



# Your Future

## **Fashion Design & Merchandising**

Department of Family and Consumer Sciences  
College of Tropical Agriculture and Human Resources  
University of Hawai'i at Mānoa

Fall 2018 – Spring 2019

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## College of Tropical Agriculture and Human Resources

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UNIVERSITY OF HAWAII AT MĀNOA

Aloha!

Welcome to the Department of Family and Consumer Sciences (FCS). We are pleased you are considering or have chosen the Fashion Design and Merchandising (FDM) program. FDM is a comprehensive undergraduate program whose mission is to prepare students with the knowledge and skills needed for career positions in apparel and fashion-related industries.

FDM graduates have successful careers as fashion buyers, managers, visual merchandisers, business owners, textile and fashion designers, fashion forecasters, and costume curators. Strong academic backgrounds enable graduates to move into other fields including other businesses and education.

Join *Innovators of Fashion* and *Phi Upsilon Omicron*, a national honor society, for fun and fellowship as you team with other students in professional and community activities that introduce you to the profession and to the people with whom you will work with following graduation.

This booklet provides you with a general overview of the FDM program and its degree requirements. Please consult with an academic advisor about program admission requirements, transfer, appropriate course sequencing, graduation requirements, and other academic information. To make an appointment with an academic advisor, visit: <https://ctahradv.youcanbook.me/>. You can contact the College of Tropical Agriculture and Human Resources (CTAHR) academic advisors at [ctahradv@hawaii.edu](mailto:ctahradv@hawaii.edu).

Best wishes for success in your college career and your future in fashion.

Sincerely,

Barbara Yee, Ph.D.  
Professor and Chair

## Fashion Design and Merchandising Degree Program

The FDM curriculum provides students with the knowledge and skills needed for career positions in apparel- and fashion-related fields. Students learn fashion industry operating methods; develop buying and merchandising plans; study textile fibers and fabrics; create fashion apparel lines; examine Hawaiian, Asian, and western costume artifacts; analyze the effects of social, political, and economic conditions on local, national, and global industry operations and consumer needs; and study current concerns relating to social responsibility, ethical issues, and environmental impacts as these relate to fashion businesses and consumers.

Courses cover these and related topics:

- Fashion sketching
- Textile properties
- Apparel design and construction
- Retail buying and merchandise management
- Fashion promotion and fashion show production
- Costume history
- Social and cultural aspects of dress
- Fashion computer-aided design
- Fashion forecasting and marketing
- Branding
- International trade issues.

### Admission

New students who apply to the University of Hawai'i at Mānoa (UHM) as first-year students may apply directly to the program by specifying Fashion Design and Merchandising (FDM) as their major on their application form. Students transferring from another institution **who have a cumulative grade point average (GPA) of 2.0 or better** may apply directly to the program by specifying Fashion Design and Merchandising (FDM) as their major on their application form. Please visit the Office of Admissions website for details about applying: <http://manoa.hawaii.edu/admissions/>

Prior to admission, students should make an appointment with an academic degree advisor; appointments can be made by visiting: <https://ctahradv.youcanbook.me/>. All CTAHR (College of Tropical Agriculture and Human Resources) students are required to meet with an academic advisor every semester to plan their curriculum and to ensure they are making satisfactory progress towards graduation.

Students wishing to transfer from another UHM program must submit the College and Curriculum Transfer Request form. Acceptance into the FDM program will be based on **a minimum cumulative UHM grade point average (GPA) of 2.0**.

The request form is available from CTAHR advisors located on the first floor of Gilmore Hall. Schedule an appointment with an academic advisor to discuss transfer into FDM and have the paperwork processed. You may schedule an appointment at <https://ctahradv.youcanbook.me/>. Status as an FDM major is not official until all necessary paperwork has been completed and processed. Students are encouraged to apply to the program within the first month of any given semester to allow adequate time to process their transfers prior to registration for classes.

