# MRCH 2034 Textiles Fall 2024

Department of Interior Design and Merchandising

College of Health and Human Performances

East Carolina University

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| **Lecture Time**  **Classroom**  **Office Hour**  **Credit and Curriculum placement**  **Instructor &**  **Contact Information** | Tuesday and Thursday 11:00 am – 12:15 pm  Rivers 267  Monday 2:30 pm – 5:00 pm (Textile Lab)  Tuesday 3:30 pm – 5:30 pm (Textile Lab)  Wednesday 4:00 pm – 5:00 pm (Textile Lab)  or by appointment  3 semester hours; required merchandising major course. This course is a pre-requisite of MRCH 4300, **Co-requisite: MRCH 2035**  Runying Chen, Ph.D.,  Office: 334 Rivers RW, College of Health and Human Performances  (Office Phone) 252-328-1329 (E-mail) chenr@ecu.edu |

**Highly Recommended: Textbook (hard copy or ebook)**: Kadolph, S.J. and Marcketti, S. B. (2016). *Textiles* (12th Ed.). Pearson Education, Inc.: Boston. ISBN: 9780134128634

**Required**: **Poll Everywhere** – will be applied for in-class learning activities and attendance. Please see the updated information about how to use Poll Everywhere posted on Canvas.

**Course Description**: Textile fibers and fabrics. Emphasis on quality, performance, care, and selection. Introduction to the textile industry.

**Merchandising major students need C or higher** for all merchandising and related concentration courses. Merchandising major students are also required to maintain a 2.5 minimum GPA for enrolling in MRCH 4883 Internship and other 4000-level merchandising courses.

**Course Objectives**: Upon completion of this course, students will be able to:

1. Describe textile product components and their properties.
   1. Apply terminologies in describing, identifying, and analyzing fibers, yarns, fabric constructions, coloration, and finishing.
2. Analyze the properties of different fibers, yarns, and fabrics.
   1. Determine differences and similarities among groups.
   2. Describe how properties are affected by fiber structure (chemical, molecular, morphology), yarn structure (size and twist etc.), and fabric structure (construction)
3. Explain how finishing and coloration affect the performance of textile products.
4. Evaluate apparel product performance, including sustainability, of textile variants, including fiber, yarn, fabrication, finishing, and coloration.
5. Identify labeling practices and legislation related to textile products and assess their importance and implications to consumers, retailers, and manufacturers.
6. Research new developments in the textile industry and evaluate their effects on the textile and apparel industry and consumer market.

**Grading Items and Points Assigned to Letter Grade**

Exams (3 @ 115/120 points each) --------------------350 points

Assignments and Quizzes --------------------300 points

**Total = 1000 points**

Class activities (polling & other) -----------------225 points

Project --------------------125 points

***Letter Grade Scale*:**

A = 940 points & above

A-= 900 – 939 points

B+ = 870-899 points C+ = 770-799 points D+ = 670-699 points

B = 830-869 points C = 730-769 points D = 630-669 points

B-= 800-829 points C- = 700-729 points D- = 600-629 points

F = below 600 points

**Please do not negotiate the final letter grade with the instructor if your grade doesn’t meet the grading criteria listed above. Please check your graded item within the week when the graded item is returned or reviewed.**

**CLASS POLICIES – *AI USE PROHIBITED*** Students are not allowed to use advanced automated tools (such as Chat APT or Dall-E 2) on assignments in this course.

* ***In-class activity – Poll Everywhere Review and Quizzes*** There will be frequent in-class quizzes and review exercises via Poll Everywhere.
* ***Attendance Related Issues***

Class attendance is required – attendance is recorded through both Poll Everywhere and class learning activities. Students have **two** **allowed absences**.

Additionally, students are expected to arrive on time and to remain for the entire scheduled class period. Arriving late or leaving early for each class meeting will result in lower points assigned to each class meeting.

Make-up exams will be given in case of officially documented absences. Students are required to provide a document recognized or issued by the ECU student office for excused absences. When possible, please notify the instructor promptly of any excused absences.

When missing classes, it is the student’s responsibility to find out the course content progress and to catch up with the course content learning outcome. The instructor will be available for individual questions during the scheduled office hours or by appointment.

* ***Grading Issues:***

All grades given to quizzes, assignments, class activities, exams, and projects become finalized one week after the results are reviewed and discussed. It means that students need to talk to the instructor about grading disagreements or any recording error within one week. The instructor will not respond to emails arguing about the grade at the end of the semester.

