# **TEXTILES – AD169**

Instructor: Annin Barrett	e-mail:	
	Term:	
Voice mail:	Total class hours: 18	
Office hours:	Class meets:	

**Course description:** An introduction to textiles that provides a broad view of the types, development, production and use of fabrics and the impact they have on design and construction. The characteristics of different fibers, yarns, fabrics, and finishes are investigated.

**Course objectives:** Following this class, the student will be able to demonstrate textile terminology correctly. The purpose of this course is to advance students' knowledge of fibers, fabrics, their construction and end use possibilities. Competencies being assessed:

• Apply appropriate apparel terminology in business situations.

• Evaluate performance of textile fibers, fabrics and findings for given applications.

Class format: Class time is divided between lecture/demo and supervised lab time.

### Recommended text:

*The Fashion Designer's Textile Directory: A Guide to Fabrics' Properties, Characteristics, and Garment-Design Potential* by Gail Baugh

### Required supplemental materials:

Fabric Swatchbook kit bought at Portland Fashion Institute fabric store.

### **Standards of conduct:** Complete and on-time attendance is mandatory.

- No student can miss three or more classes and expect to pass this class.

- Attendance is at the beginning of each class period. If you are late, you will lose half the attendance points for the day. If you arrive late, it is your responsibility to make sure you have been counted present. If you arrive more than 15 minutes after the beginning of a part of the class period, you will be counted absent for that part of the period.

- If you are absent, you lose the attendance points for that day. If you know ahead of time that you will not be in class, make arrangement with the instructor the night *before* class (by 10 p.m. and by telephone).

- It is the student's responsibility to keep track of assignments and turn them in on time should the students miss the class or arrive late.

Professionalism means: Turn off your cell phone. Attend the full class. Focus and follow-through during classroom work. Have respect and work well with classmates.
 Use the same behavior in the classroom as you would on the job in the apparel industry.
 Late work will result in a one letter grade deduction.

**Labeling Policy**: All student work must be turned in with the following information: Name, Course Name/Number, Instructor, Term/Date, Project/Assignment, Contact Info (phone or e-mail). Work may not be accepted for full credit without the required information. PFI cannot guarantee the return of student work that is not labeled with the required information. **Incomplete**: A student who, due to medical or other exceptional causes, cannot complete the required class work must document his/her situation and submit a written request for an incomplete grade to be entered. The instructor, the academic advisor and director must approve the grade and assign a time line for the work to be completed. Incompletes must be requested and approved no later than the end of the quarter for which the incomplete is requested. To remove an incomplete, a student must complete the required course work before the next quarter commences. If a student does not comply within the time line or does not complete the work, an "F" grade, or the grade calculated by the instructor on the incomplete form, will be entered to replace the incomplete.

To initiate a request for an incomplete grade, the student must fill out an incomplete form and submit it to his/her instructor. The instructor will obtain the required signatures and submit the completed form with final grades.

**Lab Policies**: Leave food and drink outside the classroom. Disciplinary action will be taken toward any student found using the equipment in an inappropriate manner. Disruptive, disrespectful, rude behavior is not tolerated.

**<u>Plagiarism</u>:** Presenting the writings, images or paraphrased ideas of another as one's own, is strictly prohibited. Properly documented excerpts from other's works, when they are limited to an appropriate amount of the total length of a student's paper, are permissible when used to support a researched argument.

<u>Attendance Policy</u>: Students who are absent from all scheduled classes over a 14-day period (2 weeks) are subject to automatic attendance suspension—from PFI, not just from this course. This means the student is administratively withdrawn from all courses and cannot attend classes or continue in the current quarter unless he/she successfully appeals for reinstatement. Students who anticipate violating the attendance policy should contact the academic advisor immediately to discuss options such as withdrawing from PFI or navigating the appeals process.

**<u>Picking up Work:</u>** Please pick up your work no later than the first Friday of the following quarter. If you cannot retrieve your work by this date please make arrangements with me. All work not picked up by this date will be recycled.

**Students with Disabilities:** It is PFI policy not to discriminate against qualified students with a documented disability in its educational programs, activities or services. If you have a disability-related need for adjustments contact the academic advisor.

