ADES 2213 Textile Analysis Lecture Syllabus

Course Designator | ADES
Course Number | 2213
Section Number | 001--Lecture
Semester and Year | Fall 2013

Class Meeting Days & Time | 8:30 - 9:20 MW
Classroom | 33 McNeal Hall
Number of Credits | 4
Final Exam Date & Time | Saturday, December 14, 4-6PM
(Also state if there is NO final)
Teaching Assistants | Dr. Kathy Reiley: TTh 10:40am – 12:35pm
Ms. Meghan Mckinney: MW 9:35-11:30am & MW 11:45am -1:40pm
Ms. Yumin Kim: TTh 3-4:55pm

Instructor’s Information

| Name | Dr. Karen LaBat
Office Location | 354 McNeal Hall
Office Phone | 612-624-3628
DHA Phone | 612-624-9700
Email | klabat @umn.edu
Office Hours | M 9:45 to 10:45 and by appointment

Course Information and Instructor’s Expectations

Course Description:
Physical, chemical, and biological characteristics of fibers, yarns, textile structures, and finishes. Their effect on performance/appearance of textile products, including apparel, interior, and industrial textiles.

Professor’s goals for the course:
My goals are to provide you with a comprehensive understanding of the physical properties of a wide range of textiles and to help you develop the skills to evaluate any textile. Most of you will be designing with or purchasing textiles and textile products in your chosen professions. With knowledge from this course you should be able to select the most appropriate textile for the project.

What do YOU want to learn in this class? Write at least 2 goals below:
1.
2.

Student Learning Outcomes:
1. Develop a comprehensive vocabulary of textile terms.
2. Identify basic fabrics (structures and names) and draw conclusions about how fabrics differ structurally and materially by using the textile equation (Fiber + Yarn + Structure + Finish = Textile)
3. Understand characteristics of fibers, structures and finishes and how the characteristics affect performance and use of textile products.
4. Analyze textiles and make appropriate choices for textile products from a design/merchandising perspective.
Required and Recommended Materials:

**Required Texts:**
- **11th** edition also available as an ebook pick up card from UMN bookstores with information.
- **NOTE:** If you have access to 10th edition—that will also be acceptable.

(available at Books Underground and Coffman Book Store)

Laboratory sheets (available at Books Underground and Coffman Book Store)
- **NOTE:** If the packets are not on the shelf in St. Paul bookstore ask at the service counter. Packets can be shipped over from Coffman in one day.

**Supplies:** All are available at Books Underground—St. Paul and Coffman Book Store—Mpls.
- Fabric swatches by Tex Swatch
- Double stick tape—you will need 2 dispensers—Permanent ----NOT reuseable
  - Limited supplies at bookstore—you might want to purchase elsewhere
- Pencil and eraser—mechanical is best
- Pick glass—in the TexSwatch pack or small magnifying glass

**Books in Reference Department, St. Paul Campus Library—useful for study purposes**

**Dictionaries:**

**Periodicals--St. Paul Campus Library:**
- Textile World
- American Dyestuff Report
- Journal of the American Association of Textile Chemists and Colorists
- Journal of Home Economics

**WEB SITES:**
US Customs Guide to Generic fiber names and Tradenames

Web site of the American Fiber Manufacturers.
www.fibersource.com

Excellent site with information on apparel and home furnishings textiles. Also textile care information
www.fabriclink.com

News of industrial fabric development from Industrial Fabrics Association International, Roseville, MN
www.ifai.com

Federal Trade Commission web site. RN database --- the registered number for textiles manufactured in U.S. www.ftc.gov

For detailed information on the Textile Fiber Product Information Act (TFPIA) go to:
www.ftc.gov/bcp/conline/pubs/pubs/buspubs/thread.htm or go to “facts for business through the FTC site.
www.cpsc.gov
Home site for the U.S. Consumer Product Safety Commission. Gives all current recall information. Information on textile flammability regulations. For access to safety/flammability regulations: www.access.gpo.gov/nara/cfr/waisidx_03/16cfrv2_03.html

There are many more sites---be advised that the Wikipedia site does not always have reliable information. There are also some smart phone apps available-----some of the vocabulary used in these sites may not agree with vocabulary we use in class.

