

MDSE 3650 Advanced Textiles

Section/Day/Time/Location:

Lecture: 001/Tuesday/2:00-3:50pm/Chilton 387
 Lab: 301/Thursday/2:00-3:50pm/Chilton 387

Instructor: Mrs. Bruder

Office: 355D Chilton Hall

Phone: 940-565-2709

Email: kristina.bruder@unt.edu

Office Hours: see Mrs. Bruder's Schedule immediately below; otherwise by appointment only.

Communications: All emails must have a subject heading which begins with the following: **MDSE 3650: your subject here** ”.

Mrs. Bruder's Schedule	Monday	Tuesday	Wednesday	Thursday	Friday
900					
930		Office Hours		Office Hours	
1000	MDSE 2650 BLB 055 10-1050am		MDSE 2650 BLB 055 10-1050am		MDSE 2650 BLB 055 10-1050am
1030					
1100	Lunch		Lunch		Lunch
1130					
Noon	MDSE 3250-001 Lecture Chem 109 Noon-1:50pm		MDSE 3250-301 Lab Chilton 387 1230-220pm		MDSE 3250-302 Lab Chilton 387 Noon-1:50pm
1230					
100					
130					
200	Office Hour	MDSE 3650 Lecture Chilton 387 200-350pm		MDSE 3650 Lab Chilton 387 200-350pm	
230					
300					
330	HFMD 2655 Chilton 345 3:30-4:50pm		HFMD 2655 Chilton 345 3:30-4:50pm		
400					
430					

Description*: Evaluate aesthetic, durability, comfort, care, and safety problems associated with consumer textile products. Use AATCC and ASTM standards and procedures, basic research methods, technical and consumer literature, and computer applications to prepare comprehensive textile product evaluation reports.

Prerequisite: MDSE 2650 Textiles for Merchandising, E-merchandising, and Designs majors or MDSE 2655 Textiles for Home Furnishings majors (with a grade of C or better)

Objectives:

1. Develop a more comprehensive understanding of fibers and fabrics through in-depth swatch analysis.
2. Analyze and compare fabric samples in order to select the best fabric for intended end use by prioritizing product performance needs/wants of the consumer.
3. Using appropriate AATCC and ASTM procedures, identify textile product use problems and write a comprehensive technical textile evaluation report that recommends changes to improve product performance.

Required Texts:

- Hatch, K. (1993). Textile Science. St. Paul, Minnesota: West Publishing. (July 2007 update)
- Hatch, K. (2012). Textile Identification Manual with Textile Collection. Tucson, AZ: University of Arizona

Required Materials: Linen counter or pick glass, linen pick/pick needle/teaser (UNT Bookstore)

* Students may vary in their competency levels for these abilities. Expect to acquire this knowledge and these skills only if you honor all course policies, attend classes regularly, complete all assigned work in good faith and on time, and meet all other course expectations of you as a student. The above and included schedule, policies, procedures, requirements and assessments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.

Course Requirements (see "How to Calculate Your Grade So Far" on Blackboard):	Points	Due Dates
<p>Swatch Kit Lab Exercises (22 labs--drop lowest scored lab for 21 labs x 10-15 points = 310 points total): Students will be required to turn in lab assignments completed using the swatch kit. The swatch kit builds as we progress through the semester, so there is no immediate assembly. Lab dates are noted on the course calendar. Some labs may be completed during lecture. You will always need the swatch book in lab and we often use it in lecture.</p> <ul style="list-style-type: none"> • These activities will aid in reinforcing material discussed in lecture and will help you identify weak areas you need to study more. • Before each lab, it is important that you read the material to be covered in that particular lab. Come to lab having studied, prepared, and ready to begin. Spending too much time reviewing the material in lab will take up valuable time needed for answering questions. You will run out of time if you need to study the lab in order to understand it. • If you do not have your swatch book or swatches in lab, you will NOT be able to complete the scheduled lab assignment. You are welcome to stay in class and follow along with another student; however, you cannot include your name on their lab for credit. This policy is firm and exceptions will not be made. You will not receive credit for that lab and there is no extra time. Remember that there may be more than one lab in a class and you will miss all the labs that day if you don't bring your swatch kit. • The lowest lab grade will be dropped. Note that on any given lab day, there may be more than one lab exercise which must be completed. If you miss a day when there are two or more labs due, you will only be able to drop one lab grade. No makeup or alternate labs will be given. 	310	See Course Schedule; some exercises will be completed on lecture days; Bring your swatch book to every day, every class, lecture and lab.
<p>Mystery Swatch Worksheet (1 swatch @100points): A swatch and some other information will be given to you during class. You will be expected to identify the fiber, yarn, fabrication, fabric name as nearly as possible with the skills you learned during labs. Also, you will identify the operations and the order of the operations used to make the fabric. You will propose a care label, the tests necessary to ensure quality, and identify a suitable garment for the fabric (and justify the suitability). You will not use the Swatch Kit. Lab equipment will be available to help with identification.</p>	100	11/29
<p>Fabric Selection Worksheet (20 questions): A fabric selection worksheet will be distributed in class. There will be a time limit--an allotted amount of time to complete the analysis. The questions aim to engage students in skillfully applying, analyzing, reasoning, and communicating textile knowledge for the purpose of end use selection.</p>	100	12/1
<p>Exams: Two exams will be divided purposefully between items to assess the students' experience with the reading material and familiarity with the materials presented in class (e.g., handouts, fabric swatch kits, in-class assignments, and lectures). The instructor will keep all exams.</p>	160	9/20, 11/1
<p>Professional Development: Attend one of the specified campus events below and complete the assignment. Submit on Blackboard under "Professional Development".</p> <ul style="list-style-type: none"> • Executive + Scholar Lecture Series (November 16, 10am-Noon, Union Ballroom; executive speaker is Bill Adler, founder and CEO of True Fit®; the scholar is Dr. Tammy Kinley, discussing size and fit issues in the apparel industry): submit 3 quotes from each speaker and state 5 things (total) you learned from the lectures (limit of one page). • MDR Career Expo on Thursday, September 29 from 9:30am to 12:00pm (Noon): scan, copy and paste 3 business cards from recruiters who were at the Expo and state 5 things you learned from the Expo (limit of one page). 	50	11/22
<p>Wear Test Report: Guidelines will be distributed at a later date. The Wear Test project will be submitted through Turnitin on Blackboard.</p>	200	12/6
<p>Final Exam: The final exam will cover the last section of course material; it is not comprehensive.</p>	80	12/15
<p>Total</p>	1000	
<p>Bonus: If 80% of the class completes the SPOT, 10 points will be awarded to each student in the class.</p>	(10)	

