A course, exploring leather skills and decorating techniques for grades 7-12, is presented. The Course Content includes Historical and cultural survey; Leather types; Definitions and application; Plan for working leather; and Tools and equipment. Upon completion of this course the student will be able to do the following: (1) Relate the research of historical application of leather to contemporary products; (2) Apply elements of design to the planning and production of leather products; (3) Demonstrate his ability to select appropriate leather for his products; (4) Produce at least five selected leather objects; (5) Experiment with the uses of leather and design and implement at least one creative work; (6) Perform assigned tasks according to direction and specifications; and (7) Evaluate his work by displaying it for class critique, discussing results with the teacher and fellow students. A section on Strategies and Procedures covers design and material and equipment used. Suggestions for the Instructor deal with notes on leather and work procedures. Resources for Teacher and Student list books, periodicals, and films on related subjects and the suppliers. (LS)
AUTHORIZED COURSE OF INSTRUCTION FOR THE

QUINMESTER PROGRAM

DADE COUNTY PUBLIC SCHOOLS

THE MOD WORLD OF LEATHER I
6681.21
6682.21
6683.22
Art Education

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DIVISION OF INSTRUCTION•1971
THE MOD WORLD OF LEATHER I
(Tentative Course Outline)

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ART EDUCATION

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for the
DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida
1971
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I. COURSE TITLE
   THE 100D WORLD OF LEATHER I

II. COURSE NUMBERS
   6681.21
   6682.21
   6683.22

III. COURSE DESCRIPTION
   Exploratory application of basic leather design principles, texture and color as applied to basic leathercraft. Leather skills and decorating techniques are explored. A studio course.

IV. RATIONALE
   Leather has occupied an important place in man's life from the Neolithic period until present time. Objects made of leather are durable as well as pleasing to see, handle and wear. The contemporary applications of leather are as diversified as any material used creatively.

V. COURSE ENROLLMENT GUIDELINES
   A. Grades 7-12
   B. No prerequisite for this course
A. Competencies expected of the student. The student will be able to do the following:

1. Research the historical applications of leather and relate the research to contemporary products.

2. Apply the elements of design to the planning and production of leather products.

3. Demonstrate his understanding of the different types of leather by selecting the appropriate leather for his products.

4. Produce at least five selected leather objects.

5. Experiment with the uses of leather and design and implement at least one creative leather work.

6. Perform the assigned tasks in leatherwork according to the directions and specifications of the tools and materials which are used in the operation of the task.

7. Critically evaluate his work by displaying it for a class critique, discussing the results with the teacher.
and discussing the results with fellow students.

B. Conditions under which the student will be expected to demonstrate his competence are:

1. Research
2. Demonstration
3. Studio work
4. Experimentation
5. Evaluation and critique

C. Standards for acceptable performance:
The student will meet or surpass standards established by the instructor for objectives 1 through 7.

VII. COURSE CONTENT

A. Historical and cultural survey

1. Early man - Neolithic man used skins for clothing, drinking cups and vessels, etc. The first leather was tanned by rubbing it with fat and smoking it over a fire to cure it.

2. Egyptians - From Egypt came the fore-runner of modern tanning methods. The Egyptians cured and preserved skins by soaking them in fermented oak or chest-
nut bark containing tannic acid.
(Tanning arrests decomposition of the skin, increases the strength and pliability of the skin and keeps it from becoming soluble in water.)

3. Chinese - Used thick heavy leather to make screens and chests which were decorated by appliquéing cut-out patterns with heavy stitches.

4. Moors - Uses and methods of decoration were carried to Spain. They covered walls of large rooms in palaces and villas with tooled and colored leather. Their methods of decoration were carving, inlaying, or embossing. Objects created from the leather included chairbacks, chests, paddles, belts, caps, books, jackets and bottles covered with modeled leather.

5. Medieval - Leather as a writing material for books was introduced. Vellum and parchment were prepared from skins of calves and sheep and polished with pumice stone to provide a smooth writing surface.

6. Morocco - Used moroccan goat skin for book binding, purses, saddle covers,
garments, etc. The traditional tooling practices are still used in Morocco today. They covered clay (terra cotta) tiles with leather for wall decorations. Carved wooden stamps were used to emboss leather goods with finely ground silver or gold pigments.

7. Early American Colonists - Leather and skins for chairs and screens, bindings, door hinges and door coverings.

8. American Indians - Rawhide was used for clothing, packing cases, drums, trappings, tents, shields, etc. Leather goods, fringing, feathers, painted designs, embroidery, porcupine quills (softened in water, flattened, dyed and sewed on garments). Garments were made out of buckskin, an unusually soft leather.

