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LEATHER PROCESSING TECHNOLOGIST



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TRAINER GUIDE

National Vocational Certificate Level 3

Version 1 - September, 2019



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Introduction

Competence-based training helps to bridge the gap between what is taught in training and what tasks will be performed on the job. Training trainees to perform actual job functions helps to ensure that future front-line workers have the skills, knowledge and abilities required to perform their jobs properly, safely and effectively. In addition to competence-based training, assessment based on the performance of actual work competencies helps to ensure that:

- trainees are performing their work tasks as safely as possible
- performance gaps are recognized prior to serious incidents
- training can be implemented to improve competence.

There are significant benefits to competence-based training:

1. Cost effectiveness

Since training activities and assessments in a competence-based approach are goal-oriented, trainers focus on clearly defined areas of skills, knowledge and understanding that their own industry has defined in the competence standards. At the same time, trainees are more motivated to learn when they realize the benefits of improved performance.

2. Efficiency

The transfer gap between the training environment and working on the job is reduced substantially in a competence-based approach. This is because training and assessment are relevant to what needs to be done on the job. As a result, it takes less time for trainees to become competent in the required areas. This, in turn, contributes to improved efficiency where training and assessment are concerned.

3. Increased productivity

When trainees become competent in the competence standards that their own industry has defined, when they know what the performance expectations are and receive recognition for their abilities through successful assessments, they are likely to be more motivated and experience higher job satisfaction. The result is improved productivity for organizations. The communication and constructive feedback between future employers and employees will improve as a result of a competence-based approach, which can also increase productivity.

4. Reduced risk

Using a competence-based approach to training, development, and assessment, employers are able to create project teams of people with complementary skills. A trainee's record of the skills, knowledge and understanding relating to the competence standards they have achieved can be used by a future employer to identify and provide further relevant training and assessment for new skills areas. Competence standards can shape employee development and promotional paths within an organization and give employees the opportunity to learn more competencies beyond their roles. It can also provide organizations with greater ability to scale and flex as needed, thereby reducing the risk they face.

5. Increased customer satisfaction

Employees who have been trained and assessed using a competence-based approach are, by the definition of the relevant competence standards, able to perform the required tasks associated with a job. The knock-on effect is that, in service-related industries, they are able to provide high service levels, thereby increasing customer satisfaction. In production or manufacturing industries, they are able to work closely to industry standards in a more effective and efficient way.

Lesson plans

This manual provides a series of lesson plans that will guide delivery of each module for the *(title)* qualification. It is important for trainers to be flexible and be ready to adapt lesson plans to suit the context of the subject and the needs of their trainees.

Good teachers acknowledge that CBT means each and every trainee in the class learns at a different speed. The good teacher is prepared to throw aside the day's lesson plan and do something different (and unplanned) for the class even if it means 'writing' a lesson plan for each trainee to match their learning pace for that day or week.

Learning by doing is different from learning theory and then applying it. To learn to do something, trainees need someone looking over their shoulder saying 'it's not quite like that, it's like this', 'you do it like this because ...', or even 'tell me why you chose to do it like this?'

In this way, trainees learn that theoretical knowledge is meaningless if it is not seen in the context of what they are doing. In other words, if a trainee doesn't know why they do something, they will not do it competently (skills underpinned by knowledge = competent performer).

This is how a *(title)* acquires a practical grasp of the standards expected. It's not by learning it in theory, but because those standards are acquired through correction by people who show what the standards are, and correct the trainee where they do not meet those standards, and where they repeat it correction until they have internalised those standards.

Demonstration of skill

Demonstration or modeling a skill is a powerful tool, which is used, in vocational training. The instructions for trainers for demonstration are as under:

- a) Read the procedure mentioned in the Trainer Guide for the relevant Learning Unit before demonstration.
- b) Arrange all tools, equipment and consumable material, which are required for demonstration of a skill.
- c) Practice the skill before demonstration to trainees, if possible.
- d) Introduce the skill to trainees clearly at the commencement of demonstration.
- e) Explain how the skill relates to the skill(s) already acquired and describe the expected results or show the objects to trainees.
- f) Carry out demonstration in a way that can be seen by all trainees.
- g) Use the same tools and materials that the learner will be using.
- h) Go through EACH of the steps involved in performing the skill.
- i) Go SLOWLY - describe each step as it is completed.
- j) Encourage the learners to move around and watch what you are doing from a number of different angles.

