SYLLABUS FOR INSTRUCTOR

(LEATHER TECHNOLOGY)

Syllabus for Workshop Instructor- Leather Technology

Practices of Preservation and Pre Tanning Processes: Preservation of Hides and Skin, Soaking, Liming, Deliming and Drenching, Bating, Pickling, Degreasing.

Analytical Chemistry of Leather: Analysis of Lime, Analysis of Na_2S, Analysis of lime liquors, Analysis of limed pelt, Analysis of Boric acid, Analysis of delining agent, Analysis of Chrome liquor, Analysis of acids & salts in vegetable tannin extracts, Analysis of followings of Veg. tanned leather, Analytical Chemistry of Post tanning and Finishing agent, Analysis of lipids for following: Acid value, Saponification value; Iodine value.

Principles of Inorganic Tanning: Theory, Chemistry, Factors and objectives of following inorganic tanning operations (Chrome Tannage, Aluminum Tannage, Iron Tannage, Zirconium Tannage, Titanium Tannage), Aqueous Chemistry of Chromium, Factor Controlling Chrome tanning, Mechanism of chrome tanning.

Principles of Post Tanning Operation: Neutralisation, Bleaching, Dyeing, Fat liquoring, Retanning syntans and Retanning, Theory of leather drying.

Practices of Leather Manufacturing: Vegetable tauning process, chrome tanning process, Degree of tannage, Manufacturing process of belting, harness and saddle leather, Nubuck and suede leather, manufacturing technique of full chrome goat suede upper and semi chrome Goat suede upper leather, corrected grain upper leather, upgradation techniques of leather.

Leather Product Technology: History of Footwear industry, Functions of footwear, Different parts of Footwear (Upper, Bottom and hidden components), Anatomy of Human foot, Classification of last, Different parts of last, Shoe Sizes and Fittings (British and French size system), Designing (Concept of inside form, outside form and mean form), Making standard of oxford and derby shoe, different pattern making allowances, lasting margin, folding, underlay and seam margin, Footwear materials.

Footwear Manufacturing Process: Cutting lay out on corrected grain leather ang goat glaze leather, Different quality region of hide, line of tightness and stretch of side and skin, different quality region of shoe components, types of cutting dies and cutting machine, cutting value of leather, calculation of consumption by RSM method, 1st, 2nd and 3rd wastage, closing, lasting.

Tannery Waste Management: Water Pollution in General Perspectives, Tannery Effluent, Primary Treatment, Secondary Treatment, Tertiary Treatment, Standards and Specifications.