Release of Work Statement:
Students understand that enrollment in this course grants consent for their work to be selected for inclusion in college or departmental publications (online or in print). Your instructor may select to use your work to represent her skills as an instructor in a teaching portfolio (online or in print).

Attendance:
Attendance at lecture and lab is essential. In most cases information is covered in lecture that is necessary for completion of the laboratory that follows in the lab session. Attendance is taken routinely in lab and periodically in lecture. Students are responsible for all make-up materials. Make-up for mid-term and final exams is granted only in emergency situations. Arrangements for absences due to university approved participant sporting events must be made at the beginning of the semester. An incomplete for the class is given only under exceptional circumstances and a contract for completion of the class must be agreed upon by student and professor before the end of finals week and filed in the department office. Also see attendance policy for lab attendance.

Tardiness
I plan to start class on time and expect that you will be here—8:30AM. Occasionally, you may find it necessary to be late. In that case, I would certainly prefer that you come after class has started rather than miss the entire session. However, tardiness should never develop into a pattern. To avoid disrupting the class---please enter at the back of the lecture room.

Workload: The U of M Senate standard for credit/work ratio for undergraduate students is that one semester credit is to represent, for the average U of MN undergraduate student, or 3 hours of academic work per week (including lectures, laboratories, recitations, field work, study outside of class, etc.), averaged over the term, in order to complete the work of the course. Textile Analysis is a 4 credit course, therefore 12 hours of work per week is expected for this course.

Course Examinations
There are three major written examinations for the lecture portion of the course that are primarily from information learned in lecture and in readings. There are two mid-term exams and the final exam. The format for all three exams is similar. There are several sections of multiple choice, true/false, and fill in the blank. These questions test your vocabulary and factual knowledge. There may be 1 or 2 short essays in each exam. These questions assess your ability to integrate knowledge from lab and lecture and often ask you to evaluate the performance of a textile in an end-use situation.

Final Exam Scheduling Conflicts: You are required to take final examinations at the times shown (lecture and lab). However, if you have examination conflicts or three exams within a 16-hour period, you may request adjustment with your college office and with your instructor. Such a request must be presented at least two weeks before the examination period begins.

Handbook--Textile Swatches
Textile swatches in the Handbook give students a representative sample of most commercially available textiles. Students are responsible for analyzing the textile swatches for yarn type, fabric structure and
finish. This is a continual process of analysis and re-analysis as the course progresses and students learn more about the factors that affect the textile—in other words your assessment of each textile swatch may change as you progress through the course.

At the completion of each lab go through your entire Handbook and find swatches that relate to the lab topic---fill in as much information as you can—USE PENCIL---you may change your mind later!

Students mount the TexSwatch textile swatches and swatches supplied by the lab instructor in the Handbook and complete as much information about each swatch as possible. Fiber content is given in the key or provided by the lab instructor—do not “guess” fiber content.

Students must analyze each and every swatch in the Handbook -- and fill in the blank boxes with:
1) fabric name
2) yarn type and structure
3) fabric structure, (e.g. woven-basket; knit-warp-raschel, etc.)
4) finish. Many finishes, especially color application (e.g. yarn dyed, piece, dyed, etc.) can be determined by examining the textile or assumed because of the type of textile (e.g. cotton organdy fabrics are parchmentized).

***You are responsible for writing in information for ALL swatches in your Handbook, including fabric name, fiber name, yarn type, fabric structure and specified finishes.

Note: your Handbook will be graded throughout the semester with quizzes.

Grading Structure:
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html

**Grade Distribution**
25% Lab Grade (250 points)
20% Lab Final (200 points)
25% Lecture Exams 1 & 2 (250 points/125 points each)
20% Comprehensive Final Exam in Lecture (200 points)
10% Handbook Swatch quizzes (100 points)

**Grading (Lab Grade):**
Your lab grade is 25% of your total course grade and totals 250 points based on:
- Lab sheets (75 points):
  - Three lab sheets will be randomly chosen—not announced and will be graded by the lab TA’s. These labs are worth 25 points each.
- Assignment (50 points)
  - There is one written assignment.
- Quizzes (125 points)
  - There will be 5 quizzes worth 25 points each---quiz dates are listed on your lab schedule.
  - There will be NO make-up quizzes

The final grade is based on accumulated points divided by total points possible.

