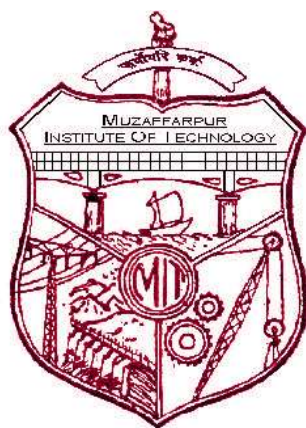


MIT MUZAFFARPUR



COURSE FILE OF

Practices of Leather Manufacturing – LT 071508



Faculty Name:

MANIKANT KUMAR

**ASSISTANT PROFESSOR, DEPARTMENT OF LEATHER
TECHNOLOGY**



विज्ञान एवं प्रावैधिकी विभाग
Department of Science and Technology
Government of Bihar

Content

S.No.

Topic

Page No.

1	Vision of department	
2	Mission of department	
3	PEO's	
4	PO's	
5	Course objectives and course outcomes(Co)	
6	Mapping of CO's with PO's	
7	Time table	
8	Student list	
9	Lecture plans	
10	Assignments	
11	Seasonal question paper	
12	University question paper	
13	Question bank	
14	Result	
15	Result analysis	

VISION STATEMENT

- To emerge as a national leader in graduate level studies in all sub areas of leather field and to make significant contribution to the development of the society, industry, nation and the world.

MISSION STATEMENT

- Educate leather technology students to produce quality engineers who serve leading firms and different sectors of the industry and can work in multi-disciplinary environment to anticipate and address evolving challenges of the 21st century in tanning and footwear industry.
- Impart high performance knowledge in leather and footwear sector that are economic and environment friendly.
- To establish national leadership and provide technological support to the Indian leather industry.
- Improve fundamental knowledge of inter relationship between the built environment and natural systems.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):

After successful completion of program, graduates will be able to

PEO1: Work in the leather, chemical and footwear industries.

PEO2: Pursue higher studies.

PEO3: Contribute in teaching, research and other developmental activities of Leather technology and its allied fields.

PEO4: Work in the multicultural and multidisciplinary groups for the sustainable development and growth of leather industry projects and profession.

PROGRAMME OUTCOMES (PO)

Students who complete the B.E. degree in leather technology will be able to:

1. An ability to apply knowledge of mathematics, science, and engineering,

2. The ability to conduct laboratory experiments and to critically analyze and interpret experimental data.
3. The ability to perform design of leather products by means of design experiences integrated throughout the professional component of the curriculum.
4. An ability to function on teams, that must integrate contributions from different areas of leather technology towards the solution of multi-disciplinary projects.
5. An ability to identify, formulate, and solve Leather technology problems.
6. An understanding of professional practice issues in leather technology including professional and ethical responsibility.
7. An ability to write and speak effectively.
8. The broad education necessary to understand the impact of leather technology solutions in a global and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning,
10. An ability to use the techniques, skills, and modern tools necessary for leather technology practices.
11. Possess a thorough understanding of techniques that are appropriate to environment and country.
12. Possess ability to estimate costs, estimate quantities and evaluate materials for leather manufacturing.

COURSE OBJECTIVE AND COURSE OUTCOMES:

Institute / College Name :	MUZAFFARPUR INSTITUTE OF TECHNOLOGY		
Program Name	B. Tech. Leather Technology		
COURSE CODE	071508		
COURSE NAME	Practice of Leather Manufacture -I		
Lecture / Tutorial / Practical (per week):	3 – 0- 0	Course Credits	3
Course Coordinator Name	MANIKANT KUMAR		

Course objective:

The objective of this course is to provide the knowledge of manufacturing process of various heavy and light Leathers such as sole, belting , harness, upper etc. In this course the student will be familiar with the different recipe for different leathers.

