

TEXTILES

Fall 2009

Course number: TXMI 3500

Credit: 3 hours

Location: 306 Dawson Hall

Course time: TU and TH 9:30 - 10:15

Instructor: Dr. Patricia Annis

Office: 309 Dawson Hall

Office hours: Daily 10:30 – 11:30, and by appointment

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Prerequisite CHEM 1110 - 1110L

Purpose of Course: TMI 3500 introduces undergraduate students to the principles of textiles. The focus of the course will be the production and properties of fibers, yarns and fabrics and their preparation, coloration and finishing. The course is required for all students majoring in Fashion Merchandising and Furnishing and Interiors. Textiles are the common thread that interrelates all of our undergraduate and graduate majors and makes the Department of Textiles, Merchandising, and Interiors so unique!

Student Outcomes:

Upon completion of the course, the student will be able to:

1. Explain the scope of contemporary textiles in the consumer's environment.
2. Identify fibers, yarns and fabrics commonly used in apparel and interior products.
3. Explain how structural characteristics of fibers, yarns, and fabrics influence appropriate use and care of consumer products.
4. Explain how and why fabric preparation procedures are required before fabrics can be successfully dyed, printed, and/or finished.
5. Distinguish between dyed and printed fabrics and explain how these coloration methods are applied.
6. Recognize different fabric finishes and know why they are used to improve appearance, performance, and safety of fabrics.

Required Textbook: Collier, B.J. Bide, M., and Tortora, P.G. Understanding Textiles, 7th edition, Pearson Prentice-Hall Inc., New Jersey, 2009. This book will be useful in your other textile classes. Therefore, I recommend that you do not sell it back at the end of the semester. It is a required textbook if you take TXMI 3520, Textile Testing, with me.

Required Fabric Sample File: Brown, P.K. The Textile Kit, ISIS Edition, ATEXINC, Wildwood, Missouri, 2005.

Course Requirements and Grading Scale:

Approximate Points

Three unit exams (≈ 70 points each) ≈ 210 points (40%)

Fabric sample file and worksheets ≈ 210 points (40%)

Final comprehensive exam ≈ 100 points (20%)

Approximate TOTAL ≈ 520 points (100%)

Grading scale (percentage):

A = 100 – 90, A- = 89 – 87, B+ = 86 – 84, B = 83 – 80, B- = 79 – 77, C+ = 76 – 74, C = 73 – 70, C- = 69 – 67, D = 66 – 60, F = 59 and below

The instructor reserves the right to assign extra points during the course of the semester.

Discussion of Grading System:

Exams. Information on the exams will be based on class lectures, worksheets, and the textbook. Exam questions will be in the form of true/false, multiple choice and short answer/essay. The number of points for the exams will vary. The final exam will be comprehensive.

Sample File and Worksheets. A collection of sample fabrics will be compiled during the quarter. The fabric samples will be used in identifying and discussing characteristics of fibers, yarns, fabrics and coloration and finishing techniques. Worksheets with questions related to the fabric samples will be distributed during each unit of study. The fabric samples and worksheets will be turned in at specified intervals during the semester and the completed file will be submitted at the end of the semester. Due dates are listed on the tentative class schedule. Detailed instructions will be provided.

Bonus Points accumulated during the semester, will either be incorporated into your score on the relevant assignment or added to your overall total score at the end of the semester.

Course Policies:

1. Class Attendance. **CLASS ATTENDANCE IS EXPECTED AND WILL BE TAKEN REGULARLY.** You are responsible for what transpires in class, regardless of attendance. There will be no provision for making up missed lectures, demonstrations, or group activities. Excused absences apply only to sickness and other extreme circumstances. Appropriate documentation must be provided. Attendance and arriving late or leaving early are strongly considered in borderline grading situations. Excessive absences will result in a teacher-initiated drop.
2. Makeup Exams. Students are to be present on all testing days. If a previously scheduled and important event coincides with an examination date, a written request to take a make-up exam will be considered. Such requests must be submitted **at the beginning of the semester**. Any request for make-ups based on illness or family emergency must be accompanied by **written documentation** that establishes the veracity of the excuse. All make-ups are administered at the professor's discretion.

3. Late adds will not be approved except on exceptional circumstances
4. Students with Disabilities. The University of Georgia is committed to full inclusion of all students. Students who, by nature of a documented disability, require academic accommodations should contact the instructor at the beginning of the semester.
5. Academic Honesty. All academic work must meet the standards contained in "A Culture of Honesty". Students are responsible for informing themselves about those standards before performing any academic work. Each student is expected to complete each assignment independently. **Worksheets and assignments that are identical in wording will be penalized. For more information see http://uga.edu/ovpi/academic_honesty/academic-honesty.htm**
6. Electronics. Use of cell phone calculators and other electronics are prohibited during tests. Hand held calculators are OK. Please turn off cell phones with audible ring.
7. The Family Educational Rights and Privacy Act is adhered to at UGA. If anyone objects to being identified by name during class, when tests and labs are returned, or when attendance sheets are circulated, please see the instructor.