**Grades are determined as follows:**
- A (93.3%) Represents achievement that is outstanding relative to the level necessary to meet course requirements
- A- (90%) Necessary to meet course requirements
- B+ (86%) Represents achievement that is significantly above the level necessary to meet course requirements
- B (83%) Necessary to meet course requirements
- B- (80%)
C+ (76%) Represents achievement that meets all course requirements in every respect
C- (70%) Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
D+ (66%) Represents achievement that is worthy of credit even though it fails to meet fully the course requirements.
F (below 60%) Represents failure and signifies that the work was either 1) completed but at a level of achievement that is not worthy of credit or 2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an Incomplete. The F carries "0" grade points and the credits for the course do not count toward any academic degree program. The credit hours for the course do count in the grade point average.

Accepting and Returning Assignments: All assignments are required to be turned in on time on the designated due dates. Assignments will be graded and returned within a reasonable time to allow for feedback and study before quizzes and exams.

Grading Late Work: Late work will be accepted from those who have a documented, University-approved excused absence (i.e. documented death in the family, illness with doctor’s note, documented class trip, religious holiday) ---for lecture exams---contact Dr. LaBat in advance or as soon as possible.

Policy for Missed Exams: Make-up exams will be given to those who have a documented, University-approved excused absence (i.e. documented death in the family, illness with doctor’s note, documented class trip, religious holiday) ---you must contact Dr. LaBat by e-mail in advance or as soon as possible.

Make Up Work for Legitimate Absences:  
http://www.policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html

Extra Credit Options:  
Completing all requirements for this course with distinction will keep you occupied. I do not give extra-credit assignments.

Classroom Electronic Disruptions:  
Turn off all cell phones during lecture. If you "beep, buzz, or ring" during a lecture, you will be asked to leave the lecture session and not return for the remainder of that session. Note taking via computer is allowed---however, professor and TA’s will circulate during lecture and ask you to leave if you are on any social media sites. Research shows that “multi-tasking” does not work—one of the tasks will suffer!

Photographs of lecture PowerPoint slides are prohibited as violation of copyright.

Personal Electronic Devices in Classroom:  
http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html

Use of Class Notes and Materials:  
http://policy.umn.edu/Policies/Education/Education/CLASSNOTESSTUDENTS.html

Scholastic Dishonesty and Student Conduct Code:  
http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf

Sexual Harassment:  
http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf
**Statement on Climate of Inclusivity:**
You are expected to be attentive during class, ask questions if you do not understand something, and to offer your opinion. You are also expected to listen respectfully to other students and to me when speaking. The University of Minnesota is committed to providing a safe climate for all students, faculty, and staff. All persons shall have equal access to its programs and facilities without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation. Racism, sexism, homophobia, classism, ageism and other forms of bigotry are inappropriate to express in this class. Reports of harassment are taken seriously, and there are individuals and offices available for help.
*(or refer to [http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO-AA.pdf](http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO-AA.pdf))*

**Academic Freedom and Responsibility:**
[http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf](http://www1.umn.edu/regents/policies/academic/Academic_Freedom.pdf)

**Availability of Disability and Mental Health Services:**

*The University of Minnesota is committed to providing all students equal access to learning opportunities.*

*Disability Services (DS) is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations.*

- **Students who have, or think they may have, a disability (e.g. mental health, attentional, learning, vision, hearing, physical or systemic), are invited to contact DS to arrange a confidential discussion at 612-626-1333 (V/TTY) or ds@umn.edu.**

- **Students registered with DS, who have a letter requesting accommodations, are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.**