- k) Identify critical or complex steps, or steps that involve safety precautions to be followed.
- l) Explain theoretical knowledge where applicable and ask questions to trainees to test their understanding.
- m) Try to involve the learners: Ask them questions about why they think the process may work that way.
- n) Repeat critical steps in demonstration, if required.
- o) Summarize the demonstration by asking questions to trainees.

Involvement in the process (actively seeing) is important at this stage. When you work on getting involved, getting people to participate, you make them a part of what is happening. Questions for clarification or explanation are important throughout the demonstration. It is up to the learners to ask questions about things they do not understand, but it is also important for trainers to seek out and elicit questions from learners. A trainer may need to do repeated demonstrations of difficult or complex skills.

Overview of the program

| | |
|--|-----------------------------------|
| Course: <i>Leather Processing Technologist</i> <i>(Level-3) "Leather Tanning Technician"</i> | Total Course Duration: 450 |
| Course Overview: | |
| <p>The purpose of this training is to develop a range of skills and techniques, personal skills and attributes essential for successful performance in leather processing sector in accordance with industry requirements. It also enables the student to pursue a leather processing technologist career path with greater employment and entrepreneurial skills progress to related general and/or vocational qualifications</p> | |

| Module | Learning Unit | Duration |
|--|--|----------|
| Module 1: Apply Work Health and Safety Practices (WHS) Aim: This unit describes the skills to work with safety and participate in hazard assessment activities, follow emergency procedures and participate OHS practices in process | LU1. Implement safe work practices at work place LU2. Participate in hazard assessment activities a work place LU3. Follow emergency procedures at workplace Participate in OHS consultative processes | 30 |
| Module 2: Identify and Implement Workplace Policy and Procedures Aim: This unit describes the skills and knowledge required to develop and implement a workplace policy & procedures and to modify the policy to suit changed circumstances. It applies to individuals with managerial responsibilities who undertake work developing approaches to create, monitor and | LU1. Identify workplace policy & procedures LU2. Implement workplace policy & procedures LU3. Communicate workplace policy & procedures Review the implementation of workplace policy & procedures | 20 |

| Module | Learning Unit | Duration |
|--|---|----------|
| improve strategies and policies within workplaces and engage with a range of relevant stakeholders and specialists. | | |
| <p>Module 3: Communicate at Workplace</p> <p>Aim: This unit describes the performance outcomes, skills and knowledge required to develop communication skills in the workplace. It covers gathering, conveying and receiving information, along with completing assigned written information under direct supervision.</p> | <p>LU1. Communicate within the organization</p> <p>LU2. Communicate outside the organization</p> <p>LU3. Communicate effectively in workgroup</p> <p>LU4. Communicate in writing</p> | 30 |
| <p>Module 4: Perform Computer Application Skills</p> <p>Aim: This unit describes the skills and knowledge required to use spreadsheet applications, prepare in page documents, develops familiarity with</p> | <p>LU1. Prepare In-page documents as per required information</p> <p>LU2. Prepare Spreadsheets as per required information</p> <p>LU3. Use MS Office as per required information</p> <p>LU4. Perform computer graphics in basic applications</p> <p>LU5. Create Email account for communications</p> <p>1.</p> | 40 |

| Module | Learning Unit | Duration |
|--|---|----------|
| <p>Word, Excel, Access, PowerPoint, email, and computer graphics basics.</p> <p>It applies to individuals who perform a range of routine tasks in the workplace using a fundamental knowledge of spreadsheets, Microsoft office and computer graphics in under direct supervision or with limited responsibility</p> | | |
| <p>Module 5: Manage Personal Finances</p> <p>Aim: This unit of competency describes the outcomes required to manage develop, implement and monitor a personal budget in order to plan regular savings and manage debt effectively.</p> | <p>LU1. Develop a personal budget</p> <p>LU2. Develop long term personal budget Identify ways to maximize future finances</p> | 30 |
| <p>Module 6: Carryout Pre-PELT Operation</p> <p>Aim: After successful completion of this module, the student is competent in performing pre-pelt operation according to professional standards and by respecting safety</p> | <p>LU1: Perform Hide/skin Inspection</p> <p>LU2: Preserve Hide/skin</p> <p>LU3: Prepare Pre-PELT Recipe</p> <p>LU4: Soak Hide</p> <p>LU5: Perform Painting on Skin</p> <p>LU6: Perform un-haring & liming</p> | 100 |

