulate a financial merchandise plan using measures of profitability and pricing and devise financially beneficial marketing communications. Compare and contrast career choices through self-evaluation within the fashion apparel industry.

Prerequisite(s): FMD 3104 and FMD 3204 and FMD 3224 and FMD 4224

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4274 - International Sourcing of Apparel Products (3 credits)

Study of international sourcing of apparel products through a simulation of the sourcing production to illustrate the procedures and factors needed to source apparel abroad and interrelationships among suppliers, retailers and consumers in the global apparel supply chain. Examination of social, economic, political, cultural, ethical, and environmental factors, law and trade barriers that influence a sourcing decision of apparel products abroad.

Prerequisite(s): FMD 3104

Instructional Contact Hours: (3 Lec, 3 Crd)

FMD 4964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4964H - Field Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4984H - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4994 - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

FMD 4994H - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

Undergraduate Course Descriptions (PM)

PM 2664 - Introduction to Property Management (3 credits)

The history of residential and commercial property management, roles and responsibilities of real estate managers, developing effective management plans for properties, maintenance strategies, marketing, legal regulations that pertain to real estate management.

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 2684 - Marketing and Leasing Residential Properties (3 credits)

Marketing and leasing functions for multifamily residential properties. Leasing processes, options, and online management tools. Market analysis. State and federal housing laws. Preparation for National Apartment Leasing Professional credentials.

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 2964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 2974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 2974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 2984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 3634 - Managing Affordable and Specialized Housing (3 credits)

Operations management of specialized housing such as senior apartments, active adult communities, independent living communities, assisted living communities, nursing homes, affordable housing, military housing, student housing, as well as community associations and mixed-use housing developments. Consideration of consumer lifestyles, financial circumstances, and sustainability issues for each housing option.

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 3674 - Property Management Operations (3 credits)

Detailed investigation and analysis of the fundamentals of property management operation functions. Functions included: human resources and relationship management, maintenance and risk management, marketing and leasing, and accounting and finance. Property manager and property owner role interpretation through examination of management agreement and plan components as well as nuances among residential properties, office buildings, and shopping centers.

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 3684 - Sustainable Property Management (3 credits)

Comparison and justification of green alternatives during the operations and maintenance phase of the building lifecycle by function with respect to the interrelationships of the social, environmental, and economic spheres of sustainability. Course topics also include group and individual decision-making and their influences on resource use such as energy, water, and waste as well as environmental degradation concern and its influence on various stakeholders and their relationship with each other. Ethical issues as they relate to sustainable property management also covered.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 10 Ethical Reasoning

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4644 - Advanced Property and Asset Management (3 credits)

Examination of the competencies necessary to maximize the value of real estate assets through effective operations and financial management practices. Includes detailed examination of income maximization, financial reporting, and ownership objectives of real estate investors.

Prerequisite(s): (PM 2674 or PM 3674) and PM 4964

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 4674H - Managing and Marketing Housing for Later Life (2 credits)

Managing and marketing housing for later life, including active adult communities and assisted living facilities. Pre: Junior Standing

Instructional Contact Hours: (2 Lec, 2 Crd)

PM 4684 - Leasing Commercial Properties (3 credits)

Examination of the strategies used to market and lease various types of industrial, office and retail buildings with emphasis placed on brokerage relationships, the legal structure of commercial real estate leases, lease analytics, lease negotiations, and the impact of lease terms on the value of income-producing properties. Pre: Junior Standing.

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 4694 - Contemporary Issues in Property Management (3 credits)

Issues affecting property management, including ethics, professional management decisions, legislative issues, and current management practices. The course culminates in the analysis of an apartment community and development of a management plan. Senior standing.