* ***Calculator*** When working on calculation-related problems during quizzes or exams, students are not allowed to use their cell phones but their calculator. The instructor will provide notice to students as to when a calculator is needed.
* ***FINAL EXAM STATEMENT***Final examinations will be held at the close of each term in all courses. There will be no departure from the printed schedule of examinations. Changes for individual emergencies of a serious nature will be made only with the approval of the instructor, the student’s major chairperson, director, or dean. The departmental chairperson, school director, or the college dean will, if a serious emergency is believed to exist, forward a written request to the Office of the Registrar, setting forth the nature of the emergency. A student who is absent from an examination without an excuse will not be able make-up the exam. The instructor may issue an incomplete (I) in the case of a student absent from the final examination who has presented a satisfactory excuse or an official university excuse from the Dean of Students or his/her designee.
* ***STUDENT BEHAVIOR*** As a student in this course, you are expected to:
* be civil in your public discourse and behavior
* be respectful of others’ opinions whether or not you agree with them
* stand against incivility when you see it
* be respectful and courteous to your instructor and classmates
* turn your cell phone to silent mode. Texting and playing/using any non-teaching/learning related electronic devices are not allowed during the lecture time.
* ***Policy on Disruptive Behavior***East Carolina University is committed to providing each student with a rich, distinctive education experience. To this end, students who do not follow reasonable standards of behavior in the classroom or other academic setting may be removed from the course by the instructor following appropriate notice. Students removed from a course under this policy will receive a grade of “drop” according to university policy and are eligible for tuition refund as specified in the current tuition refund policy.” (East Carolina University Faculty Manual Part V, 2020)

(For more information about the ECU Student Code of Conduct see the Student Rights and Responsibilities <https://osrr.ecu.edu/policies-procedures/> office website.

* ***ACADEMIC INTEGRITY*** Every student has a role in maintaining the academic reputation of the University. Students are to refrain from engaging in plagiarism, cheating, falsifying their work, and/or assisting other students in violating the Academic Integrity Policy. For policy and procedures, please visit <https://osrr.ecu.edu/policies-procedures/>

Academically violating the ECU Student Honor Code consists of the following:

1. Cheating. Unauthorized aid or assistance or the giving or receiving of unfair advantage on any form of academic work.
2. Plagiarism. Copying the language, structure, ideas, and/or thoughts of another and adopting same as one’s own original work (Example: Copying and pasting any internet passage into a paper or exam)
3. Falsification. Statement of any untruth, either spoken or written, regarding any circumstances relative to academic work.
4. Attempts. Attempting any act that, if completed, would constitute an academic integrity violation as defined herein.

* ***ADA STATEMENT***students requesting disability accommodations from the University are required to self identify. Students should complete the required “[Request for Accommodation](https://clockwork.ecu.edu/custom/misc/home.aspx)” form, which is available online. Except in cases of an impairment that is readily apparent, documentation is required. Upon approval of accommodations, the student must schedule an accommodation meeting with a staff member of DSS. For more information, please visit <https://accessibility.ecu.edu/students/dss-guidelines/>
* **Observance of Religious HolidayS**

Students will not be penalized for missing a class or examination due to the observance of a religious holiday. A written statement must be submitted to the instructor prior to the end of the second-class meeting if any schedule conflicts exist.

* **CONTINUITY OF INSTRUCTION**

In the event of a campus emergency that disrupts academic activities, course requirements, deadlines, and grading percentages are subject to change. Information about changes in the course will be communicated as soon as possible by email, and on Canvas. If we are not able to meet face-to-face, students should log onto Canvas and read any announcements and/or access alternative assignments. Students are encouraged to continue the readings and other assignments as outlined or this syllabus or subsequent syllabi.