| Module | Learning Unit | Duration |
|--|--|----------|
| and health regulations | | |
| <p>Module 7: Carryout Post-PELT Operation</p> <p>Aim: After successful completion of this module, the student is competent in performing post-pelt operation according to professional standards and by respecting safety and health regulations</p> | <p>LU1: Prepare Post-Pelt recipe LU2: Perform De-liming LU3: Perform Bating LU4: Perform Degreasing 1. Maintain Post-Pelt Register</p> | 100 |
| <p>Module 8: Carryout Tanning</p> <p>Aim: After successful completion of this module, the student is competent in performing tanning operation according to professional standards and by respecting safety and health regulations</p> | <p>LU1: Prepare Tanning recipe LU2: Perform Pickling LU3: Perform Tanning LU4: Perform Basification LU5: Perform Grading 1. Maintain Tanning Register</p> | 100 |
| | | 450 |

Lesson Plan Template

| Time | Content | Tutor activity | Learner activity | Resources | Outcomes / Assessment |
|--------------|--------------|----------------|------------------|-----------|-----------------------|
| | Introduction | | | | |
| | | | | | |
| | | | | | |
| BREAK | | | | | |
| | | | | | |
| | | | | | |
| | Conclusion | | | | |

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Module-6

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Trainer's guidelines

| Module 6: Carryout Pre Pelt Operation | | | |
|--|--|--|--|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU1: Perform Hide/skin Inspection | <p>Deliver illustrated presentation on the preparation of workstation. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Differentiate skin and hide with examples • Briefing the structure of skins/ hide according to their species. • Briefing the Chemical composition of skin / hide. • Understanding Anti mortem and post mortem defects of skin / hide. • Briefing the Inspection criteria of skin / hide • Understanding the Importance of trimming in raw skin / hide. <p>Briefing the importance of Segregation of skin / hide according to their sizes and defects After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to define the types of PPE used in shaving process and hazardous materials which may affect the process</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Knife – 8”</p> <p>Safety helmet & glasses</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> |

| Module 6: Carryout Pre Pelt Operation | | | |
|--|---|--|--|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU2: Preserve Hide/skin | <p>Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Describing the storage area of the tannery section& how to maintain it. • Explaining the preservation of skins & hides and its importance to avoid bacterial growth • Describing the types of preservation and their applying methods. • Explaining different types of preserving agents its functions • Applying of preserving agent according to their condition. • Differentiate the flesh and grain side of skin/hide. <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Persevering Agents</p> |

Module 6: Carryout Pre Pelt Operation

| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
|------------------------------|--|--|---|
| LU3: Prepare Pre-PELT Recipe | <p>Deliver presentation on clean workplace. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining to check the condition of skin/hide for the designing of pre pelt recipe • Explaining the importance of pre pelt process and the base of leather processing • Briefing the selection of chemicals based on condition & type of material. • Enlisting the chemicals which is used in pre pelt process • Describing the properties of chemicals which is used in pre pelt process • Designing of recipe according to the condition, weight of raw material and end product. • Use of Drum for appropriate rpm in pre pelt process. <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to write the importance of the cleaning of workstation after any work done.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia Hide Skin Digital Weight Balance Pen Paper Calculator</p> |

| Module 6: Carryout Pre Pelt Operation | | | |
|--|---|--|--|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU4: Soak Hide | <p>Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Introduction to vessels which could used in soaking process • Describing the importance of soaking to prepare the skin / hide in slaughtered condition. • Describing desalting of skin/ hide before soaking process • Briefing the performing procedure of soaking • Briefing the sequence of chemicals used and accurate weighing of soaking agents. • Explaining about pH paper and desire pH of soaking process • Explaining to obtain the re hydrated condition of skin / hide after soaking process. • Explain precautionary & remedial measures of soaking <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Peddle</p> <p>Drum</p> <p>Pallet Jack</p> <p>Plastic Containers</p> <p>pH value measuring instrument</p> |

| Module 6: Carryout Pre Pelt Operation | | | |
|--|--|--|---|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU5: Perform Painting on skin | <p>Deliver presentation on clean workplace. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining the purpose of painting to save the wool / hairs of skins • Describing the properties of chemicals using during painting. • Describing the role of baume scale in painting mixture preparation. • Briefing the performing procedure of painting. • Explain precautionary & Remedial measures of painting <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to write the importance of the cleaning of workstation after any work done.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Peddle</p> <p>Drum</p> <p>Pallet Jack</p> <p>Plastic Containers</p> <p>Jute Brush</p> <p>Painting mixture</p> |

