

FACS 3376 Textile Science Fall 2017

College of Health Sciences, Department of Family & Consumer Sciences

Instructor: Janis H. White, Ph.D., CFCS

Room 111, MLHB

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Office Hours: Monday, Wednesday: 11:00 – 12:00

Tuesday, Thursday: 1:00 - 2:00

Friday: 9:00 - 10:00

Other times by appointment.

Day and Time Class Meets: 11:00 a.m. – 12:20 p.m., Tuesday and Thursday

Location of Class: Room 201, Margaret Lea Houston Building

Textbooks and Supplies: Kincade, Doris H. Sewn Product Quality: A

Management Perspective, Pearson Prentice-Hall, Upper Saddle River, New Jersey, 2008. (**Required**) American Cleaning Institute. Against Disease,

www.againstdisease.com. (No charge)

Students will be informed ahead of time as to what will be needed for a particular exercise. (**Required**)

1. Laundry marking pen

2. Ruler (both metric & English measures)

3. Large straight pins (just a few)

4. Roll of paper towels5. Matches or a lighter

6. Tape – ½" *double*-sided

7. Tape $-\frac{3}{4}$ " *single*-sided

8. Magnifying glass

9. Rubber gloves

10. Small terry cloth towel

11. Sponge

12. Pair of tweezers

Course Description: Exploration of textiles from a scientific perspective is emphasized, explaining the interactions among textile fibers, finishes, dyes and laundry products as well as performance criteria. Students participate in hands-on experiences with various fibers, finishes and dyeing processes. This course will include a combination of lectures by the instructor, student discussion, and adaptations of textile testing procedures feasible in a limited laboratory situation and designed to allow students to experience analysis of textile samples for specific characteristics and situations. Assignments will include weekly reports of these structured student exercises and a final project designed for studying a particular fabric in depth to be presented to the

class. Exercise worksheets are provided for students and the format for the final project will be given in class.

Course Objectives:

Economic, technological and legislative factors which concern consumers' selection and maintenance of textiles for clothing and household use are critically examined using a hands-on approach. Upon completion of the course, the student should be able to:

- 1. identify commonly used textile fibers according to readily available means.
- 2. identify the characteristics of commonly used textile fibers.
- 3. analyze fabrics according to construction and finishes.
- 4. identify effective usage of label information, focusing on care.
- 5. identify various aspects of textile renovation.
- 6. use textile terminology correctly.
- 7. demonstrate familiarity with chemical and physical testing procedures developed by the American Association of Textile Colorists and Chemists and the American Society for Testingand Materials.
- 8. develop specific skills, competencies, and points of view needed by professionals in the field of textiles and apparel.
- 9. apply textiles information (interpreting test results) in problem-solving and decision-making in regard to textile products.
- 10. demonstrate a knowledge of recycling and other environmental practices within the textiles industry.

Course Format: Face-to-face

Course Content: Review of fiber families

Review of textile fibers

Analysis of textile constructions Factors affecting fabric performance Fabric inspection, defects and flagging

Findings, threads and labels

Dyes and colorfastness, including natural dyes

Batik and tie dye

Effects of bleaching, mercerization Care and renovation of textiles

Soil and soil release

Aesthetics, hand and drape

Textiles and the environment; recycling of textiles

Course Requirements:

• Class attendance policy: Regular and punctual attendance is expected. Each student is allowed two absences (for a Tuesday-Thursday class) during the semester before there is an effect on the class participation grade. For each absence beyond the first three, five points will be deducted from the Participation Grade (see "Grading Plan" section below). It is recommended that you save these allowed absences for possible illnesses, funerals, etc. Three "tardies" constitute one absence. Distinction between non-emergency and emergency absences: included in this link is the Absence Notification Request Form: http://www.shsu.edu/dept/dean-of-students/absence.html. In-class exercises cannot be made up.