## Registration

Students register for courses online through [STAR GPS Registration](#). STAR GPS Registration is an easy-to-navigate registration system that shows courses students need to graduate in a timely manner and allows students to personalize their academic plan to fit their unique college experience. STAR GPS Registration allows students to do the following:

- Register for classes that count directly into their degree/credential so they don't go off track
- A visual calendar of the classes students are choosing and how they fit together
- Direct integration of students' class schedule into their Google calendar
- Easily switch classes using the add/drop options
- Search for classes at any UH campus
- View transcript

For help about STAR, students can meet with an academic advisor or visit the help website: <https://www.star.hawaii.edu/help/#/>. Registration dates and times are published on the Registration Timetable: <http://myuhinfo.hawaii.edu/object/uhmtimetable.html>

## Degree Requirements

The Fashion Design and Merchandising program sheet and four year plan can be found at the following link: <http://manoa.hawaii.edu/ovcaa/programsheets/>. Please scroll down the page to the College of Tropical Agriculture and Human Resources.

Accepted students who have set up their UH username and password may also find their requirements on their STAR GPS Registration page. Log onto your STAR Account by visiting: <https://www.star.hawaii.edu/>.

## Additional FDM Graduation Requirements

- FDM majors will develop a professional portfolio and make a formal presentation
- Completion of a minimum of 120 credits
- Minimum of 45 credits in upper division courses
- 2.0 GPA in major courses

Faculty will assist students nearing graduation with determining the content of their portfolios, will provide opportunities for students to develop appropriate materials in their classes, and will offer guidance in oral and written presentation techniques. Transfer students may include in their portfolios some materials developed in their previous program.

**The portfolio** consists of evidence that the student has achieved Student Learning Outcomes #1 through #7 of the FDM instructional program. These outcomes concern mastery of fundamental knowledge and skills regarding the construction and quality of apparel and textile products; the design and merchandising of those products; and the historic, social, cultural, and economic significance of those products, as well as knowledge and skills in research methods; written and oral communications; problem solving; and human relations.

**Portfolio development:** The portfolio contains selected examples of assignments, projects, papers, examinations, and other materials the student has completed over the course of their studies. Students are responsible for retrieving their assignments, projects, and other class materials at the end of each term, and for keeping their class work in a secure place in anticipation of the final exit portfolio submission. The portfolio

will be developed from those materials, and students will be guided in selection of appropriate materials and in developing the portfolio in FDM 495 Capstone Portfolio.

**The oral presentation** is a formal address to the FDM faculty and others in which the student discusses one or more issues related to the textiles and apparel field and/or to their studies. The presentation is evaluated as evidence that the student has accomplished Student Learning Outcome #10 of the FDM instructional program and concerns mastery of presentation skills. Presentations are made at the end of the semester in which FDM 495 Capstone Portfolio is completed, and are scheduled for the last Friday preceding final examinations. The presentation and the portfolio are evaluated by a team of faculty and, where possible, include evaluation by the internship work supervisor. Families and friends of students in the internship class are welcome to attend the presentations.

**The internship assessment** is an evaluation of the student’s success in meeting the requirements of the internship course, and in accomplishing Student Learning Outcomes #8 and #9 of the FDM instructional program. These outcomes concern global skills in communication, analysis and problem-solving, business management and human relations skills, and in understanding and practicing professional and ethical behaviors. The internship assessment is conducted by the internship faculty and other program faculty at the end of the semester in which the student is enrolled in the FDM 492 Internship class.

## Helpful Reminders

**FDM course descriptions:** <http://www.catalog.hawaii.edu/courses/departments/fdm.htm>

- Advising is mandatory every semester. Be sure to meet with any of the CTAHR academic advisors prior to registration. Please visit <https://ctahradv.youcanbook.me> to make an appointment with an advisor.
- Prior to registering for classes, students should check the UHM catalog for complete information about prerequisites for courses.
- Take FDM 101, FDM 200, FDM 205, and FDM 221 as soon as possible; they are prerequisites to advanced courses.
- FDM Design Emphasis majors should take the following courses in the sequence listed:

<u>YEAR</u>	<u>FALL</u>	<u>SPRING</u>
Freshman	FDM 205	FDM 216
Sophomore	FDM 215 FDM 338	FDM 350
Junior	FDM 330 FDM 315	FDM 316
Senior	FDM 419 FDM 338 (if not taken previously)	FDM 420

- Students interested in showing collections in the annual fashion show must register for FDM 419 or FDM 420. However, registration does not guarantee participation in the fashion show.
- Take either FAMR 380+L Research Methodology or NREM 310 Statistics in Agriculture and Human Resources. This is a CTAHR graduation requirement.
- Everyone should take FDM 492 Internship before taking FDM 495 Capstone Portfolio.
- Total credit requirements: 120 credits, including 45 upper division credits.