Module 6: Carryout Pre Pelt Operation

| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
|---|---|--|---|
| <p>LU6: Perform Un-hairing & Liming</p> | <p>Deliver a presentation on maintain of register. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Describing the purpose of un-hairing and liming and its advantages • Briefing the types of vessels used in un-hairing & liming process. • Explaining the different techniques of un-hairing & liming process • Explaining the performing procedure of unhairing and liming. • Briefing the modern methods of unhairing and liming also use of enzymatic material for this process • Discussing the possible defects of liming process and its classification • Explain precautionary & remedial measures of un-hairing & liming <p>After the presentation, for the practical demonstration arrange the trainees in small groups. Provide each group different type of leather to perform drying for different type of articles.</p> <p>Arrange a visit of mechanical operational area of any reputable tannery to observe the practical skills of professional drying master and discussing the strengthen and weaknesses of skills of employee and trainee. Also discussed about the techniques of drying with experienced person and ask question for understanding</p> <p>Trainees need to practice their skills independently to perform shaving of different leather.</p> <p>After the practical sessions feedback session. Ask learners to complete a self-assessment form on their</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia Hide Skin Safety Gloves Safety Shoes Mask Pallets Apron (Rubber) Digital Weight Balance Pit Peddle Drum Pallet Jack Plastic Containers Liming & un-hairing agents & auxiliaries Baume Meter pH value measuring instrument</p> |

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| Module 7: Carryout Post-PELT Operation | | | |
|---|--|--|---|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU1: Prepare Post-Pelt recipe | <p>Deliver illustrated presentation on the preparation of workstation. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining to check the condition of pelt for the designing of post pelt recipe • Explaining the importance of post pelt operations for preparation of tanning. • Briefing the Selection of chemicals based on pelt condition and type of required tanning. • Enlisting the chemicals which is used in post pelt operations • Explaining about the properties of chemicals which is used in post pelt operations • Designing of recipe according to the condition, weight of pelt and required tanning. • Use of Drum for appropriate rpm in post pelt operation.. <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to define the types of PPE used in shaving process and hazardous materials which may affect the process</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia Hide Skin Digital Weight Balance Pen Paper Calculator</p> |

| Module 7: Carryout Post-PELT Operation | | | |
|---|---|--|---|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU2: Perform De-liming | <p>Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Describing the process of deliming and how much is important to remove lime from the skin / hide. • Explaining the performing procedure of de-liming • Briefing the sequence of chemicals used and accurate weighing of de-liming agents. • Explaining about the parameters for checking the de-liming process and describe the role of indicators in de-liming. • Explain precautionary & remedial measures of de-liming process <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Peddle</p> <p>Drum</p> <p>Pallet Jack</p> <p>Plastic Containers</p> <p>Jute Brush</p> <p>Painting mixture</p> |

| Module 7: Carryout Post-PELT Operation | | | |
|---|---|--|---|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU3: Perform Batting | <p>Deliver presentation on clean workplace. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining the process of bating and how important to done it. • Explaining about the enzymatic material & its uses • Describing about the type of enzyme used in batting process • Explaining the performance procedure of batting process. • Briefing the sequence of chemicals used and accurate weighing of batting agents. • Briefing the role of time, temperature and pH of batting process • Explaining the checks of batting process to identify the accurate batting. • Explain precautionary & remedial measures of bating process <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to write the importance of the cleaning of workstation after any work done.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Peddle</p> <p>Drum</p> <p>Pallet Jack</p> <p>Plastic Containers</p> <p>Jute Brush</p> <p>Painting mixture</p> |