## Evaluation:

Attendance/Professionalism/Participation	10%
Fiber Identification Lab-Burn Test	10%
Homework questions on textbook readings:	10%
Quiz on Chapters 1-4:	10%
Quiz on Chapters 5-8:	10%
Fabric Swatchbook and in-class notes:	30%
Final Presentation on Suitable End Use:	<u>20%</u>

TOTAL

100%

Grade Scale			
Letter	Number	Rating	
Α	95-100	Excellent	
A-	90-94		
B+	87-89	Good	
В	83-86		
B-	80-82		
C+	77-79	Satisfactory	
C	73-76	Fair	
C-	70-72		
D+	67-69	Marginal	
D	62-66		
F	<62	Failure	

# COURSE CALENDAR. Each class: LECTURE (1.3 hrs) & LAB (1.7 hrs) This syllabus is subject to change at the instructor's discretion.

WEEK/DATE	TOPIC	ACTIVITY	ASSIGNMENTS
1/	Introductions. Goals and Objectives. Fiber Sources, Shapes, and Characteristics. Natural & Manufactured Fibers, Polymer Chains	Bring supplies to every class. LECTURE: •Terminology used to express and communicate the properties of textile fibers •How fiber properties may affect the usage of textile fabrics and finished products •The sources of textile fibers, both natural and manufactured •Classifications of textile fibers: Protein, Cellulose, Regenerated and Synthetic • Correlation of fibers with their properties for end-use requirements •Various trademarks, logos, and names used to market textile fibers	In class: Fiber ID Lab-Burn Test. Fabric Swatchbook focus on fibers. Homework: Review Fabric Swatchbook and notes. Read Chapter 1, answer questions #2, 5, 9 Chapter 2, answer questions #2, 3, 4, 5. Chapter 3, answer questions #1, 5, 6, 10.
2/	Yarns: Spun and Filament. Plys, Twist, Novelty, Bulked, Microfibers. Yarn Measurement Systems, Sewing Threads.	LECTURE: • Impact that type of yarn has on use of fabric • Distinctions between various yarn types, properties, and end-use applications • Systems for determining yarn sizes • Types, uses, and optimum applications of sewing threads	In class: Fabric Swatchbook focus on yarns. Homework: Review Fabric Swatchbook and notes. Read Chapter 4, answer questions # 1, 3, 4, 7. Review Chapters 1- 3.
3/	Woven Fabrics: denim, twill, chambray, boucle, satin, canvas, dobby weaves, pique, tulle, velvet, etc.	Quiz on Chapters 1-4 LECTURE: • How woven fabrics are manufactured • Why woven fabrics look and perform the way they do • Basic weaves, complex weaves. • Terminology used regarding woven fabrics • Identification of various well-known woven fabrics	In class: Fabric Swatchbook focus on fabrics. Homework: Review Fabric Swatchbook and notes. Read Chapter 5, answer questions # 1, 4, 6, 9. Read Chapter 7, answer questions # 1, 3, 6, 8, 12. Begin Final Presentation on Suitable End-Use.

4/	Knits and Non- wovens	<ul> <li>LECTURE:</li> <li>Why knitted fabrics look and perform the way they do</li> <li>Various knit structures and their identifying characteristics</li> <li>How knitted fabrics are produced</li> <li>Important differences between knitted and woven fabrics and end uses for each</li> <li>Terminology used regarding knitted fabrics</li> <li>Non-wovens</li> </ul>	In class: Fabric Swatchbook focus on knits and non- wovens. Homework: Review Fabric Swatchbook and notes. Read Chapter 6, answer questions # 2, 3, 5, 9 Read Chapter 8, answer questions # 1, 4, 5, 8. Work on Final Presentation.
5/	Dyeing and Finishing Techniques	<ul> <li>LECTURE:</li> <li>Dyeing and printing terminology and processes</li> <li>Dye affinity to fiber</li> <li>How can construction and content affect dyeing and printing?</li> <li>What are the finishes and treatments that can be applied to the fabric and what advantages do they offer?</li> <li>Final Presentation Check-In</li> </ul>	In class: Dye workshop. Fabric Swatchbook focus on dyes and fabric finishes. Homework: Review Fabric Swatchbook and notes. Review Chapters 5-8. Work on Final Presentation.
6/	Textile Testing & Standards, Determining Fabric Quality, Appropriate Fabric Selection	<ul> <li>LECTURE:</li> <li>Tests and procedures for evaluating textile quality</li> <li>Role of fabric standards and specifications in domestic and international textile trade</li> <li>How fabric end-use suitability is determined</li> <li>Apparel maintenance</li> <li>How performance expectations of fabrics differ with each end use of that fabric</li> <li>Quiz on Chapters 5-8</li> </ul>	Fabric Swatchbook and In- Class Notes due. Final Presentations on Suitable End Use due.