Course Evaluation:

Exercise Worksheets (9 @ 15 points each)	135 points
Class Participation	50 points
Midterm Exam	100 points
Final Project	100 points
Final Exam	100 points
Total Possible Points	485 points

Grading scale: 90 - 100% (min. of 437 pts.) = A

80 - 89 % (min. of 388 pts.) = B 70 - 79 % (min. of 340 pts.) = C 60 - 69 % (min. of 291 pts.) = D 0 - 59 % (290 or fewer pts.) = F

Each exam, including the final, will consist of 40-50 objective questions that will be graded via Scantron. The Scantron form answer will be the answer that is graded.

There will be one make-up exam at the end of the semester at a time to be announced toward the end of the semester. A student must produce appropriate documentation (a doctor's signed note for illness or a funeral or obituary notice that lists the student as a survivor of the deceased) before a make-up exam may be administered. **The make-up exam is comprehensive.**

SHSU Academic Policy Manual - Students

• Procedures in cases of Academic Dishonesty AP 810213: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism (copying of work which is not your own), collusion (dividing work between two or more classmates and turning it is as

though each of you did all of the work), and the abuse of resource materials. **Cell phones, backpacks, and handbags or totes MUST be placed at the front of the room during exams.** The student assumes all responsibility for personal property. Additional information is given at the Student Syllabus Guidelines web link.

- Academic Grievance Procedures for Students AP 900823: Academic grievances include disputes over course grades, unauthorized class absences/tardiness, suspension for academic deficiency, instructor's alleged unprofessional conduct related to academic matters, graduate comprehensive and oral exams, theses and dissertations, and withdrawal or suspension of privileges related to degree-required clinical rotation, internships, or other clinical service delivery in professional degree programs. If the dispute is determined to be based upon professional judgment, the aggrieved student is entitled to have, as appropriate and in turn, the department/school chair, College Academic Review Panel, academic dean, Dean of Graduate Studies (for graduate student issues), and Provost and Vice President for Academic Affairs form an opinion about the dispute and so advise the individual(s) involved.

 http://www.shsu.edu/dotAsset/0bb1346f-b8d6-4486-9290-dba24123d0d8.pdf
- Students with Disabilities AP 811006: It is the policy of Sam Houston State University that no otherwise disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired. SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities.

NOTE: No accommodation can be made until the student registers with the Office of Services for Students with Disabilities (http://www.shsu.edu/dotAsset/187f9029-a4c6-4fb4-aea9-2d501f2a60f3.pdf).

• Student Absences on Religious Holy Days AP 861001: Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement

- concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.
- Use of Telephones and Text Messengers in Academic Classrooms and Facilities AP 100728: Use of cell phones to identify information on current issues may be done ONLY with the instructor's express and ADVANCE permission. Should a student have a personal emergency that requires that the his/her cell phone be available, the student must alert the instructor in advance. Any calls must be taken outside of the classroom. Cell phone availability and use during class times is GREATLY discouraged as cell phones are generally a distraction during lecture times. The presence of a cell phone at the student's chair or station during testing times will result in a de facto appearance of cheating and the student will receive a grade of 0 on the exam. During class activities and exams/quizzes, students will be required to store their belongings in open bins and/or shelving. These dates are clearly spelled out on the class schedule. Please plan accordingly in order to properly protect and store your valuables.
- Assignments: For the assignments given below, detailed instructions will be given in class; for the final project, an assignment sheet will be posted to Blackboard in addition to instructions given in class. Exercise Worksheets: Exercise worksheets are to be completed in **pen** (any color that is readable except pink or red) and handwritten. Most of the work will be conducted under supervision during class time. Bring your own supplies and equipment! Due dates will vary depending on the nature of the exercise. Exercise worksheets generally are due at the end of the class period in which the work was completed or at the beginning of the next class meeting if samples are wet and need to be dried before the worksheet can be completed. (**Do not** turn in wet samples!!!) Exercise worksheets that are due at the beginning of a class meeting and these and all other assignments are considered late if they are not turned at the **beginning** of the class meeting on the due date. An assignment will receive an automatic drop of **one letter grade** for **each** class day the assignment is late. When exercises are scheduled (usually on Thursdays), clean work areas before leaving. This includes wiping/washing tabletop area if needed. Take notes during lecture and bring your notes and textbook with you to the structured exercises times.