Module 7: Carryout Post-PELT Operation

| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
|-------------------------|--|--|--|
| LU4: Perform Degreasing | <p>Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining the degreasing of skin / hide to remove the unwanted natural fat from the skins/ hide and prepared to tanning process • Briefing about the standard limits of fat content in leather • Describing the problems of natural fat on leather surface • Explaining the type of degreasing agents and its affectivity. • Explaining the different stages of degreasing process. • Explaining the performance procedure of degreasing process. • Briefing the sequence of chemicals used and accurate weighing of degreasing agents. • Briefing about the modern Techniques of degreasing process. • Explain precautionary & remedial measures of degreasing process <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia Hide Skin Safety Gloves Safety Shoes Mask Pallets Apron (Rubber) Digital Weight Balance Pit Peddle Drum Pallet Jack Plastic Containers Jute Brush Painting mixture</p> |

| Module 7: Carryout Post-PELT Operation | | | |
|---|---|--|--|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU5: Maintain Post Pelt Register | <p>Deliver presentation on clean workplace. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Introduction the entries of post pelt operation • Importance of processing records • Procedure of the entries in post pelt register. <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to write the importance of the cleaning of workstation after any work done.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Computer with Multimedia</p> <p>Hide</p> <p>Skin</p> <p>Safety Gloves</p> <p>Safety Shoes</p> <p>Mask</p> <p>Pallets</p> <p>Apron (Rubber)</p> <p>Digital Weight Balance</p> <p>Pit</p> <p>Peddle</p> <p>Drum</p> <p>Pallet Jack</p> <p>Plastic Containers</p> <p>Jute Brush</p> <p>Registers</p> |

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| Module 8: Carryout Tanning | | | |
|-----------------------------------|--|--|---|
| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| LU1: Prepare Tanning Recipe | <p>Deliver illustrated presentation on the preparation of workstation. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining how to check the condition of pelt for the designing of Tanning recipe • Explaining the importance of Tanning process • Describing the types of Tanning agents • Briefing the selection of chemicals based on pelt condition and type of required tanning. • Enlisting chemicals used in Tanning process • Explaining properties of chemicals which is used in Tanning process • Designing of recipe according to the condition of pelt and end product. • Use of Drum for appropriate rpm in tanning process. <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to define the types of PPE used in shaving process and hazardous materials which may affect the process</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Digital Weight Machine</p> <p>Automated Trial/Experimental drum</p> <p>Table with Tube light (Selection Table)</p> <p>Pile Horse</p> <p>Safety helmet & glasses</p> <p>Safety Gloves</p> <p>Safety Shoes(Rubber)</p> <p>Mask</p> <p>Apron Rubber</p> <p>Baume Meter</p> <p>Graduated Measuring Cylinder (250ml)</p> <p>pH meter/pH paper</p> <p>Knife – 8”</p> |
| LU2: Perform Pickling | <p>Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining the process of pickling and its requirements | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> | <p>Digital Weight Machine</p> <p>Automated Trial/Experimental drum</p> <p>Table with Tube light (Selection Table)</p> |

| Module 8: Carryout Tanning | | | |
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| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| | <p>according to the type of tanning</p> <ul style="list-style-type: none"> • Describing the pH values as per type of required tanning • Explaining the performance procedure of pickling process. • Briefing the sequence of chemicals used and accurate weighing of pickling chemicals. • Explaining about the acid shocks & role of buffers to prevent the acid shocks. • Explain precautionary & remedial measures of pickling <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | Either, Training Tannery Area | Table) Pile Horse Safety helmet & glasses Safety Gloves Safety Shoes(Rubber) Mask Apron Rubber Baume Meter Graduated Measuring Cylinder (250ml) pH meter/pH paper Knife – 8" |
| LU3: Perform Tanning | <p>Deliver presentation on clean workplace. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Explaining the process of tanning and its key importance in leather processing. • Describing the classification of tanning according to their types and its properties. • Explaining the performance procedure of tanning process. | Class Room with multimedia aid, audio visual facility and flip chart Either, Training Tannery Area | Digital Weight Machine Automated Trial/Experimental drum Table with Tube light (Selection Table) Pile Horse Safety helmet & glasses Safety Gloves |

| Module 8: Carryout Tanning | | | |
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| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| | <ul style="list-style-type: none"> Briefing the sequence of chemicals used and accurate weighing of tanning agents. Describing the role of shrinkage temperature for proper tanning and durability of leather. Modern techniques of tanning Explain precautionary & remedial measures of tanning process <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask that to write the importance of the cleaning of workstation after any work done.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | | Safety Shoes(Rubber) Mask Apron Rubber Baume Meter Graduated Measuring Cylinder (250ml) pH meter/pH paper Knife – 8” |
| LU4: Perform Basification | Deliver illustrated presentation on Drying. Ensure that the presentation focuses on the following: <ul style="list-style-type: none"> Explaining the process of basification and its purpose Describing the role of fixation for tanning material Describing the types of basification agents & its properties Explaining the performance procedure of basification. Briefing the sequence of chemicals used and accurate weighing of basifying agents. Briefing about the impact of masking in tanning process Explaining the process of ageing and formation of | Class Room with multimedia aid, audio visual facility and flip chart Either, Training Tannery Area | Digital Weight Machine Automated Trial/Experimental drum Table with Tube light (Selection Table) Pile Horse Safety helmet & glasses Safety Gloves Safety Shoes(Rubber) Mask |

