

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

FASH 6 - Understanding Fibers, Fabric, and Textiles

3 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level IV; English Level III

Transfer Status: CSU/UC

51 hours Lecture

This course introduces students to fibers and their origin, yarns, basic weaves and fabric finishes, with reference to fabric selection for use in fashion and interior design. Emphasis is placed on the selection, use and care of new fibers and fabrics. The course also examines the impacts of textile laws, regulations and trade agreements.

II. OBJECTIVES

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

- A. Select a fiber or fabric for its inherent characteristics to use for an end product or garment.
- B. Analyze a product or garment from conception to manufacturing to a finished product.
- C. Evaluate a fiber or fabric for its aesthetics, durability, safety, care and cost of the finished product or garment.
- D. Identify and describe the impact of textile laws, regulations and trade associations that are relevant to the textile industry.

III. COURSE CONTENT

A. Unit Titles/Suggested Time Schedule

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Introduction/Orientation	2.00
2. Textile Industry	2.00
3. Natural Fibers	5.00
4. Manufactured Fibers	5.00
5. Yarns and Sewing Threads	4.00
6. Woven Fabrics	8.00
7. Knitted and Other Non-Woven Fabrics	4.00
8. Textile Dying	5.00
9. Textile Printing	6.00
10. Textile Finishing	3.00
11. Care and Repair of Textiles	3.00
12. Textile Laws, Regulations and Trade Associations	4.00
Total Hours	51.00

IV. METHODS OF INSTRUCTION

A. Lecture

B. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture

- C. Multimedia Presentations
- D. Demonstrations and Experiments
- E. Class Discussion

V. METHODS OF EVALUATION

- A. Quizzes
- B. Written Assignments
- C. Notebook
- D. Exams
- E. Textile Project

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments

1. Read articles provided by the instructor about upcoming apparel and textile shows. Pay particular attention to current trends in the textile industry. Be prepared for in-class discussion.
2. Read about careers in the textile industry. Identify a particular career potentially of interest to you. Learn about job prospects, desired qualifications, working conditions, salary and opportunities for advancement. Prepare for in-class discussion.

B. Writing Assignments

1. Write a 3 to 5 page paper pertaining to a textile law or regulation, or to a textile-related trade association. Discuss the historical context and the current impact of the law, regulation or trade association.
2. Write a 3 to 5 page research paper about a fiber or fabric used to make garments and/or end products. Describe the history of the fiber, the chemistry and/or production of the fiber, the characteristics of the fiber and the environmental impact of the production process.

C. Out-of-Class Assignments

1. Using your Textile Swatch Kit, pull apart swatches to identify yarns, construction technology, dyeing and printing techniques, applied finishes and thread counts. Determine the appropriate end use for each of the swatches. The final report for this semester-long project will be approximately 50 pages long.
2. Develop an idea for a product utilizing a fiber or fabric that meets the serviceability concept. Decide on the best fiber or fabric for the end product. Determine if it will meet the criteria of aesthetics, durability, comfort, safety, appearance retention, care and cost. Also, consider the environmental impact of manufacturing or production. Make a product prototype. Submit a one page executive summary and journal accounting for the time and cost involved in creating your prototype.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. Cohen, A.C., Johnson, I., Pizzuto, J.J. Fabric Science. 10th Edition. Fairchild, 2011.
- B. Cohen, A.C., Johnson, I., Pizzuto, J.J. Fabric Science Swatch Kit. 10th Edition. Fairchild, 2011.
- C. Kadohph, Sarah J. Textiles Basics. 1st Edition. Prentice Hall, 2013.

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