PROGRAMME: GARMENT TECHNOLOGY LEVEL: UNDERGRADUATE

Course Syllabus

1. Course Title: Garment Washing Technology Course Code: WATE324551

2. Credit Units: 2 (2/0/4) (2 units of theory, 0 unit of practice, 4 units of self-study) Duration: 15 weeks (15 hours of theory + 0 hours of practice, 60 hours of self-study per week)

3. Course Instructors

1/ M.BA. Pham Thi Ha

4. Course Requirements

Prerequisite courses: Textiles Materials.

5. Course Descriptions

The course equips students with knowledge about Wash Jeans Technology, denim fabric production and finishing process, indigo dyeing technology From then on, students will know the wash effects on the product, types of chemicals, tools and equipment used to create wash effects on Jean's products.

6. Course Goals

Goals	Goal descriptions	ELOs	Scale
G1	Applying natural science knowledge to analyze the chemicals used in	ELO-02	4
GI	dyeing Denim fabric and in wash Jeans technology.		
G2	Analyzing the influence of mechanical and physical factors and chemistry	ELO-04	3
	on the surface of Jeans products to create fashion effects.	ELO-06	3
G3	Read and understand the relevant documents in the field of Wash Jeans in	FI O-11	3
GS	English.	LLO-11	3

7. Course Learning Outcomes (CLOs)

CLOs		CLO Descriptions		Scale	
G1	CLO1	Distinguish chemicals used in dyeing cotton fibers and jean products washing technology.		4	
G2	CLO2	Explain wash technology of jeans, quantify the concentration of chemicals, the duration of mechanical and physical agents to produce the desired fashion effect on Jean products.			
	CLO3	Determine and propose solutions to handle situations arising in the wash Jeans process.			
G3	CLO4	Manipulate relevant documents in Jean Wash through English. ELO-11		3	

8. Learning Ethics:

Students must do homework by themselves. If plagiarism is found students will get zero point. Need a full quote of reference sources.

9. Course Content:

Week	Contents	CLOs	CPT
	CHAPTER 1: DENIM & JEANS - HISTORY OF ESTABLISHMENT		
	AND DEVELOPMENT		
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
	Denim - History and development	CLO3	
1	1.1.Denim - The origin of the name	CLO4	
1	1.2 History and development		
	2. Jeans - History and development		
	2.1.Jean - The origin of the name		
	2.2. History of Jeans		
	2.2.1 Jeans		
	2.2.2. Levi Strauss - "father" of Jeans pants		

	2.2.3 The first Jeans brand in the world		
	B/Self-study contents: (4) Problem 1: Photo collection of fashion models about Jeans pants so far	CLO1 CLO2	3
	2 Toolean 20 Thoto concernor of tasmon models acoust come panels so tar	CLO3 CLO4	
	CHAPTER 1: DENIM & JEANS - HISTORY OF ESTABLISHMENT AND DEVELOPMENT (continued)	0201	
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	<i>Content</i>3. The development of Jeans fashion in the world	CLO2 CLO3	
2	3.1. Jeans Fashion in the early 19th century.3.2. Jeans for every gender, every class.	CLO4	
	3.3. Current trend of Jeans fashion.	CLO1	3
	B/ Self-study contents: (4)	CLO2	
	+ Learn the composition of fibers used to produce Denim fabric	CLO3	
	CHARTER A JEANG FARRIC RECEIVED REACTES	CLO4	
	CHAPTER 2: JEANS FABRIC PRODUCTION PROCESS A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content and pedagogical methods in class: (2)	CLO1	3
	1. Cotton:	CLO3	
	1.1. Cotton fibre	CLO4	
	1.2. How is Cotton selected for Jeans?		
3	2. Jeans weave:		
	2.1. Twill fiber		
	2.2. Textile type	CT O1	
	B/ Self-study contents: (4)	CLO1 CLO2	3
	Overview about cotton fibre	CLO2	
	Overview about cotton noice	CLO ₃	
	CHAPTER 2: JEANS FABRIC PRODUCTION PROCESS (continued)	0_0	
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
	3. Dyeing of jeans fabric	CLO3	
	3.1.Indigo	CLO4	
4	3.2.Indigo synthesis		
•	3.3. Non-indigo		
	3.4. Basic color of denim fabric	OF C.1	
	D/C IC . I	CLO1	3
	B/ Self-study contents: (4) Molying gammala indica due (using white cotton febrie)	CLO2	
	+ Making samples indigo dye (using white cotton fabric)	CLO3 CLO4	
	CHAPTER 2: JEANS FABRIC PRODUCTION PROCESS (continued)	CLOT	
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
	4. Jean finishing	CLO3	
5	5. Standard of Denim fabric	CLO4	
		CLO1	3
	B/ Self-study contents: (4)	CLO2	
	Learn the basic Denim fabric colors.	CLO3	
6	CHAPTED 1. IEANS EARDIC DEODICTION DEOCESS (acution of)	CLO4	
6	CHAPTER 2: JEANS FABRIC PRODUCTION PROCESS (continued)		