## Program Expectations for FDM Majors

All FDM majors are expected to attend class on the first day of instruction, and to attend class regularly throughout the term.

All Students enrolled in FDM courses are expected to exhibit integrity with regard to all of their university-related work. Cheating and/or plagiarism may result in suspension or expulsion from the University.

- **Cheating** includes, but is not limited to, giving unauthorized help during an examination, obtaining unauthorized information about an examination before it is administered, using inappropriate sources of information during an examination, altering the record of any grade, altering an answer after an examination has been submitted, falsifying any official UH Mānoa record, and misrepresenting the facts in order to obtain exemptions from course requirements.
- **Plagiarism** includes, but is not limited to, submitting, to satisfy an academic requirement, any document that has been copied in whole or part from another individual's work without identifying that individual; neglecting to identify as a quotation a documented idea that has not been assimilated into the student's language and style; paraphrasing a passage so closely that the reader is misled as to the source; submitting the same written or oral material in more than one course without obtaining authorization from the instructors involved; and "dry-labbing," which includes obtaining and using experimental data from other students without the express consent of the instructor, utilizing experimental data and laboratory write-ups from other sections of the course or from previous terms, and fabricating data to fit the expected results.

View UHM campus policies and student conduct code here:

[http://studentaffairs.manoa.hawaii.edu/policies/conduct\\_code](http://studentaffairs.manoa.hawaii.edu/policies/conduct_code)

## Additional Educational Opportunities

FDM students are encouraged to participate in educational opportunities nationally and abroad through programs such as the National Student Exchange and the Fashion Institute of Technology (New York City) Visiting Student Program. Other programs in London and Paris are also available. Tours to fashion centers on the mainland, in Europe and in Asia are offered on occasion by FDM faculty.

## What's my future in Fashion?

As an FDM student, you will learn to:

- Plan, develop, and merchandise apparel product lines and evaluate their quality;
- Recognize the global impact of fashion trends on production and distribution of apparel;
- Understand the role of dress and fashion in society; and
- Master the tools needed for career positions in fashion industries and related fields.

FDM graduates have successful careers as fashion buyers, managers, visual merchandisers, business owners, textile and fashion designers, fashion forecasters, and costume curators. Strong academic backgrounds enable graduates to move into other fields including other businesses and education.

FDM alumni business and leadership roles:

- Fashion designers & apparel production managers: Kenneth Cole, Diesel, Quicksilver, Local Motion, Town & Country Surf
- Fashion buyers and retail executives: Macy's, Gucci, Chanel, Neiman Marcus, Ferragamo, Hermes, Cartier, Tiffany, Pier 1 Imports, Sears, Gap Kids, Banana Republic
- Owners, Hawaii garment manufacturing
- Companies and retail stores: Acid Dolls, You & Me Naturally, Puamana, Global Village
- Costume designers, stylists, model management, and wardrobe consultants for
- TV, film and advertising
- Fashion support services: Freelance visual merchandiser; President, Retail Merchants of Hawai'i (trade association)

## Useful Websites for Students Entering into the University of Hawai'i

**University of Hawai'i Home page** <http://www.hawaii.edu>

All information for students covering how to apply, academic calendar, financial aid, catalog, transfer credit search, new database, on-campus activities, housing (dorms), parking, etc.

**UH Mānoa General Catalog** <http://www.catalog.hawaii.edu/>

**UH Academic Calendar** <http://www.hawaii.edu/academics/calendar>

**My UH Services** <http://myuh.hawaii.edu>

MyUH Services is a mobile-optimized, one stop shop for UH business tasks, form, apps and more. It includes one-click access to services customized for students, faculty and staff across our 10-campus system.

**STAR** <http://www.star.hawaii.edu>

STAR for students is the online degree tracking system for UH. You can view your degree requirements, register for classes, search for scholarships, and view your transcripts through STAR.

**College of Tropical Agriculture and Human Resources' Home Page** <http://www.ctahr.hawaii.edu>

Select "Academic and Student Affairs" will open all the programs up for students interested in all that CTAHR has to offer for Undergrad and Graduate Programs, financial aid/scholarship information, course requirements and information on who we are, Department, Faculty and Staff as well as publications and research projects.

