Course Syllabus

1. Course Name: Textile Finishing Process

Course Code: FFTE325551

2. Credit Units: 2 (2/0/4) (2 units of theory, 0 unit of experiment, 4 units of self-study) Duration: 10 weeks (3 hours of theory + 0 hours of practice, 6 hours of self-study per week)

3. Course Instructors

- 1/ Dr. Nguyen Phuoc Son
- 2/ Dr. Nguyen Tuan Anh
- 3/ M.Sc. Ta Vu Thuc Oanh
- 4/ M.Sc. Nguyen Thi Luyen

4. Course Requirements

Prerequisite courses: None

Previous courses: None

5. Course Descriptions

This course provides the fundamental knowledges such as definition, principle, properties, effect factors and applications of functional finishes for fabrics including singeing, raising, calendering, washing (with heat, pressure, enzyme and stone), antibacterial finising, water repellence, fire retardance, pilling resistance, ultra-violet resistnce, smell inducing, etc. Accordingly, student can apply the knowledge to identify, analyze, evaluate and solve the problem of quality management for textile products.

6. Course Goals

Goals	Goal descriptions	ELOs	Scale
G1	Knowledge of structure and properties of common greig fabrics in		2
	garment manufacturing processes		
G2	Ability to identify, analyse, evaluate and control the quality of	ELO-04	3
	usual fabrics	ELO-05	2
	Ability to choose and propose the appropriate finishing processes to	ELO-07	2
	the specific fabrics		
G3	Communication and teamwork skills, information searching and	ELO-09	4
	synthetizing.	ELO-10	3

7. Course Learning Outcomes (CLOs)

CLOs		CLO Descriptions	ELOs	Scale
G1	G1 CLO1 Classify specific fabrics and fabric finishing technologies		ELO-02	2
	CLO2	Interpret problems of dyeing, printing and finishing fabrics	ELO-04	3
G2	CLO3	Identify applications of textile treatments	ELO-05	2
	CLO4	Select personal skills to work efficiently	ELO-07	2
C 2	CLO5	Connect teamwork activities in disciplinary groups	ELO-09	4
G3	CLO6	Establish communications such as text, emails, graphics	ELO-10	3

8. Learning Ethics:

Students must do homework by themselves. If plagiarism is found students will get zero point.

9. Course Contents:

Week	Contents	CLOs	Scale
	Chapter 1: Overview		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
1	Content	CLO2	3
1	1.1. Concepts		
	1.2. Significances		
	1.3. Classification		

	Pedagogical methods		
	Presentation, movies, Q&A		
	B/ Self-study contents: (6)	CLO2	3
		CLO2	5
	(1) Find out the fabric finishing processes on internet in Vietnam		
	(2) Find out the job positions related to the fabric finishing		
	processes		
	Chapter 2: Mechanical Finishes	CL01	2
	A/ Content and pedagogical methods in class: (3)		$\begin{vmatrix} 2\\ 3 \end{vmatrix}$
	Content	CLO2	3
	2.1. Introduction		
2	2.2. Sanforizing finishes		
	2.3. Abrasing finishes		
	Pedagogical methods		
	Presentation, movies, Q&A	CX 0.0	
	B/Self-study contents: (6)	CLO2	3
	Find out the methods to determine the shrinkages of fabrics		
	Chapter 2: Mechanical Finishes (continued)		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
	2.4. Raising finishes		
•	2.5. Hair shearing finishes		
3	2.6. Washing finishes		
	Pedagogical methods		
	Presentation, movies, Q&A		
	B/ Self-study contents: (6)	CLO2	3
	Find out the treatment solution for washing fabrics		
	Chapter 2: Mechanical Finishes (continued)		
	A/ Content and pedagogical methods in class: (3)		-
		CLO1	
	Content	CLO1 CLO2	
	Content		
4	<i>Content</i> 2.7. Calendering finishes		
4	<i>Content</i> 2.7. Calendering finishes 2.8. Open-width treatment		
4	<i>Content</i> 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes		
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A	CLO2	3
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6)		3
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality	CLO2	3
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes	CLO2 CLO2	3
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes A/ Content and pedagogical methods in class: (3)	CLO2 CLO2 CLO1	3
4	Content2.7. Calendering finishes2.8. Open-width treatment2.9. Heat setting processesPedagogical methodsPresentation, movies, Q&AB/ Self-study contents: (6)Analyze the effect factor of finishing processes on the fabric qualityChapter 3: Chemical FinishesA/ Content and pedagogical methods in class: (3)Content	CLO2 CLO2 CLO1 CLO2	3 3 2 3
4	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes A/ Content and pedagogical methods in class: (3) Content 3.1. Concepts	CLO2 CLO2 CLO1	3 3 2 3
5	Content2.7. Calendering finishes2.8. Open-width treatment2.9. Heat setting processesPedagogical methodsPresentation, movies, Q&AB/ Self-study contents: (6)Analyze the effect factor of finishing processes on the fabric qualityChapter 3: Chemical FinishesA/ Content and pedagogical methods in class: (3)Content3.1. Concepts3.2. Softening treatment	CLO2 CLO2 CLO1 CLO2	3 3 2 3
	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes A/ Content and pedagogical methods in class: (3) Content 3.1. Concepts 3.2. Softening treatment 3.3. Crease resistant treatment	CLO2 CLO2 CLO1 CLO2	3 3 3 2 3
	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes A/ Content and pedagogical methods in class: (3) Content 3.1. Concepts 3.2. Softening treatment 3.3. Crease resistant treatment Pedagogical methods	CLO2 CLO2 CLO1 CLO2	3 3 2 3
	Content2.7. Calendering finishes2.8. Open-width treatment2.9. Heat setting processesPedagogical methodsPresentation, movies, Q&AB/ Self-study contents: (6)Analyze the effect factor of finishing processes on the fabric qualityChapter 3: Chemical FinishesA/ Content and pedagogical methods in class: (3)Content3.1. Concepts3.2. Softening treatment3.3. Crease resistant treatmentPedagogical methodsPresentation, movies, Q&A	CLO2 CLO2 CLO1 CLO2 CLO5	2 3 3 2 3 4
	Content 2.7. Calendering finishes 2.8. Open-width treatment 2.9. Heat setting processes Pedagogical methods Presentation, movies, Q&A B/ Self-study contents: (6) Analyze the effect factor of finishing processes on the fabric quality Chapter 3: Chemical Finishes A/ Content and pedagogical methods in class: (3) Content 3.1. Concepts 3.2. Softening treatment 3.3. Crease resistant treatment Pedagogical methods	CLO2 CLO2 CLO1 CLO2	3 3 2 3