| Module 8: Carryout Tanning | | | |
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| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| | <p>complex bonding of skin / hide fiber with tanning material</p> <ul style="list-style-type: none"> Define precautionary & remedial measures of basification <p>After the presentation, for the practical demonstrations arrange the trainees into small groups and ask to write a types of drying according to their at least 5 articles also perform Drying of different leather according to their articles.</p> <p>trainees need to practice their skills independently to perform Drying.</p> <p>After that take feedback from the group. Answer any question and confirm trainee's understanding</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | | <p>Apron Rubber Baume Meter Graduated Measuring Cylinder (250ml) pH meter/pH paper Knife – 8”</p> |
| LU5: Perform Grading | <p>Deliver a presentation on maintain of register. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> Explaining about the grading of tanned leather and how its effect on further processing of leather. Describing the classification of different grades Modern terminologies of grading system Classifying the type of end product according to their different grades. Segregation of leather according to their grades. <p>After the presentation, for the practical demonstration arrange the trainees in small groups. Provide each</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart Either, Training Tannery Area</p> | <p>Digital Weight Machine Automated Trial/Experimental drum Table with Tube light (Selection Table) Pile Horse Safety helmet & glasses Safety Gloves Safety Shoes(Rubber) Mask</p> |

| Module 8: Carryout Tanning | | | |
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| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
| | <p>group different type of leather to perform drying for different type of articles.</p> <p>Arrange a visit of mechanical operational area of any reputable tannery to observe the practical skills of professional drying master and discussing the strengths and weaknesses of skills of employee and trainee. Also discussed about the techniques of drying with experienced person and ask question for understanding</p> <p>Trainees need to practice their skills independently to perform shaving of different leather.</p> <p>After the practical sessions feedback session. Ask learners to complete a self-assessment form on their ability to carryout drying.</p> <p>Ask questions to confirm their understanding.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | | <p>Apron Rubber</p> <p>Baume Meter</p> <p>Graduated Measuring Cylinder (250ml)</p> <p>pH meter/pH paper</p> <p>Knife – 8”</p> |
| LU6: Maintain Tanning register | <p>Deliver a presentation on maintain of register. Ensure that the presentation focuses on the following:</p> <ul style="list-style-type: none"> • Introduction the entries of Tanning process • Importance of processing records • Procedure of the entries in Tanning register. <p>After the presentation, for the practical demonstration</p> | <p>Class Room with multimedia aid, audio visual facility and flip chart</p> <p>Either, Training Tannery Area</p> | <p>Digital Weight Machine</p> <p>Automated Trial/Experimental drum</p> <p>Table with Tube light (Selection Table)</p> <p>Pile Horse</p> |

Module 8: Carryout Tanning

| Learning Unit | Suggested Teaching/ Learning Activities | Delivery Context | Media |
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| | <p>arrange the trainees in small groups. Provide each group different type of leather to perform drying for different type of articles.</p> <p>Arrange a visit of mechanical operational area of any reputable tannery to observe the practical skills of professional drying master and discussing the strengths and weaknesses of skills of employee and trainee. Also discussed about the techniques of drying with experienced person and ask question for understanding</p> <p>Trainees need to practice their skills independently to perform shaving of different leather.</p> <p>After the practical sessions feedback session. Ask learners to complete a self-assessment form on their ability to carryout drying.</p> <p>Ask questions to confirm their understanding.</p> <p>Learners must be able to practice and develop their knowledge and skills relating to cleaning workplace in an appropriate practical setting. Ensure that learners have the opportunity to ask questions to support their understanding</p> | | <p>Safety helmet & glasses</p> <p>Safety Gloves</p> <p>Safety Shoes(Rubber)</p> <p>Mask</p> <p>Apron Rubber</p> <p>Baume Meter</p> <p>Graduated Measuring Cylinder (250ml)</p> <p>pH meter/pH paper</p> <p>Knife – 8”</p> <p>Register</p> |