**College of Tropical Agriculture and Human Resources Academic Advisors**

<https://ctahradv.youcanbook.me/>

Use this website to make an appointment with our academic advisors. Advisors can assist you with developing a degree plan and making sure you're taking the appropriate classes for graduation. Meeting with an academic advisor is mandatory every semester.

**Department of Family and Consumer Sciences (FCS)**

<https://cms.ctahr.hawaii.edu/fcs>

This web site shows the different programs, courses and resources available within the FCS department as well as general information about each.

**General Education** – UH Core requirements and class listings:

<http://www.catalog.hawaii.edu/corerequirements/coreRequirements.html>

**Transfer of Credits, Admissions** – <http://www.hawaii.edu/transferdatabase/>

This web site shows information on how your credits transfer into UH Mānoa.



## Student Academic Support Services

Access to student academic support services is important to ensure your success while a student at the University of Hawai'i. Below is a listing of some of these services that can also be found in the University of Hawai'i catalog (<http://www.catalog.hawaii.edu/undergrad-ed/undergrad4.html>).

**Office of Civic and Community Engagement** offers UH Manoa students and community agencies the opportunity to participate in a partnership of volunteer service.

**First Year Programs** ease the transition of new students into the academic and social communities at UH Manoa. First-Year Programs provide the opportunity to develop personal relationships with faculty and other students, enhance active involvement in the educational process, and build connections to UH Manoa.

**International Student Services** provides assistance to international students who come from more than countries to study at UH. Students are advised and helped to adjust to the local and U.S. cultures. Website: <https://www.hawaii.edu/issmanoa/>.

**Kokua Program (Disability Access Services)** provides disability access services to students with documented physical and/or mental disabilities. Services include alternative media production, counseling, early registration, note-taking, sign language interpreting, technology access, testing accommodations and campus transportation. Website: <https://www.hawaii.edu/kokua/>.

**Learning Assistance Center** provides tutoring, workshops, Supplemental Instruction (SI), and one-on-one appointments in which students learn appropriate study strategies and problem solving skills to achieve their academic goals.

**Mānoa Advising Center** serves as an advising office for exploratory students who have not yet declared a major.

**New Student Orientation Program** offers information sessions for first-time students and transfer students.

**Student Success Center** in Sinclair Library offers students a welcoming and convivial place to study and to learn, and provides them the information and skills they need to be successful in their academic career and beyond. The center provides seating that facilitates collaborative learning, is open long hours, and permits students to bring their own snacks, all in a space that has natural light and air.

**Student Support Services** is a federally funded program that provides academic advising and planning, special courses, financial aid advice, graduate and professional school advising, tutoring, mentoring, and academic enrichment activities to program students enrolled at UH Mānoa.

**Mānoa Writing Center** provides free services to equip students with appropriate writing skills so they can become better and more confident writers. Website: <https://sites.google.com/a/hawaii.edu/writingcenter/home>.

Do not hesitate to discuss your needs with your academic degree advisor who can help refer you to the appropriate resource.

## **Minor in Merchandising**

(Not available for FDM Majors)

Merchandising/retailing is the largest private employer segment of Hawai'i's business community, and it is hungry for educated retailers. The merchandising minor gives students from other disciplines the opportunity to gain the required theory and applied skills to understand the merchandising/retailing function. Students will learn to skillfully employ techniques that encourage consumers to interface with products and services in both local and international marketplaces.

The minor requires a minimum of 24 credits. Please see break down of required courses below.

### Prerequisites:

- 2.0 GPA or higher

### Required Courses in FDM (12 credits):

FDM 101 Introduction to the Fashion Industry  
FDM 221 Textiles I  
FDM 371 Retail Buying and Merchandising\*  
FDM 375 Merchandise Planning/Control\*

*\*Students must request an override to register for course.*

### Merchandising Elective Courses (12 credits minimum):

Minimum of one 300-level course, two 400 level courses, and one 300-400 level course. Must achieve C or better in all courses. Choose from the following:

- One of the two courses: Either 1) FDM 338 2D/3D Computer Aided Design or 2) FDM 339 3D Retail Store Design
- Three of the four courses: 1) FDM 301 Fashion Forecasting/Marketing, 2) FDM 411 Product Lifecycle Management, 3) FDM 437 Small Business Start-Up, 4) FDM 471 International Apparel Trade Issues

FDM Elective courses chosen from above:

FDM (300 level)  
FDM (400 level)  
FDM (400 level)  
FDM (300-400 level)

### Advising:

Interested students should meet with a CTAHR Academic Advisor. Please schedule your appointment online at: <https://ctahradv.youcanbook.me/>

Students must complete the "Verification of Academic Minor" form with an advisor prior to graduation.