	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
	3.4. Water repelling finishes	CLO5	4
	3.5. Antimicrobial finishes		
	3.6. Fire retardant finishes		
	3.7. Static resistant finishes		
	3.8. Pilling resistant finishes		
	3.9. UV resistant finishes		
	Pedagogical methods		
	Presentation, movies, Q&A		
	B/Self-study contents: (6)	CLO2	2
	Show the principles of water repellence and fire resistance		
	Chapter 3: Chemical Finishes (continued)		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
	3.11. Smelling treatment	CLO5	4
	3.12. Rotting resistant treatment	CLOJ	-
	•		
7	3.13. Fully handling treatment		
	Pedagogical methods		
	Presentation, movies, Q&A		
	B/ Self-study contents: (6)	CLO2	2
		CLO2	2
	Explain the reason why the cotton fabric should be remove the bad		
	smelling.		
	Chapter 4: Design of processing for specific fabric treatment		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
0	4.1. Functional finishes of cotton fabrics	CLO5	4
8	Pedagogical methods		
	Presentation, movies, Q&A		
	B/ Self-study contents: (6)	CLO2	2
		CLO2	2
	Find the information of finishes for wool fabrics		
	Chapter 4: Design of processing for specific fabric treatment		
	(continued)		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
0	4.2. Functional finishes of wool fabrics		
9	4.3. Functional finishes of silk fabrics		
	Pedagogical methods		
	Presentation, movies, Q&A		
		CLO2	2
	B/ Self-study contents: (6)	CLO2	2
	Find the information of finishes for wool fabrics		
	Chapter 4: Design of processing for specific fabric treatment		
	(continued)		
	A/ Content and pedagogical methods in class: (3)	CLO1	2
	Content	CLO2	3
	4.4. Functional finishes of synthetic fabrics		_
10	4.5. Functional finishes of blended fabrics		
	Pedagogical methods		
	Presentation, movies, Q&A	~~~~	-
	B/Self-study contents: (6)	CLO2	2
	Find the information of finishes for synthetic fabrics		1

^{10.} Student Assessment:

- Grading scale: 10

- Assessment plan:

Туре	Content	Timeline	CLOs	Scale	Assessment method	Assessment tool	Rate (%)
Formative Assessment							
	(1) Find out the fabric	Week 2	CLO1	2	Essay	Rubric	10
	finishing processes on		CLO2	3			
Problem	internet in Vietnam		CLO6	3			
1	(2) Find out the job						
	positions related to the						
	fabric finishing processes						
Problem	Quizzes in class for chapter	Week 5	CLO1	2	Quizzes	Rubric	20
2	2 (30 minutes)		CLO2	3	-		
	Translate English materials	Week 9	CLO1	2	Essay	Rubric	20
Problem	of textile finishes into		CLO4	2	-		
	Vietnamese and receive the		CLO5	4			
3	feedbacks form lecturers and		CLO6	3			
	classmates						
	Summ	native Ass	essment				50
	Based on the learnt	Week	CLO1	2	Video	Rubric	25
	knowledge, the group (3	2-9	CLO2	3			
VD 1	students) is required to make		CLO3	2			
	the videoclip to guide the						
	process of fabric finish						
PPT 1	Report a specific topic of	Week 10	CLO1	2	Presentation	Rubric	25
rri i	textile treatment (PPT)		CLO2	3			

CLOs					
CLOS	Problem #1	Problem #2	Problem # 3	VD # 4	PPT #1
CLO1	Х	Х	Х	Х	Х
CLO2	Х	Х		Х	Х
CLO3				х	
CLO4			Х		
CLO5			Х		
CLO6	Х		Х		

11. Learning Resourses

- Textbooks:

1. Nguyen Tuan Anh - Textile Materials - National Publisher in HCMC - 2012.

2. Nguyen Tuan Anh - Fabric Finishing Processes - National Publisher in HCMC - 2012.

- References:

1. Nguyen Van Lan, Textile Materials, HCMUT, 1999

2. Nguyễn Trung Thu, Textile Materials, HUST, 1999

3. Tran Thuy Binh, Le Thi Hoa Mai - Textbook of Textile Materials - Education Publisher - 2005

4. Nguyen Cong Toan - Dyeing and Finishing Technology, National Publisher in HCMC, 20055. Kathryn L. Hatch - Textile Science - USA, 1993

12. Date of first approval: June 15, 2018

13. Approved by:

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14. Date and u	p-to-date content		
1 st time: Date			Instructor
			Head of Department