Prerequisite(s): PM 4964 or PM 4644

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 4744 - Housing Challenges and Policies in the United States (3 credits)

Overview of the issues relating to U.S. housing policy with an emphasis on housing affordability, homeownership, fair housing and community development, and homelessness. Examination of the policy tools used to respond to housing problems at local, state and federal levels.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 10 Ethical Reasoning

Instructional Contact Hours: (3 Lec, 3 Crd)

PM 4914 - Residential Property Management Study Tour (1-19 credits)

Study tour that examines trends in the multifamily housing industry focusing on marketing, management, design, and customer service. Variable credit 2 credits maximum.

Instructional Contact Hours: Variable credit course

PM 4964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4964H - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4984H - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4994 - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

PM 4994H - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

Undergraduate Course Descriptions (RED)

RED 1604 - Introduction to Residential Design (3 credits)

Analysis of residential spaces to meet the needs of residents. Interrelationship of residential spaces, site, and community, including climate, historic tradition, culture and impact on diversity. House construction systems and finish materials. Current and future trends in design, construction and marketing of housing for diverse households. Impact of codes and regulations on residential design and construction. Professional and labor force issues in the housing industry, interpreting residential floor plans, elevations, detail drawings.

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 2234 - Residential Materials (3 credits)

Identifies materials used in residential applications. Flooring, Walls, Ceilings, Trim and Textiles. Reviews properties of materials, wellness for occupants, and sustainability criteria.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 2614 - Residential Construction (3 credits)

Principles of residential construction. Components, materials and methods of residential construction. Terminology used in residential construction. Interior detailing.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 2624 - Residential Design I (3 credits)

Principles of residential design. Concept development using elements and principles of design. Space planning for residential environments including kitchen and bath design. Introduction to hand and computer drawing. Design Lab/Studio.

Prerequisite(s): RED 1604 or RED 2604

Instructional Contact Hours: (5 Lab, 3 Crd)

RED 2644 - Housing and the Consumer (3 credits)

Overview of housing as it relates to consumer needs, values, lifestyles, norms and constraints. Includes structural and tenure alternatives, financial and legal considerations, house design, neighborhood choices, the home buying process, and future directions in housing. Government aspects focus on the history of federal involvement in housing, major housing programs, role of state and local government, and current housing issues and policies.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 2654 - Residential Environments (3 credits)

Application of elements and principles of design in residential spaces and products from diverse cultural perspectives. Examination of human behavior theories that impact the design of residential environments. Development of residential design solutions and processes using computer aided design software. Design Lab/Studio.

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (1 Lec, 3 Lab, 3 Crd)

RED 2964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 2974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 2974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 2984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 3624 - Residential Design II (3 credits)

Principles of space planning and 3-dimensional design, including activity analysis and user needs, program preparation as applied to residential settings. Zoning and space planning. Design process including schematic design and design development. Design detailing. Graphic design solutions for specific areas of the home, including social, private, kitchen, and outdoor areas. Design Lab/Studio.

Prerequisite(s): RED 2624 or RED 1624

Instructional Contact Hours: (5 Lab, 3 Crd)

RED 3644 - American Housing (3 credits)

Overview of the role of housing in family life and society throughout the history of the United States. Exploration of the impact of technology, resources, and societal values on the design and style of housing and products used in the home.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 3674 - Residential Systems (3 credits)

Residential systems such as lighting, plumbing, electrical, mechanical and security. Smart home technologies and appliances. Integration of systems into residential environments.

Prerequisite(s): RED 2614

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 3954 - Study Abroad (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4224 - Historic Preservation of Residential Properties (3 credits)

History, theory, and field methods of historic preservation in the United States such as building and site surveys, historic structures reports, and National Register Nominations; history and theory of European preservation; fundamental concepts and the role of preservation in allied disciplines; preservation in urban, town, neighborhood, and rural contexts; common preservation strategies and initiatives; understanding of community-based preservation efforts; focus on residential properties.