Course outcomes (CO):**CO1:** Became familiar with vegetable tanning operation.**CO2:** Learn about the manufacturing process of picking band and sports goods leather..**CO3:** Understand the knowledge about upper leather processing.**CO4:** Understand the pre tanning and post tanning operation.**MAPPING OF COs AND POs**

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	✓	✓			✓							
CO2	✓	✓	✓									
CO3	✓			✓								
CO4	✓	✓			✓							

Correlation level: 1- slight (Low) 2- moderate (Medium) 3-substantial (High)

COURSE SYLLABUS:

Topics	Number of Lectures	Weightage (%)
General Practices in vegetable and chrome tanning with quality control in manufacture of Industrial and heavy leathers.	6	19
Traditional and Rapid methods of vegetable tannage of sole (Pit and Drum tanning). Chrome tanned sole and waxed chromed soles. Improvement of water resistance of vegetable tanned sole leathers.	6	19

Bag tanning of cattle and buffalo hides, different types of finished leather from bag tanned leathers, Belting harness, Saddlery and honing leathers.	5	15
Picking band leathers, Apron leathers, Hydraulic pneumatic leathers such as water and air pump leathers for turbines, Oil seals, Gas meters etc.	6	19
Sports goods leathers like Foot ball, Hokey ball, Volley ball, Cricket ball, Glove for wicket keepers and Boxing.	3	9
Manufacture of Kattai, Banwar and case hides from Buff cattles.	6	19

MUZAFFARPUR INSTITUTE OF TECHNOLOGY

B.Tech. 5th Semester (2016 Batch)

Practices of Leather Manufacturing – LT 071508

5 th SEMESTER Leather technology				ROOM NO. LB-2				
	9:00 - 10.00	10.00- 11.00	11.00-12.00	12.00-1.00	1.00-2.00	2.00-3.00	3.00-4.00	4.00-5.00
MON			P of Lmfg-1 LB2		R			
TUES					E			
WED		P of Lmfg-1 LB2			C			
THUR					E			
FRI					S			
SAT				P of Lmfg-1 LB2	S			
FACULTY NAME:MK: MANIKANT KUMAR								

STUDENT LIST:

Sl. No.	College Roll No.	AKU Reg. No.	Name
1	16LT08	16107107001	ARCHANA KUMARI
2	16LT20	16107107003	RAVINDRA RAM
3	16LT15	16107107004	SURBHI SAURAV
4	16LT11	16107107005	AMAN SHRIVASTAVA
5	16LT05	16107107007	VIKASH KUMAR
6	16LT19	16107107008	DEEPSHI
7	16LT16	16107107009	RAKESH KUMAR SAH
8	16LT14	16107107010	RAKESH KUMAR
9	16LT17	16107107011	KRITIKA VAGMI

Text Books:

TB1: Introduction to the Principles of Leather Manufacture by -S.S Dutta

TB2: Theory and practice of leather Manufacture By K.T.Sarkar

Reference Books:

RB1:

RB2:

COURSE PLAN

Topic No.	Topic	No. of Lecture/ lecture no.	Text book
1.	General Practices in vegetable and chrome tanning with quality control in manufacture of the following Industrial and heavy leathers.	1-6	TB2
2.	Traditional and Rapid methods of vegetable tannage of sole (Pit and Drum tanning). Chrome tanned sole and waxed chromed soles. Improvement of water resistance of vegetable tanned sole leathers.	7-12	TB2
3.	Bag tanning of cattle and buffalo hides, different types of finished leather from bag tanned leathers, Belting harness, Saddlery and honing leathers.	13-17	TB2
4	Picking band leathers, Apron leathers, Hydraulic pneumatic leathers such as water and air pump leathers for turbines, Oil seals, Gas meters etc.	18-23	TB2

5	Sports goods leathers like Foot ball, Hokey ball, Volley ball, Cricket ball, Glove for wicket keepers and Boxing. Taxidermi.	24-29	TB2
6	Manufacture of Kattai, Banwar and case hides from Buff cattles.	30-32	TB2

DETAILS OF ASSIGNMENTS:

S.No.	Assignment	Topic No.
1	Assignment 1	1,2
2	Assignment 2	2
3	Assignment 3	-
4	Assignment 4	-

Principle of Leather Manufacturing -I

Assignment -1

Q.1 Explain theory of Vegetable tanning.

Q.2 Explain manufacturing process of sole leather.

Principle of Leather Manufacturing -I

Assignment -2

Q. Explain the Rapid method of vegetable tanning.

Q.2 How finishing of sole and belting leather is done?