Training Module:
Footwear Design and Pattern Making

Module Endorsed by ALLPI Curriculum Review Committee

Africa Leather and Leather Products Institute (LLPI)

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www.allpi.int
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<th>Module title</th>
<th>Footwear Design and Pattern Making</th>
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<td>Module code</td>
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<tr>
<td>Total hours</td>
<td>5 days</td>
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<td>Target Group</td>
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**Description of module**
- This unit covers the knowledge about the understanding of design & styles of the footwear.
- Provide the necessary skills and craft ability required for the development of model pattern.
- Provide useful information about fashion trends and to exercise originality of products.
- Develop skills & knowledge to carry out grading.

**Learning outcomes**
After the module is completed, the trainees would be able to:
- Develop understanding about the design
- Interprets the drawing/graphic representation.
- Develop understanding about the design and pattern effect on cost and efficiency
- Make good choice of last for the model design
- Mask the last
- Sketch the design on the last.
- Identify the technical points
- Draw the main lines
- Develop last copies (outside & inside)
- Make mean form.
- Make the standard plan for model
- Make upper, lining and bottom stock net patterns
- Add corresponding allowances to net patterns
- Make upper, lining and bottom stock working patterns.
- Nest and calculate consumption of the model.
- Grading of patterns

**Content**

**Understanding about the design**
- Basic elements & principles of design
- Types of footwear construction;
- Footwear Components & their utility
- Footwear Materials:
- Styles & types of footwear:

**Assess Design requirement**
- Fashions understanding
- Last identification
- Development of Specific requirement of design:

**Assess cost and efficiency aspects related to design and pattern**
- Cost implication of designs and pattern changes
Effect of design and pattern changes on efficiency in terms of productivity and cleaner production

The Last (basis of footwear manufacture)
The last measurements points and important lines.
Classification of last according to:
- Construction
- Manufacturing methods

Characteristic of last for various style
- Choice of the last

Last taping
The principle of sticking adhesive paper (flexible tapes) on the surface of a last and the different methods of last copying. Production of forms and mean form.

Drawing of the design on the last
- Drawing interpretation
- Identification of the main lines
- Define the model lines (Last measurements)
- Identification of design & style feature:
- Identification of type of construction:
- Sketch of last:
- Proportion of sketched components:
- Color combination & Textures:

Principles of pattern making
- Technical point
- Techniques to develop last copies
- Techniques to develop mean foam
- Techniques to develop standard plans

Explanation of different allowances, measurement and the technological reason for each of them

Principles of Designing
- Identification of the basic upper patterns
- Development of the parts of the upper patterns
- Techniques to construct basic upper patterns
- Techniques to develop the upper working patterns
- Techniques to construct the lining basic patterns
- Techniques to develop the lining working patterns
- Techniques to develop bottom patterns and stiffening patterns

The different sizing systems used in footwear manufacture and their
### Teaching strategy
- Class room teaching
- Field trips to industry
- Assignments
- Group work
- Practical sessions

### Assessment criteria
- Individual Assignment
- Group assignment and presentation
- Practical work

### Assessment strategy
- Continuous assessment basis:
  - Class attendance
  - Written exams
  - Reports of assignments
  - Practical demonstration

### Role of Trainer and Trainees
- Trainer should organize classes and field sessions, conduct lectures, give guidance to do assignments, motivate trainees to actively participate in class and field sessions.
- Trainees should attend classes and field sessions, actively participate in class and field sessions and submit duly completed reports of assignments.

### Teaching support and inputs
- Lecture materials (handouts, Slides, Reference books)
- LCDs and laptops, photocopier and photocopy papers, flip charts

### Module requirements
- Should attend all class and practical/field sessions

### Reading materials
- The pattern cutters handbook by Michael H Sharp
- Manual of shoe designing by Md. Sadiq
- Manual of shoe designing by P.I.S.I.E (Italy)
- Series of innovation book for footwear industry.
- Footwear technology by Jerzy Malenczak
- TechnOrg manual.(Hungary)
- fashion magazines,
- catalogues
- Mwinyihija, M (2016). The transformational initiative of Africa’s leather sector dependence from commodity to value created agro-
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<td>leather sector with reflection to the global performance. Journal</td>
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