9. Settlers of the American West - Leather was used for trappings, garments, holsters, belts, saddles and bindings. Decoration of leather was effected by fringing, inlaid stitching and large floral carving.

10. Eskimos - The life of the Eskimo is
substantiated by skins of arctic animals used for trappings, clothing, dwellings, books, canoes, bindings, etc.

11. Africans - Hides are used for clothing, quivers, bags, shields, rugs, coverings, and decorative uses of leather, skins, pelts.

12. People of Java-Siam - Decorated puppets used for dramatic productions. The puppets have unnaturally long arms, attached to the body and moved by means of small sticks attached to them.

B. Leather types: Definitions and applications.
The types of leather selected for an object depends upon the purpose it is to serve.

1. Skin: Leather tanned in the whole pelt, the same size and shape as it came from the animal.

2. Back: A side with the belly cut off, usually 15 to 10 square feet.

3. Belly: Lower part of a side, usually 6 to 10 square feet.

4. Cape: A soft smooth lamb or sheep for garments and linings.

5. Chamois: Flesh side of a heavy sheep, 

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specially oil-tanned.

6. Extreme: A side usually 17 to 20 square feet.

7. Full grain: Leather as it is taken off the animal. Only the hair removed, grain is left on.

8. Grain: Epidermis or outer layer of animal skins.

9. Harness backs: Heavy cowhide backs for work harness, heavy duty lineman belts.

10. Kip: One half of a large calf, usually 9 to 17 square feet.

11. Latigos: Cowhide sides specially oil-tanned for cinches, harnesses and belts.


13. Plivero: Grain side of a small sueded sheep. Leather has been split; grain side is called Plivers, the flesh side termed sheer suede.


15. Shearlings: Sheepskin washed and tanned with wool left on, then clipped to desired length, usually 1/4 to 1 inch.
16. Shelter cape: Soft lamb skin in suitable weight for garments.

17. Split: Under sections of a piece of leather that has been split into two or more thicknesses. Finished splits have been waxed and rubbed down smooth or embossed with a design.

18. Suede: A finish produced by running the surface of leather on a carborundum or emery wheel to separate fibers in order to give leather a nap. Usually 5 to 7 square feet per skin. Most suede comes from lamb skins. Used for bags, bag linings, pillows, jackets, skirts and garments of all types.


20. Top grain: Top grain has been sanded to remove scars and is then sprayed or pasted to "cover up".

C. Plan for working leather

1. Types of articles
   a. Belts
      (1) Straight
      (2) Decorated
      (3) Braided
(4) Macramè
b. Coin purse
c. Key case
d. Watchband
e. Archery guard
f. Purse
g. Luggage tag
h. Glasses case
i. Chair back
j. Stool seat
k. Wastepaper basket
l. Name plate
m. Pen holder
n. Leather sculpture
o. Billfold
p. Coasters
q. Bookplates

2. Design for article

3. Methods of transfer of design
   a. Template
   b. Transfer paper (never carbon paper)
   c. Transfer film
   d. Stylus, pencil

4. Methods of cutting
   a. Scissors (lightweight leather and suede)
b. Straight edge

c. Utility knife

d. Head knife (cutting around corners)

e. Draw gauge (leather strips)

f. Skiving knife (reduce thickness of leather)

5. Decoration

a. Tooling - (modeling leather-depressing areas)

b. Stamping - producing a pattern by pressing into leather

(1) Stamps - metal (nailheads carved into pattern), wood blocks, engraved commercial stamps

(2) Mallet (rawhide)

(3) Press

c. Carving - incising leather

(1) Swivel knife - to cut in original design

(2) Metal saddle stamps

(3) Modeling tools

(4) Mallet

d. Dyeing

(1) Brush, dauber, atomizer, or spray gun

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(2) Leather dyes, stains, inks, water colors, shoe polish, or food coloring (Try samples first)
e. Appliqué - sewing on design of various leathers, or other compatible materials
f. Cutting out
   (1) Round drive punches
   (2) Thong punches
   (3) Rotary punch
6. Assembly
   a. Lacing - join two pieces of leather together and also decorate
      (1) Running stitch
      (2) Whiptstitch
      (3) Double whiptstitch
      (4) Cross stitch
      (5) Single buttonhole stitch
      (6) Double buttonhole stitch
   b. Sewing - Manual or machine (lightweight leather or suede)
      (1) Spacer
      (2) Awl
      (3) Thonging chisel
      (4) Drill (thick leather)
(5) Waxed thread
(6) Glover's thread or harness needles