**Tentative Course Outline (Tuesdays are in-person & most Thursdays are online)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **WK** | **Day** | **Date** | **Topic** | **Cha.** | **Tasks** |
| WK 1 | T | Aug 20 | Introduction and Poll Everywhere | 1 | Reading |
|  | Th | Aug 22 | Sustainability & Lifecycle Assessment | 2 | Quiz or assign |
| WK 2 | T | Aug 27 | Fibers Classification & Properties | 3 |  |
|  | Th | Aug 29 | Fiber Properties continued | 3 | Quiz or assign |
| WK 3 | T | Sept 3 | Natural Cellulosic Fiber - Cotton | 4 | Group |
|  | Th | Sept 5 | Other Natural Cellulosic Fibers | 4 | Quiz or assign |
| WK 4 | T | Sept 10 | Natural Protein Fibers | 5 | Group |
|  | Th | Sept 12 | Man-made fibers, cellulosic | 6-7 | Quiz or assign |
| WK 5 | T | Sept 17 | **Review and Summary** |  | Quiz or assign |
|  | Th | Sept 19 | **Exam 1** | 1-5 | Exam 1 |
| WK 6 | T | Sept 24 | Synthetic Fibers | 8 |  |
|  | Th | Sept 26 | Synthetic Fibers - continue | 8 | Quiz or assign |
| WK 7 | T | Oct 1 | Specialty Fibers and Summary | 9 |  |
|  | Th | Oct 3 | Yarn Processing | 10 | Quiz or assign |
| WK 8 | T | Oct 8 | Fall Break |  |  |
|  | Th | Oct 10 | Yarn Classification & structure | 11 | Quiz or assign |
| WK 9 | T | Oct 15 | **Review and Summary** | 6-11 | Quiz or assign |
|  | Th | Oct 17 | **Exam II** |  | Exam 2 |
| WK 10 | T | Oct 22 | Fabric Properties |  | Quiz or assign |
|  | Th | Oct 24 | Woven fabric | 12,13 | Project Draft |
| WK 11 | T | Oct 29 | Knit fabric | 14 | Quiz or assign |
|  | Th | Oct 31 | Other fabrication | 15 | Project Draft |
| WK 12 | T | Nov 5 | Aesthetic Finishes | 16-17 | Quiz or assign |
|  | Th | Nov 7 | Functional Finishes | 18 | Project Draft |
| WK 13 | T | Nov 12 | Dyeing and Printing | 19 | Quiz or assign |
|  | Th | Nov 14 | Care of Textile Products | 20 | Project Draft |
| WK 14 | T | Nov 19 | Legal and Environment | 21 | Quiz |
|  | Th | Nov 21 | **Review and Summary** | 12-21 |  |
| WK 15 | T | Nov 26 | **Exam 3** |  |  |
|  | Th | Nov 28 | Thanksgiving Break |  |  |
| Final | M | Dec 9 | **Final Presentation (Mandatory)** |  | 11:00 am-1:30 pm |

**Please note that the above schedule is tentative and subject to change as needed.**

**Six strategies for effective learning and implementation example**

1. ***Spaced practice*** – “Creating a study schedule that spreads study activities over time”.

On your calendar, block off time each week (persistence is key) to study and review key concepts and facts introduced during the week as well as earlier content. For example, the concept of denier. Although it is introduced in week 1 or 2, students need to study and review the concept on multiple days (spaced practice) vs studying it just before the exam.

1. ***Interleaving*** – “Switching between topics while studying”.

After studying cotton fiber for a short time, switching to a different fiber such as flax or wool or silk, etc. Then, change the order of studying from wool, silk, to cotton and flax. By interleaving these different fibers, you can notice and describe the differences and similarities of these different fibers.

1. ***Retrieval Practice*** – “Bring learned information to mind from long-term memory”.

When learning about fiber structure and properties, practice writing out or describing fiber structures (or fabric structure) from chemical, molecular, and morphological levels of the fiber introduced; or yarn structure or fabric structure, etc.; and explaining how structures affect properties.

1. ***Elaboration*** – “Asking and explaining why and how things work”.

Ask and explain why cotton fiber products wrinkle or why polyester fabrics are usually easy to care or why jersey knit fabric tends to run or why it is claimed that the textile industry is one of the top polluters of the environment. In explaining, students apply relational understanding between structure elements of a product and product service properties; between production processes and textile environmental impact.

1. ***Concrete Examples*** – “When studying abstract concepts, illustrate them with specific examples”.

When studying the concept of molecular orientation (fiber structure), you can imagine well-aligned team members are all pulling in the same direction – thus becoming stronger. Use your imagination to think of examples of any abstract concept; yarn number – using apparel products of thicker and finer fabric as examples.

1. ***Dual Coding*** – Combining words with visuals

You can lay two fibers or two yarns or two fabrics side by side, then describe and explain the differences between them; or pair concepts such as resilience with wrinkled garments and stiffness with soft yet flowy gowns…It can be done on a complex level of a garment using both descriptive concepts and its performance characteristics.

Reference:

Weinstein, Y., Madan, C.R. & Sumeracki, M.A. Teaching the science of learning. *Cogn. Research* **3**, 2 (2018). <https://doi.org/10.1186/s41235-017-0087-y>