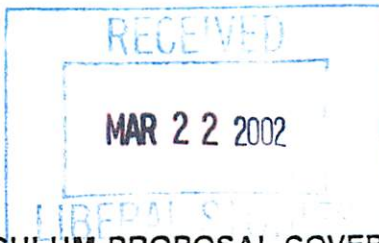


LSC Use Only  
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02-19  
UWUCC USE Only  
Number: 01-70  
Submission Date: \_\_\_\_\_  
Action-Date: App UWUCC

**CURRICULUM PROPOSAL COVER SHEET**  
University-Wide Undergraduate Curriculum Committee

2/4/03  
App senate -  
2/25/03

**I. CONTACT**

Contact Person Sandra J. Lynn Phone 7-2336

Department Human Development & Environmental Studies

**II. PROPOSAL TYPE (Check All Appropriate Lines)**

**COURSE** Textiles  
Suggested 20 character title

**New Course \*** \_\_\_\_\_  
Course Number and Full Title

**Course Revision** FSMR 314 Textiles  
Course Number and Full Title

**Liberal Studies Approval +** \_\_\_\_\_  
for new or existing course Course Number and Full Title

**Course Deletion** \_\_\_\_\_  
Course Number and Full Title

**Number and/or Title Change** \_\_\_\_\_  
Old Number and/or Full Old Title

\_\_\_\_\_   
New Number and/or Full New Title

**Course or Catalog Description Change** FSMR 314 Textiles  
Course Number and Full Title

**PROGRAM:** \_\_\_\_\_ Major \_\_\_\_\_ Minor \_\_\_\_\_ Track

**New Program \*** \_\_\_\_\_  
Program Name

**Program Revision \*** \_\_\_\_\_  
Program Name

**Program Deletion \*** \_\_\_\_\_  
Program Name

**Title Change** \_\_\_\_\_  
Old Program Name

\_\_\_\_\_   
New Program Name

**III. Approvals (signatures and date)**

Mary C. Seiber  
Department Curriculum Committee

Linda S. Nelson 3-18-02  
Department Chair

Mary C. Seiber 3/19/02  
College Curriculum Committee

Carleen C. Zoni 3-19-02  
College Dean

+ Director of Liberal Studies (where applicable)

\* Provost (where applicable)



Rev.



## New Syllabus of Record

### I. CATALOG DESCRIPTION

FSMR 314 - TEXTILES

3 class hours  
0 lab hours  
3 semester hours  
(3c-01-3sh)

Prerequisites: CHEM 101 and CHEM 102 or SCI 105 and SCI 106

Interpretation of basic textile knowledge with emphasis on fiber, yarn, fabric structure, coloration, and fabric finishes. Discussions include importance of factors related to consumer information, protection, and satisfaction.

### II. COURSE OBJECTIVES

Upon completion of this course, students will

Demonstrate an understanding of the complexity of the textile industry.

Define the inherent physical and chemical properties of fibers and identify the fibers associated with these properties.

Define yarn structures and identify the processes involved in yarn end uses.

Define fabrication, including the manufacturing equipment, and identify the fabrics produced.

Identify methods of coloration and finishing.

Identify and evaluate the interrelationships among fibers, yarn structure, fabric structure, coloration, and finishing; and their importance in the selection, use, and care of textiles.

Demonstrate an understanding of labeling practices and legislation related to textile products and access their importance to consumers, retailers, designers, and manufacturers.

### III. COURSE OUTLINE

#### A. The Textile Industry

1 lecture hour

1. An International Industry
2. Major Production Segments
3. Use of Electronics for Textiles
4. Sources of Fabrics
5. Buying and Selling of Fabric
6. Careers

- B. Fiber Characteristics** **5 lecture hours**
1. Fiber Sources
  2. Fiber Structure
  3. Fiber Performance Properties
  4. Identification of Textiles Fibers
- C. Natural and Manufactured Fibers** **6 lecture hours**
1. Natural Fibers
    - Natural Cellulosics
    - Natural Proteins
    - Natural Minerals
    - Natural Rubber
  2. Manufactured Fibers
    - Man-Made Fibers
      - Man-Made Cellulosics
      - Man-Made Modified Cellulosics
      - Man-Made Proteins
      - Man-Made Minerals
    - Synthetics
      - Polyamides
      - Polyester
      - Acrylic and Modacrylic
      - Olefin
      - Elastomers
      - Others
- D. Yarns and Threads** **5 lecture hours**
1. Spun and Filament Yarns
  2. Yarn Twist
  3. Special Types of Yarns
  4. Blends and Mixtures
  5. Sewing Threads
- E. Woven Fabrics** **5 lecture hours**
1. Looms
  2. Fabric Features
  3. Weave Layouts
  4. Biaxial Weaving
    - Plain
    - Twill

Satin  
Combinations and Special Effects

5. Triaxial Weaving
- F. Knitted Fabrics 4 lecture hours
1. The Knitting Industry
  2. Weft Knits
  3. Warp Knits
- G. Other Fabrication Methods 4 lecture hours
1. Felt
  2. Stitch-knit
  3. Net
  4. Lace
  5. Embroidery
  6. Tufted
  7. Multicomponents
  8. Nonwovens
  9. Others
- H. Dyeing 3 lecture hours
1. Dyes and Pigments
  2. Dyeing Procedures
  3. Special Effects
  4. Colorfastness
- I. Printing 3 lecture hours
1. Methods
  2. Features of Printed Fabrics
  3. Basic Types of Prints
  4. Special Types of Prints
- J. Finishing 3 lecture hours
1. Pretreatment
  2. Routine Finishes
  3. Functional Finishes
- K. Textiles Laws and Regulations 1 lecture hour
1. Textile Fiber Products Identification Act
  2. Wool Products Labeling Act
  3. Flammable Fabrics Act
  4. Care Labeling
  5. Others

NOTE: Two one hour exams and a two hour comprehensive final exam will be given

IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

30% Exam 1

Consisting of multiple choice and/or true-false questions on The Industry, Fiber Characteristics, Natural and Manufactured Fibers, and Yarns and Threads

25% Exam 2

Consisting of multiple choice and/or true-false questions on Fabrication

45% Comprehensive Final Exam

Consisting of multiple choice and/or true-false questions on Coloration, Finishing, and Legislation (50%) and material covered in Exams 1 and 2 (50%).