c. Riveting
d. Gluing

7. Finishing
a. Saddle soap
b. Leather wax
c. Waterproofing
d. Leather finisher (commercial)
e. Shoe polish (neutral)

D. Tools and equipment
1. Hard surface composition work boards
2. Hard rubber boards for punching and cutting
3. Rawhide mallets
4. Swivel knives - 3/8" steel blade
5. Sharpening stick
6. Basic stamping tool set
   (C431, P206, B200, V407, S724, A104)
7. Scissors
8. Modeling tool (spoon/pointed tip combination)
9. Small tool rack
10. Utility knives
11. Wing dividers
12. Thong chisels - 1 prong and 4 prong
13. Rotary hole punches
14. Set of round hole drive punches
15. Steel squares
16. Gouging tools
17. Skiving knives
18. Edge beveling tool - size 3
19. Lacing awl
20. Leatherwork sponges
21. Oxalic acid - leather bleach
22. Transfer paper on film
23. Leather craft cement
24. Lacing needles
25. Snap fasteners
26. Permanent rivets
27. Rectangular and circular dee rings
28. Leather finisher
29. Sheep wool applicators
30. Leather dye
31. Dye brushes
32. Lining leather
33. Leather (assorted for varied projects)
34. Suede
35. Eyelets
VIII. STRATEGIES AND PROCEDURES

"... In contrast to leather examples from the past, the utilitarian aspects of contemporary leather work assume the chief importance and less emphasis has been placed upon creative ideas."

Moseley, Johnson, Koening, *Craft Design*

The strategy of this course of study is to remove the prior concept of leather work as a "kit" or the reproduction of established designs in a project-oriented class. Leather can be a unique design material.

A. Design

1. Articles
   a. Research past and interpret for contemporary impact.
   b. Plan in terms of the principle, "form follows function".
   c. Research contemporary design trends.
   d. Stress originality of design.
   e. Research contemporary materials
(plastics, acrylics, etc.) and their relationship to leather.
f. Combining leather with other materials (wood, plastics, woven cloth, etc.)
g. Research the capabilities and limitations of leather as a design material.

2. Decoration
a. Research contemporary design trends.
b. Explore leather as a material to be molded, modeled, cut, stamped, stitched, etc.
c. Explore leather as a decorative material, applique, mosaic, covering, etc.

B. Material and equipment
1. Experimentation with leather
   a. Capabilities
   b. Limitations
   c. Construction
   d. Decoration
   e. Combination with other materials
   f. Dyeing, coloring,

2. Experimentation with tools for decoration
   a. Design and create tools for stamping.
b. Design and create tools for embossing.
c. Design and create tools for carving.

IX. SUGGESTIONS FOR THE INSTRUCTOR

A. Notes on leather

1. Whole skins are divided into sides, backs and bellies and are sold by the square foot.

2. The sides and backs are approximately 16 to 22 square feet.

3. Smaller pieces of leather are sold by the square inch.

4. The weight or thickness of the leather is measured in ounces - one ounce equals \( \frac{1}{64} \)".

5. The weight of leather used depends on the article or use.
   a. 3-4 ounces - billfold backs, zipper gussets, etc.
   b. 4-5 ounces - billfolds, pocket secretaries, etc.
   c. 5-6 ounces - small bags, bag straps.
   d. 6-7 ounces - large bags, contour belts, carved bags.
   e. 7-8 ounces - carved belts or belts 1" or narrower, brief cases, handbags.

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f. 8-9 ounces - 1¼" and 1½" belts, saddle bags, motorcycle belts.

g. 9-10 ounces - belts over 1½", holsters and quivers.

h. 10-11 ounces - lineman belts, 3" belts or wider.

6. Grain side of leather is the hair side. This section is approximately 1/5 of the thickness of the hide. During the tanning process, fats and oils are added to the flesh side to make the grain soft and workable.

7. Casing leather for work.

   a. Rub damp sponge to flesh side then turn leather and dampen the grain side.

   b. When leather returns to its natural color, it is ready for tooling, carving, or stamping.

   c. Casing makes the leather fibers swell and softens them for a more impressionable surface.

B. Work procedures

1. Cutting

   a. To cut thick leathers, use a sharp knife and a steel square or metal edge ruler.

   b. To skive leather, so that it will be thin enough to fold over on the edges, pare it
on the underside. Lay it face
down on a hard surface with the
fleshside up, and with a skiving
knife remove a few pieces at a
time. Remove scraps as they gather
to keep from marring the outer
surface of the leather.