RECOMMENDATIONS FOR SUCCESS!

1. Attend class regularly
2. Take good class notes, ie., thorough (record more than just the outline given on the slides).
3. Write down examples discussed in class.
4. Ask questions
5. Turn in assignments on time
6. Start studying early for tests; read outside readings
7. Attend review sessions
8. Enjoy the class. What you learn will be useful in many different aspects of your life. Wait and see!

Tentative Class Schedule

<u>Date</u>	<u>Topic</u>	<u>Readings & Assignments</u>
Tu 8/18	Introduction & syllabus Ubiquity of textiles	Acquire textbook and Textile Swatch Kit
Th 8/20	Classification of textiles Textile components	Chapter 1, pp. 1-16 Chapter 2, pp. 15-20
Tu 8/25	Textile Properties	Chapter 3 Textile Swatch Kit DUE; read directions Start compiling swatch kit
Th 8/27	Natural cellulosic fibers - cotton	Chapter 4 Bring cotton fabric samples to class, #1-7 Worksheet #1 Natural Fibers

<u>Date</u>	<u>Topic</u>	<u>Readings & Assignments</u>
Tu 9/1	Natural cellulosic fibers – linen/other bast	Chapter 4 Bring bast fabric samples to class, #8-12
Th 9/3	Natural protein fibers – wool/specialty hairs	Chapter 5 Bring wool fabric samples to class, #13-15
Tu 9/8	Natural protein fibers – silk	Chapter 5 Bring silk fabric samples to class, #17-20
Th 9/10	Test #1	Worksheet #1 DUE Natural Fibers
Tu 9/15	Manmade fiber formation and properties	Chapter 2, pp. 20-36
Th 9/17	Manmade cellulose – rayon/acetate/others	Chapter 6 Worksheet #2 Manmade Fibers Bring manmade cellulosic samples to class, #21-23
Tu 9/22	Nylon/aramids/polyester	Chapters 7 & 8 Bring nylon/aramid/polyester samples to class, #24-29
Th 9/24	Acrylics/olefins/elastomers	Chapters 9-11 Bring acrylic/olefin/elastomeric samples to class, #30-37
Tu 9/29	Comparison of manmade fibers	Worksheet #2 DUE Manmade Fibers
Th 10/1	Yarns	Chapter 13 Worksheet #3 Yarns Bring yarn samples to class, #39-48
Tu 10/6	Yarns	Chapter 14
Th 10/8	Test #2 Midterm	Worksheet #3 DUE Yarns
Tu 10/13	Weaving	Chapters 15 & 16 Worksheet #4 Weaving I
Th 10/15	Weaving	Chapter 17 Worksheet #5 Weaving II Bring woven fabric samples to class, #49-107
Tu 10/20	Weaving	Worksheet #4 DUE Weaving I Bring woven fabric samples to class, #49-107
Th 10/22	Knitting	Chapter 18 Worksheet #5 DUE Weaving II Worksheet #6 Knitting I Bring knit fabric samples to class, #115-132
Tu 10/27	Knitting	Worksheet #7 Knitting II Bring knit fabric samples to class, #115-132

<u>Date</u>	<u>Topic</u>	<u>Readings & Assignments</u>
Th 10/29	Nonwovens	Chapter 19 Worksheet #6 DUE Knitting I Bring nonwoven fabric samples to class, #140-143 Worksheet #8 Nonwovens/other fabrics
F 10/30	Fall Break	
Tu 11/3 Th 11/5	Nonwovens Tufted/multicomponent fabrics	Worksheet #7 DUE Knitting II Chapter 20
Tu 11/10 Th 11/12	Test #3 Wet processing and preparation	Worksheet #8 DUE Nonwovens/other Chapter 21 Worksheet #9 Wet processing/coloration
Tu 11/17	Dyeing	Chapter 22 Bring dyed/printed fabric samples to class, #160-172
Th 11/19	Printing	Chapter 23 Bring printed fabric samples to class, #160-172
Tu 11/24 Th 11/26	Thanksgiving Holiday Happy Thanksgiving!	
Tu 12/1	Finishing - mechanical	Chapter 24 Worksheet #10 Finishing Worksheet #9 DUE Wet processing/ coloration Bring mechanical finished fabric samples to class, #154-158
Th 12/3	Finishing – chemical	Chapter 25
Tu 12/8	Follow Friday schedule Last day of classes	Worksheet #10 DUE Finishing Bonus point fabrics DUE
W 12/9 Th 12/10 F 12/11	Reading Day Finals start	
Tu 12/15	FINAL COMPREHENSIVE EXAM 8:00 – 11:00 am	Return Worksheet #10

* The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.