Frequently Asked Questions

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| 1. What is Competency Based Training (CBT) and how is it different from currently offered trainings in institutes? | Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training. Compared to conventional programs, the competency based training is not primarily content based; it rather focuses on the competence requirement of the envisaged job role. The whole qualification refers to certain industry standard criterion and is modularized in nature rather than being course oriented. |
| 2. What is the passing criterion for CBT certificate? | You shall be required to be declared “Competent” in the summative assessment to attain the certificate. |
| 3. What are the entry requirements for this course? | The entry requirement for this course is 8th Grade or equivalent. |
| 4. How can I progress in my educational career after attaining this certificate? | You shall be eligible to take admission in the National Vocational Certificate Level-3 in Leather Products Development Technician (Pattern Maker). You shall be able to progress further to National Vocational Certificate Level-4 in Leather Products Development Technician (Computerized Pattern Designer); and take admission in a level-5, DAE or equivalent course. In certain case, you may be required to attain an equivalence certificate from The Inter Board Committee of Chairmen (IBCC). |
| 5. If I have the experience and skills mentioned in the competency standards, do I still need to attend the course to attain this certificate? | You can opt to take part in the Recognition of Prior Learning (RPL) program by contacting the relevant training institute and getting assessed by providing the required evidences. |
| 6. What is the entry requirement for Recognition of Prior Learning program (RPL)? | There is no general entry requirement. The institute shall assess you, identify your competence gaps and offer you courses to cover the gaps; after which you can take up the final assessment. |
| 7. Is there any age restriction for entry in this course or Recognition of Prior Learning program (RPL)? | There are no age restrictions to enter this course or take up the Recognition of Prior Learning program |
| 8. What is the duration of this course? | The duration of the course work is 1,510 hrs. (11 months) |
| 9. What are the class timings? | The classes are normally offered 25 days a month from 08:00am to 01:30pm. These may vary |

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| | according to the practices of certain institutes. |
| 10. What is equivalence of this certificate with other qualifications? | As per the national vocational qualifications framework, the level-4 certificate is equivalent to Matriculation. The equivalence certificate can be obtained from The Inter Board Committee of Chairmen (IBCC). |
| 11. What is the importance of this certificate in National and International job market? | This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTTC). These standards are also recognized worldwide as all the standards are coded using international methodology and are accessible to the employers worldwide through NAVTTTC website. |
| 12. Which jobs can I get after attaining this certificate? Are there job for this certificate in public sector as well? | You shall be able to take up jobs in the leather products making companies in the functions of cutting, stitching and finishing of leather gloves and garments. |
| 13. What are possible career progressions in industry after attaining this certificate? | You shall be able to progress up to the level of supervisor after attaining sufficient experience, knowledge and skills during the job. Attaining additional relevant qualifications may aid your career advancement to even higher levels. |
| 14. Is this certificate recognized by any competent authority in Pakistan? | This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTTC). The official certificates shall be awarded by the relevant certificate awarding body. |
| 15. Is on-the-job training mandatory for this certificate? If yes, what is the duration of on-the-job training? | On-the-job training is not a requirement for final / summative assessment of this certificate. However, taking up on-the-job training after or during the course work may add your chances to get a job afterwards. |
| 16. How much salary can I get on job after attaining this certificate? | The minimum wages announced by the Government of Pakistan in 2019 are PKR 17,500. This may vary in subsequent years and different regions of the country. Progressive employers may pay more than the mentioned amount. |
| 17. Are there any alternative certificates which I can take up? | There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field. |
| 18. What is the teaching language of this course? | The teaching language of this course is Urdu and English. |
| 19. Is it possible to switch to other certificate programs during the course? | There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field. |
| 20. What is the examination / assessment system in this program? | Competency based assessments are organized by training institutes during the course which serve the purpose of assessing the progress and preparedness of each student. Final / summative assessments are organized by the relevant qualification awarding bodies at the end of the certificate |

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| | program. You shall be required to be declared “Competent” in the summative assessment to attain the certificate. |
| 21. Does this certificate enable me to work as freelancer? | You can start your small business of stitching leather garments, gloves of other products. You may need additional skills on entrepreneurship to support your initiative. |