V. CLASS ATTENDANCE A class attendance policy may vary with the instructor. Following is a sample policy. Class Attendance will not be factored in the course grade. However, students are reminded that studies show a direct link between class attendance and class performance. Students who show an active interest in the learning process consider class attendance an essential part of the college experience.

VI. GRADING SCALE The grading scale may vary with the instructor. Following is a sample scale.

Grading Scale (%)

A 88-100

B 76-87

C 64-75

D 52-63

F 0-51

VII. REQUIRED TEXTBOOK

Price, A. & Cohen, A. C. (1998). J. J. Pizzuto's Fabric Science. New York: Fairchild Publications.

VIII. OPTIONAL TEXTBOOK

Price, A. & Cohen, A. C. (1998). J. J. Pizzuto's Fabric Science Swatch Kit. New York: Fairchild Publications.

IX. SPECIAL RESOURCE REQUIREMENTS

None

X. BIBLIOGRAPHY

Davison's Knit goods trade. (Annual). New York: Davison Publishing Company.

Davison's Textile blue book. (Annual). New York: Davison Publishing Company.

Demir, A. & Hessian, M. B. (1997). Synthetic filament yarn: Texturing technology. Upper Saddle River, NJ: Prentice Hall.

Humphries, M. (1996). Fabric glossary. Upper Saddle River, NJ: Prentice Hall.

Humphries, M. (1996). Fabric reference. Upper Saddle River, NJ: Prentice Hall.

Kadolf, S. & Langford, A. (1998). Textiles. New York: MacMillan Publishing Company.

Tortora, P. (1996). Fairchild's dictionary of textiles. New York: Fairchild Publications.

Tortora, P. (1997). Understanding Textiles. New York: MacMillan Publishing Company.

Yeager, J. & Teter-Justice, L. (2000). Textiles for commercial and residential interiors. New York: Fairchild Publications.

#### Historical Sources

Basics of dyeing and finishing. (1991). Research Triangle Park, North Carolina: American Association of Textile Chemists and Colorists.

Hudson, P., Clapp, A. C. & Kness, D. (1993). Introductory textile science. New York: Reinhart & Weston, Inc.

Lavner, J. (1992). Woven fabric and yarn analysis. New York: Fashion Institute of Technology.

Spencer, D. J. (1989). Knitting Technology. New York: Pergamon Press.

#### Summary of Proposed Revisions

1. Course Format Change

Old: (2c-2l-3sh) 3 credit lecture laboratory course  
New: (3c-0l-3sh) 3 credit lecture course

2. Pre-requisite Change

Old: CH 102  
New: CHEM 101 and CHEM 102 or SCI 105 and SCI 106

#### Justification/Rationale for Revision

1. Course Format Change

Originally the chemical testing laboratory component was done using the Weyandt chemistry laboratory facilities. Ackerman does not have the physical facilities for chemical testing.

A lecture-type course would better utilize both student and instructor resources.

2. Pre-requisite Change

FSMR 314 is a required course for Interior Design, whose science requirement is SCI 105 and SCI 106. The pre-requisite change will simplify the registration procedure.

3. Description, Objectives, and Outline Change

The description, objectives, and outline are being changed to be in the accepted format and to better reflect the course content and format.

## Old Syllabus of Record

FM 314 – Textiles  
Prerequisite – CH 102 or permission

2 class hours  
2 lab hours  
3 semester hours  
(2c-2l-3sh)

### Course Description

Analyses of textile components of fiber, yarn, fabrication, finishes, and color with emphasis upon consumer acquisition, use, and satisfaction.

### Course Objectives

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

Recognize and appreciate textile fabrics.

Understand a sound scientific theory concerning fibers, including their production, processing and treatment, to establish a solid background for a clear understanding of textiles – their selection, use, and care.

Develop guides for the use of scientific data in the selection, use, and care of textiles.

Understand the interrelationships among fibers, yarn structure, fabric structure, finishing, and coloring; and the importance of these interrelationships in the selection, use, and care of textiles.

Describe the complexity of the textile industry and existing legal controls and policies.

### Evaluation

Exam 1	20%
Exam 2	20%
Comprehensive Final	30%
Activity Score*	30%

- The Activity Score includes in-class work, chapter study questions, study puzzles, pop quizzes, outside assignments, laboratory work and activities, etc. In-class work may not be made up if a student misses that session. All out of class projects are due at the beginning of the session on the due date (announced in class).

### Required Text

Fabric Science (7<sup>th</sup> Ed.) and Fabric Swatch Kit (7<sup>th</sup> “Gray” Ed.) by Joseph Pizzuto

### Course Attendance Policy

Students are expected to attend class (lecture and lab). If you miss a class, you are responsible for getting notes and any handouts from a classmate. Three unexcused absences are permitted. Each unexcused absence in excess of three will result in a 5% reduction in the Activity Score.

### Grading Scale

A	88-100
B	76-87
C	64-75
D	52-63
F	0-51