		CLO1	3
	A/ Content and pedagogical methods in class: (2)	CLO2	J
	Content	CLO3	
	Presentation Problem 1 (group)	CLO4	
		CLO1	3
	B/ Self-study contents: (4)	CLO2	
	Problem 2: Learn the wash effects often are found on Jeans.	CLO3	
		CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS		
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
	6. Dry processes	CLO3	
	6.1. Sand blasting	CLO4	
7	6.2. Brushing		
7	6.3.Grinding		
	6.4. Whiskers, tagging, 3D crush effects		
	6.5.Resin application	CT O1	3
	D/Colf study soutouts. (1)	CLO1	3
	B/ Self-study contents: (4)	CLO2	
	Identify dry wash effects on the Jeans which you collect.	CLO3 CLO4	
	Charles 2. WASHING TECHNOLOGY ON TEANS (and in al)	CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)	CI O1	3
	A/ Content and pedagogical methods in class: (2) Content	CLO1 CLO2	3
	Problem 3 (Group exercises): Identification and process analysis to	CLO2	
8	create dry wash effects.	CLO3	
8	create dry wash effects.	CLO ₄	3
	B/ Self-study contents: (4)	CLO1	3
	Identify dry wash effects on the Jeans which you collect.	CLO3	
	ruching dry wash creeks on the scans which you concer.	CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)	CLOT	
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	3
	Wet processes	CLO3	
	1. Garment wash, rinse wash	CLO4	
	2. Washing with chemical:	CLO.	
	2.1. Enzym wash (Bio wash)		
9	2.2. Bleaching		
	2.3. Acid wash		
	2.4. Tintin		
	2.5. Over dye		
		CLO1	3
	B/ Self-study contents: (4)	CLO2	
	+ Identify wet wash effects on the Jeans which you collect.	CLO3	
		CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)		
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
10	3. Washing with mechanical impact:	CLO3	
	3.1. Stone wash	CLO4	
	3.2. Bio stone wash		
	3.3. Sand wash		
	4. Soften		

		CLO1	3
	D/ Salf study contents (1)	CLO1	3
	B/ Self-study contents: (4) Identify wet wash effects on the Jeans which you collect.	CLO2	
	dentity wet wash effects on the Jeans which you conect.	CLO3	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)	CLU4	
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content and pedagogical methods in class. (2)	CLO2	3
	Problem 3 (class test/Group exercises): Identification and process	CLO3	
11	analysis to create wet wash effects.	CLO4	
	which the transfer of the tran	CLO1	3
	B/ Self-study contents: (4)	CLO2	_
	Identify process of wash effects on the Jeans which you collect.	CLO3	
	Francisco Company (1997)	CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)		
	A/ Content and pedagogical methods in class: (2)	CLO1	4
	Content	CLO2	
	3. New effect on jeans	CLO3	
	3.1. Ozone fading	CLO4	
12	3.2. Laser fading		
	4. Dyeing of ready-made jeans		
		CLO1	
	B/ Self-study contents: (4)	CLO2	
	Identify process of wash effects on the Jeans which you collect.	CLO3	
		CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)		
	A/ Content and pedagogical methods in class: (2)	CLO1	4
	Content	CLO2	
13	Problem 4 (Mid-term test): Analysis of wash process on available	CLO3	
	Jeans.	CLO4	
	B/ Self-study contents: (4)	CLO1	4
	Identify process of wash effects on the Jeans which you collect.		
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)		
		CLO1	3
	A/Content and pedagogical methods in class: (2)	CLO2	
	Content Description Description 2	CLO3	
14	Presentation Problem 2	CLO4	
		CLO1	
	B/ Self-study contents: (4)	CLO2	
	+ Review the end of the subject	CLO3	
		CLO4	
	Chapter 3: WASHING TECHNOLOGY ON JEANS (continued)		
	A/ Content and pedagogical methods in class: (2)	CLO1	3
	Content	CLO2	
	+ Review the end of the subject	CLO3	
15	+ Answering questions of students	CLO4	
		CLO1	3
	B/ Self-study contents: (4)	CLO2	
	+ Review the end of the subject	CLO3	
		CLO4	

10. **Student Assessment:**

Grading scale: 10 Assessment plan:

Туре	Content	Timeline	CLOs	Scale	Assessment method	Assessment tool	Rate (%)
	Form	ative Asses	sment				50
Problem 1	Photo collection of fashion models about Jeans pants	Week 1	CLO1 CLO2 CLO3 CLO4	3	Group presentation	Rubrics	10
Problem 2	Learn the wash effects on Jeans.	Week 14	CLO1 CLO2 CLO3 CLO4	3	Group presentation	Rubrics	20
Problem 3	Identification and process analysis to create dry wash effects. Identification and process analysis to create wet wash effects.	Week 8/11	CLO1 CLO2 CLO3 CLO4	4	Writting/ individual	Rubrics	30
Problem 4	Analysis of wash process on available Jeans.	Week 13	CLO1 CLO2 CLO3 CLO4	4	Writting/ individual	Rubrics	40
Final examination							
	Essay writing, personal		CLO1 CLO2 CLO3 CLO4	4		Rubrics	

CLOs			Assessmo	ent Types	
CLOS	Ex#1	Ex#2	Ex#3	Ex#4	Final exam
CLO1	X	X	X	X	X
CLO2	X	X	X	X	X
CLO3	X	X	X	X	X
CLO4	X	X	X	X	X

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11.	Learning	Resourses
	Lamme	IXCOULL SCS

13. Approved by:

Dean Head of Department Instructor

M.Ed. Vu Minh Hanh Dr. Nguyen Ngoc Chau

14. Date and up-to-date content

1st time: Date

Instructor

Head of Department

M.BA. Pham Thi Ha

^{12.} Date of first approval: June 15, 2018