## FDM Course Descriptions

Can be viewed online at: <http://www.catalog.hawaii.edu/courses/departments/fdm.htm>

*The minimum required grade for prerequisites is a grade of D or better.*

**FDM 101 Introduction to the Fashion Industry (3)** Introduction to the fields of apparel design and merchandising including theories of fashion change, apparel industry operations, current industry issues, literature of the field, professional competencies, careers in apparel and related businesses. A-F only.

**FDM 200 Culture, Gender, and Appearance (3)** Social construction of gender within culture and its visual expression through appearance. Analysis of role, identity, conformity, and deviance in human appearance. Repeatable one time. Open to nonmajors. (Cross-listed as WS 200) **DS**

**FDM 205 Basic Apparel Construction (4)** (3 Lec, 1 3-hr Lab) Principles, concepts, and procedures for quality construction and custom fitting of clothing.

**FDM 210 Western World Fashion History (3)** Historic study of dress as related to customs and cultures in the Western world, in sociohistorical and contemporary contexts. Emphasis on 19th and 20th centuries. Pre: 101.

**FDM 215 Block Pattern Designing (3)** (2 Lec, 1 3-hr Lab) Principles of pattern making for women's apparel through manipulation of pattern blocks. Pre: 205.

**FDM 216 Fashion Illustration (3)** (2 Lec, 1 3-hr Lab) Principles and techniques of sketching the fashion figure including garment details and fabric drape. Development of a personal style of illustration. Introduction to use of computers for illustration. Pre: 101. **DA**

**FDM 221 Textiles I (3)** Introduction to fibers, fabric structure, and finishes related to selection and care. Interrelationship between textile characteristics, properties, and end uses. Open to non-majors. A-F only. **DP**

**FDM 301 Fashion Forecasting/Marketing (3)** Principles and practices in fashion trend forecasting and their role in apparel company marketing strategies. Analysis of aesthetics as it related to apparel and marketing. Adapting fashion trend forecasts to apparel lines. FDM majors only. Pre: 101, 210, and 221.

**FDM 315 Draping (3)** Principles of pattern making through draping muslin models on standard garment forms. Pre: 205 and 215.

**FDM 316 Advanced Pattern Design (3)** Further study of flat pattern methods and industrial practices for fashion design majors. Use of CAD. Repeatable two times. Pre: 221 and 315.

**FDM 321 Textiles Quality Assurance (3)** Chemical nature and structure of fibers and fabrics, their properties and finishes. FDM majors only. A-F only. Pre: 221 or consent. Co-requisite: 321L. (Spring only) **DP**

**FDM 321L Textiles Quality Assurance Laboratory (1)** Examination of textile properties through standardized textiles testing laboratory equipment. FDM majors only. A-F only. Pre: 221 or consent. Co-requisite: 321. (Spring only) **DY**

**FDM 330 Advanced Apparel Construction (3)** Principles of advanced techniques for garment construction with emphasis on new, difficult-to-handle fabrics. Repeatable one time. Pre: 205 or consent.

**FDM 338 2D/3D Computer Aided Design (3)** Exploration of CAD applications from the design to the pattern-making process. Use of Adobe Illustrator and Photoshop for fashion illustration. Use of OptiTex PDS pattern design software featuring 2D and 3D CAD. Repeatable one time.

**FDM 339 3D Retail Store Design (3)** Visual merchandising concepts and planning; use of a virtual 3D store modeling software package. Visual Retailing/Mockshop, to design store interiors, fixtures, lighting, signage, window displays, and planograms. A-F only. (Spring only)

**FDM 340 Computerized Pattern Grading (3)** Gerber Technology (GT) AccuMark System Management. The system is designed to use CAD for specific apparel industry applications in grading patterns into different sizes and making production markers. Pre: 338. Computer skills are helpful.