Course Schedule: Advanced Textiles

Key to items displayed: Lecture Topic, *Reading Assignment*, *Lab/Exam due*

Week	Tuesday	Thursday
1	8/30: Introduction and Syllabus, Unit I: The World of Textiles, <i>Read Unit I Chapter 1</i>	9/1: Exercise One: Textile Structure Identification Ex 1A Swatch Preparation, Ex 1B Fabric Component Recognition, and Ex 1C Textile Fabrics and Closely Related Materials
2	9/6: Unit II: Fiber Structure and Performance <i>Read Unit II Chapters 7-21</i>	9/8: Exercise Two: Fiber Identification Ex 2A Key Fiber Structure Words and Ex 2C Microscopic Examination
3	9/13: Burn Lab Lecture –Worksheet dist. <i>Read Unit II Chapters 7-21</i>	9/15: Exercise Two: Fiber Identification Ex 2B Burning Behavior
4	9/20: Exam 1 – Chapters 1, 7–21	9/22: Wear Test Introduction Distribution of Wear Test Materials Unit III: Yarn Structure and Performance <i>Read Unit III Chapters 22-25</i>
5	9/27: Exercise Three: Yarn Identification Ex 3A Major Types of Yarns 1 st Wear Test Wash Week (bring worn socks)	9/29: Evaluation procedures for Wear Test; Ex 3B Yarn Construction
6	10/4: Unit IV: Fabric Structure and Performance <i>Read Unit IV Chapters 26-29;</i> 2 nd Wear Test Wash Week (bring worn socks)	10/6: Unit IV: Fabric Structure and Performance <i>Read Unit IV Chapters 26-29;</i> Exercise Four: Fabric Construction Identification; Ex 4A Major Constructions
7	10/11: Unit IV: Fabric Structure and Performance <i>Read Unit IV Chapters 26-29</i> 3 rd Wear Test Wash Week (bring worn socks)	10/13: Exercise Four: Fabric Structure ID Ex 4B Woven Fabrics
8	10/18: Unit IV: Fabric Structure and Performance <i>Read Unit IV Chapters 26-29</i> 4 th Wear Test Wash Week (bring worn socks)	10/20: Exercise Four: Fabric Structure ID Ex 4C Knit Fabrics
9	10/25: Unit IV: Fabric Structure and Performance <i>Read Unit IV Chapters 26-29</i> 5 th Wear Test Wash Week (for students who missed a wash cycle)	10/27: Exercise Four: Fabric Structure ID Ex 4D Nonwoven Fabrics and Ex 4E Compound Fabrics
10	11/1: Exam 2 – Chapters 22-29	11/3: QC & QA, Testing, ASTM/AATCC (See Blackboard for Supplemental chapter)
11	11/8: QC & QA, Testing, ASTM/AATCC (See Blackboard for Supplemental chapter) con't Unit 1: Performance Categories (relevant to Wear Test) <i>Read Unit I Chapters 2-6</i>	11/10: Unit V: Chemical, Mechanical, and Thermal Treatments and Performance; Fiber Economics <i>Read Unit V Chapters 30-33</i>
12	11/15: Exercise 5: Finish Identification Ex 5A Finishes that Alter Luster, Ex 5B Finishes that Alter Surface Texture, Ex 5C Finishes that Alter Coloration, and Ex 5D Finishes that Alter Hand and/or Translucence	11/17: Unit V: Chemical, Mechanical, and Thermal Treatments and Performance (Coloration) <i>Read Unit V Chapters 34-35</i>
13	11/22: Exercise 6: Colored Fabric Identification Ex 6A Dyed or Printed and What Method, Ex 6B Fabrics with Checked Designs, Ex 6C Fabrics with Striped Designs, Ex 6D Fabrics with Solid, Muted, or Iridescent Coloration, and Ex 6E Fabrics with Intricate Patterns Professional Development due	11/24: Thanksgiving Holiday, no class
14	11/29: Exercise Six con't; Mystery Swatch	12/1: Exercise 6 con't if needed and Work Day
15	12/6: Fabric Selection Worksheet; Wear Test due online (11:59pm)	12/8: PRE-FINALS Day – Makeup exams for eligible students
16	Exam 3 (Final, not comprehensive): Thursday, December 15 at 1:30pm-3:30pm	

Please read Course Policies next separately on Blackboard!