<u>Final Project</u>: Each student will be given a piece of "mystery" fabric. Each student will be expected to conduct various tests and analyses on this fabric. The project will have two parts: first of all, all test results are to be noted and logged in a "lab notebook" format with all tests results included; secondly, students are to write a one-page synopsis in the manner of a formal report such as would be produced by a textile testing facility. The "lab notebook" portion should be handwritten, but the one-page synopsis is to be word-processed.

Calendar for FACS 3376 Fall 2017

NOTE: Page numbers are give	en <u>only</u> when pages are pulle	ed from a chapter. In other
words, when a chapter is cited.	that means that the student	should read the whole chapter.

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Thursday Angust 7/1	Introduction to cours	a raguuramante
Thursday, August 24	Introduction to cours	z, reduncincins
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Tuesday, August 29 Review of fiber families: natural, manufactured

Thursday, August 31 Identification of Textile Fibers (Ex. #1)

Tuesday, September 5
Thursday, September 7
Tuesday, September 7
Tuesday, September 12
Fibers, Yarns, and Fabrics, pp. 71-87, Kincade
Analysis of Textile Construction (Ex. #2)
Factors Affecting Fabric Performance

Thursday, September 14 Examination of Physical Properties (Ex. #3)

Internship Meeting at 3:00 p.m., MLHB, Room 302

Tuesday, September 19 Exercise 3 (cont'd) & Exercise 4

Thursday, September 21 Exercises 3 & 4, cont'd

Tuesday, September 26 Fabric Inspection, Defects, & Flagging: Chapter 5, Kinc. Identification/Fabric Defects, Chapter 5, Kincade (Ex. #5)

Tuesday, October 3 Finding, Threads and Labels, Chapter 6, Kincade

Thursday, October 5 Identification/Threads & Labels, Chapter 6, Kinc. (Ex. #6)

Tuesday, October 10 Dyes and Colorfastness, pp. 89-97, Kincade

Thursday, October 12 Effects of Bleaching, Time on Dye Processes (Ex. #7)

Tuesday, October 17 ********MID-TERM EXAMINATION*******
Thursday, October 19 Natural Dyes (History and Current Use)

Tuesday, October 24 Care and Renovation of Textiles, *Against Disease*, pp. 93-

98

Thursday, October 26 Soil and Soil Release (Ex. #8)

Tuesday, October 31 Aesthetics (Hand and Drape), p. 89, Kincade (first full

paragraph)

Thursday, November 2 Observation & Examination of Hand & Drape (Ex. #9)

Tuesday, November 7 Textiles and the Environment

Thursday, November 9 Recycling of Textiles and Textile Products

Tuesday, November 14 Begin Final Project (receive sample & instructions, decide

on tests)

Thursday, November 16 Continue Final Project Testing
Tuesday, November 21 Completion of Final Project Testing

Thursday, November 23 Thanksgiving Holiday – Please Drive Safely!!

Tuesday, November 28 Begin Presentation of Final Projects

Thursday, November 30 Continue Presentation of Final Projects, Review for Final ****FINAL EXAM, 12:00 P.M. – 2:00 P.M.****

This schedule is considered to be <u>tentative</u>: Dates may be changed as the semester's progression and coverage of the material require as decided by the professor.

However, generally this schedule will be followed in a fairly strict way. I believe that it is important to have discussion/lecture on Tuesday and the related exercise on Thursday of the same week whenever we can. However, I DO reserve the right to make changes in this schedule should they be called for during the semester. I will NOT change the final exam time. Please do not ask to take the exam early or at another time. Thank you! -- JW