**FDM 350 Embellishments (3)** Emphasis on design principles as applied to stitchery using a variety of techniques and raw materials. Processes and problems experienced and critiqued in a group environment. Repeatable two times. Pre: 205. **DA**

**FDM 360 Writing for the Fashion Industry (3)** Analysis and creation of different types of writing in the fashion industry, with emphasis on creating a professional writing style. A-F only. Pre: 101, 200 or 210, and 221.

**FDM 371 Retail Buying and Merchandising (3)** Theories and procedures in selecting, buying and selling apparel and textiles. Types of merchandising organizations, analysis of consumer demand, brick-and-click opportunities and challenges, development of an image, operation location, store and floor layout. FDM majors only. Pre: 101, 216, and 221.

**FDM 375 Merchandise Planning and Control (3)** Theories, problems, and procedures of financial and assortment planning and control of merchandise inventories. FDM majors and merchandising minors only. Pre: 371.

**FDM 411 Product Lifecycle Management (3)** Application of principles of apparel production management, including methods engineering (detail construction for ordering), story boards and color tables, production measurements, costing, and PLM computer applications. A-F only. (Once a year)

**FDM 416 Costumes/Cultures of East Asia (3)** Development of traditional dress as visual manifestation of culture. Ethnic and national dress of China, Japan, Korea, Mongolia, Okinawa, Tibet, and Vietnam. Pre: 200, 221, two FG courses; or consent.

**FDM 418 Costumes of South and Southeast Asia (3)** Development of traditional dress as visual manifestation of culture. Ethnic and national dress of Afghanistan, India, Indonesia, Malaysia, Pakistan, Philippines, Thailand and Saudi Arabia. Pre: 200, 221, two FG courses; or consent.

**FDM 419 Apparel Design Studio I (3)** Development of independent expression through creative designing for a ready-to-wear collection. Problem solving in the design process; includes sketching, draping, blocking, muslin proofs, complete garments, and portfolio. Studio courses must be taken in sequence. Repeatable one time. Pre: 210, 221, 316, 330. Enrollment in 419 or 420 is required to show designs in annual fashion show, but doesn't guarantee acceptance. (Fall only)

**FDM 420 Apparel Design Studio II (V)** Development of niche market. Problem solving in the design process. Includes sketching, draping, blocking, muslin proofs, complete garments, and portfolio. Repeatable one time. Pre: 419. Enrollment in 419 or 420 is required to show designs in annual fashion show, but doesn't guarantee acceptance. (Spring only)

**FDM 430 Fashion Show Production (3)** Application of principles and procedures related to the promotion of fashion apparel. Preparation and presentation of fashion information through shows, displays, media, and written communications. Repeatable one time. Pre: 101. (Spring only)

**FDM 437 Small Business Start-up (3)** Application of principles, procedures and techniques of organizing a small retail business in a brick-and-click world. Creative use of low and high tech resources. Students plan, write and evaluate small retail business plans. Junior standing or higher. FDM majors only; open to non-majors with instructor's consent. Pre: 375 or consent.

**FDM 460 Costume Collections Management (3)** Investigation of skills and techniques needed for handling textile and apparel artifacts in museums and other collections. Active involvement in documenting, researching, interpreting, and exhibiting costumes and textiles. Repeatable one time. FDM majors only. A-F only. Pre: 210, 416, or 418.

**FDM 471 International Apparel Trade Issues (3)** Theories, concepts, problems of international trade of textile and apparel products. Issues of importing and exporting apparel products globally. Social, political and economic factors affecting textile and apparel trade.

**FDM 491 Topics in Fashion (V)** Study and discussion of special topics, problems. Offered by staff and visiting faculty. Repeatable five times.

**FDM 492 Internship (4)** Examination of issues and opportunities associated with careers in fashion and related businesses and industries. Topics include interpersonal skills development, job search and interview strategies, and ethical issues in the workplace. FDM majors only. A-F only. Junior standing or higher. Pre: consent.

**FDM 495 Capstone Portfolio (3)** Integration and application of academic knowledge and critical skills emphasizing professional development. Placement with an approved cooperating supervisor/employer. Pre: 492 and senior standing.

**FDM 496 Field Study in the Fashion Industry (V)** Study tours to various centers of the world to examine historical and modern apparel and textiles. Merchandising and design methods and operations examined. Repeatable up to 12 credits. Pre: consent.

**FDM 499 Directed Reading and Research (V)** Repeatable up to 15 credits. Pre: consent.