Pathway Concept Area(s): 2 Critical Thinking Humanities, 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 4604 - Environmental and Sustainability Issues in Housing (3 credits)

Environmental and sustainability issues in single and multifamily housing in the United States encompassing the building, site, lifestyle, energy and water consumption, waste, air quality and toxic materials; analysis and application of social science theories and equity and identity concerns that provide a foundation for the study of environmentally sustainable housing; current and future alternatives for management of energy and water systems and provision of environmentally sustainable housing.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 4604H - Environmental and Sustainability Issues in Housing (3 credits)

Environmental and sustainability issues in single and multifamily housing in the United States encompassing the building, site, lifestyle, energy and water consumption, waste, air quality and toxic materials; analysis and application of social science theories and equity and identity concerns that provide a foundation for the study of environmentally sustainable housing; current and future alternatives for management of energy and water systems and provision of environmentally sustainable housing.

Pathway Concept Area(s): 3 Reasoning in Social Sciences, 7 Identity & Equity in U.S., 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 4624 - Residential Design III (3 credits)

Planning, design, and evaluation of residential spaces with an emphasis on kitchens and bathrooms, in relation to the total house plan. Emphasis on planning principles and technical requirements with attention to functional use of the spaces to meet the needs of people. Industry standards, best practices. Materials, fixtures, and mechanical systems. Contract documents. Design Lab/Studio.

Prerequisite(s): RED 3624

Instructional Contact Hours: (5 Lab, 3 Crd)

RED 4624H - Advanced Kitchen and Bath Design (3 credits)

Planning, design, and evaluation of residential kitchens and bathrooms, in relation to the total house plan. Emphasis on planning principles and technical requirements with attention to functional use of the spaces to meet the needs of people.

Prerequisite(s): (AHRM 3624 or RED 3624) and (AHRM 3674 or RED 3674)

Instructional Contact Hours: (6 Lab, 3 Crd)

RED 4654 - Residential Design IV (3 credits)

Advanced topics in house planning, particularly kitchen and bath design, with emphasis on independent work of portfolio quality. Sustainability principles, design process, planning guidelines, design competition. May be repeated once for a maximum of 6 credits. Design Lab/Studio (5L,3C)

Prerequisite(s): RED 4624

Instructional Contact Hours: (5 Lab, 3 Crd)

Repeatability: up to 6 credit hours

RED 4664 - Universal Design (3 credits)

Application and assessment of the principles and strategies of universal design in residential and commercial environments, accessibility regulations and guidelines, products, and technologies. Demographic changes affecting global society. Disabilities and changes throughout the lifespan that affect peoples ability to interact with their environments. Marking strategies to promote universal design communities, products, environments and technologies. Methodologies to evaluate accessibility.

Pathway Concept Area(s): 6D Critique & Prac in Design, 11 Intercultural&Global Aware.

Instructional Contact Hours: (3 Lec, 3 Crd)

RED 4664H - Universal Design (2 credits)

Evaluation and design of commercial and residential environments with consideration for accessibility, adaptation, safety, and support of the user(s).

Instructional Contact Hours: (2 Lec, 2 Crd)

RED 4764 - Universal Design Lab (1 credit)

Design of residential spaces that meet the needs of a range of users, including older adults and people with disabilities. Principles of universal design are applied to the spatial requirements and product selection for the home.

Prerequisite(s): AHRM 3624 or RED 3624

Corequisite(s): RED 4664

Instructional Contact Hours: (2 Lab, 1 Crd)

RED 4924 - Housing Study Tour (1-19 credits)

A study tour designed to examine the housing industry and trends in design, technology, products and processes. Junior standing required. May be repeated for a maximum of 6 credits.

Instructional Contact Hours: Variable credit course

Repeatability: up to 6 credit hours

RED 4964 - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4964H - Field Work/Practicum (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4974 - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4974H - Independent Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4984 - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4984H - Special Study (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4994 - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course

RED 4994H - Undergraduate Research (1-19 credits)

Instructional Contact Hours: Variable credit course