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via [www.mentalhealth.umn.edu](http://www.mentalhealth.umn.edu) or contact Counseling/Consulting Services at 612-624-3323.
<table>
<thead>
<tr>
<th>Dates</th>
<th>Monday:</th>
<th>Wednesday:</th>
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<tbody>
<tr>
<td>9/2 &amp; 9/4</td>
<td>Labor Day Holiday</td>
<td>Introduction to course</td>
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<td>The Textile Equation</td>
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<td>Evaluating textiles</td>
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<td>K: chaps. 1,2,3 (1,2,3)</td>
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<td>L/S: Intro to Fibers</td>
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<td>9/9 &amp; 9/11</td>
<td>Intro to Fibers</td>
<td>wool and Specialty Hair</td>
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<td>Fiber labeling</td>
<td>K: pages 96-99 (72-75)</td>
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<td></td>
<td>wool</td>
<td>L/S: Specialty Hairs</td>
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<td>K: ch 21, pgs. 84-95 (ch 21, pgs. 61-71)</td>
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<td>L/S: Wool</td>
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<td>9/16 &amp; 9/18</td>
<td>silk</td>
<td>Cellulosics/cotton</td>
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<td>K: 99-107 (pgs. 76-81)</td>
<td>K: pgs. 56-69 (39-49)</td>
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<td>L/S silk</td>
<td>L/S: cotton</td>
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<td>9/23 &amp; 9/25</td>
<td>cotton</td>
<td>Linen/Minor Cellulosics</td>
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<td>K: 56-69 (50-58)</td>
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<td>L/S: minor cellulosics 69-79</td>
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<td>9/30 &amp; 10/2</td>
<td>EXAM I</td>
<td>Intro to Manufactured fibers</td>
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<td>rayon and other regenerated fibers</td>
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<td>K: pgs. Read section on regenerated fibers</td>
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<td>L/S: rayon</td>
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<td>10/7 &amp; 10/9</td>
<td>Synthetics, acetate</td>
<td>acrylic, nylon</td>
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<td>K: read section on acetate</td>
<td>K: read sections on acrylic &amp; nylon</td>
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<td>L/S: acetate</td>
<td>L/S: acrylic, nylon</td>
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<td>October 3, 7:30 to 9am</td>
<td>You are encouraged to attend “Design Intersections: Design and Sport” Speaker: Dr. Su Sokolowski, Innovation Director for Apparel Innovation Team NIKE More information available on CDES web site and in the lab.</td>
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<td>10/14 &amp; 10/16</td>
<td>olefin, polyester</td>
<td>Special Use Fibers</td>
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<td>K: read sections on olefin &amp; polyester</td>
<td>K: Chapter 9 (Chapter 9)</td>
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<td>L/S: olefin, polyester</td>
<td>L/S: remainder of fibers</td>
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<td>10/21 &amp; 10/23</td>
<td>Yarns</td>
<td>Yarns continued</td>
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<td>K: Chapter 10 (pgs. 173-191)</td>
<td>K: Chapter 11 (pgs. 195-208)</td>
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<td>L/S: Yarns</td>
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<td>Date</td>
<td>Topic</td>
<td>Materials</td>
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<td>10/28 &amp; 10/30</td>
<td>Intro to Structures</td>
<td>Wovens: plain, basket, rep</td>
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<td>K: chapter 12 (213-244)</td>
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<td>L/S: plain, basket, rep</td>
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<td>11/4 &amp; 11/6</td>
<td>Wovens: pile, double, slack-tension</td>
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<td>K: chapter 13 (254-260)</td>
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<td>L/S: pile, double, slack, tri-ax</td>
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<td>11/12 &amp; 11/13</td>
<td>EXAM II</td>
<td>Intro to Knits</td>
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<td>L/S: pile, double, slack, tri-ax</td>
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<td>Warp Knits</td>
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<td>K: (283-292)</td>
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<td>L/S: warp knits</td>
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<td>K: chapter 16 &amp; 17 (327-342, chap. 19)</td>
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<td>L/S: Finishes</td>
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<tr>
<td>12/2 &amp; 12/4</td>
<td>Finishes continue</td>
<td>Carpets as a Case Example</td>
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<td>L/S: Section on carpets and carpet padding</td>
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<td>K: review tufting and warp pile pages</td>
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<td>12/9 &amp; 12/11</td>
<td>Standards, Regulations &amp; Testing</td>
<td>Evaluating textile products: the textile</td>
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<td>K: Review chapters, (20, 21, 22)</td>
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**FINAL EXAM: Saturday, December 14, 4-6PM**