2. Tooling
   a. Wet the leather on both sides -
      casing
   b. Place the leather on a hard surface
      with the grain side up. Use the
      narrow end of the modeling tool, and
      press firmly while pulling the tool
      to make a line
   c. For simple curves, cut a template of
      stiff paper, using the edge as a
      guide for the modeling tool
   d. To depress large areas, use the flat
      end of the modeling tool. Press firmly
      between tooled lines.

3. Stamping
   a. Case the leather and wait until the
top is almost dry. Leather that is
too wet will not retain the impression.
   b. Use the rawhide mallet to tap the stamp.

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Stamps can be created from 1/8" or 1/4" brass bars or the tops of large head nails that have been carved into the desired pattern.

Wood or linoleum stamps can be used with a press.

4. Carving

a. Case the leather

b. Transfer design

c. Remember that leather should be slightly wet

d. Use the swivel knife to cut in the design

e. Use the corner of the blade and cut shallow at the end deeper in center

f. Cut to about one-half the thickness of the leather

g. Be sure that no leather is cut away: it is merely incised

h. Do not go over lines or cross one line over another

i. Use the modeling tool to depress areas in the design
j. Note that metal saddle stamps or stamps created by the worker may be used to texture and depress the background.

5. Dyeing
   a. Case leather
   b. Apply dye or paint to the leather with a brush or swab made of lamb's wool.
   c. Use a shallow pan wide enough to hold the piece when dipping the leather in a dye bath.
   d. Use atomizer or spray gun if desired.

6. Punched holes
   a. Use as decorative - varied sizes and shapes.
   b. Use as lacing holes
   c. Use an awl to mark the holes at least 1/8" from the edge.
   d. Measure distance between holes with a pair of dividers or a ruler.
   e. Allow at least a hole-width between each hole.
   f. Rotary punch
   g. Thonging chisel for narrow slits
7. Lacing
   a. Check both pieces to line
   b. Lacing is made of calf or goat
   c. Sold by yard or spool
   d. 3/32-inch width is generally used
      or 1/8-inch for larger projects.
   e. The amount of lacing required
      depends upon the style of method
      selected
         (1) Simple whipstich -- three times
            the length of the distance to
            be laced
         (2) Single buttonhole stitch -- five
            times the length of the distance
         (3) Double buttonhole -- seven times
            the length of the distance
   f. Both pieces checked to line up holes
   g. 1/2 inch or so of the end tucked back
      under the last few stitches when
      lacing is completed

8. Sewing
   a. Use for joining pieces of leather or
      adding pockets, inserts, tabs or
      zippers
   b. Cement pieces to keep them from slip-
c. Do machine sewing with a large leather (suede) needle and set for wide spacing
d. Use Glover's needles or harness needles for handsewing
e. Use wax linen, nylon or heavy cotton thread
f. Mark holes with a spacer and punched with an awl or use a thonging chisel

9. Setting snaps
   a. Two types of snap setters: the segma and the birdcage
   b. Makeup: composed of a metal strip with a small knob at each end and one in the center, and accompanying metal cylinder posts
   c. The snap sets composed of four parts: the button, the socket that fits into its concave opening, and the eyelet and stud, which fit together to form the part that snaps into the button
X. RESOURCES FOR TEACHER AND STUDENT

Books


Tandy Leather Company, Fort Worth, Texas, *Gick Purse Construction and Assembly Book*  
*Craftool Tech-Tips*  
*General Leather Craft*  
*How to Color Leather Book*  
*How to Make Leather Animals*


Periodicals

*Craft Horizons*  
*Creative Crafts*  
*School Arts*  
*Art and Activities*
Films: available from:

Tandy Leather Company, Fort Worth, Texas.
1. Introduction to Leather 0801
2. Cutting Leather 0802
3. Making Tools for Leather 0803
4. The Swivel Knife 0804
5. Modeling and Embossing 0805
6. Basic Leather 0806
7. Simple Lacing Techniques 0807
8. The Double Cordovan Stitch 0808
9. Dyeing and Preserving Leather 0809
10. Designing with Processes 0810
11. Designing with Nature Forms 0811
12. Designing with Tools 0812
13. Designing with Abstract Forms 0813

Suppliers

Avalon Industries, Inc.
95 Lorimer St., Brooklyn, New York.

CCM Arts and Crafts, Inc.
9520 Baltimore Ave., College Park, Maryland.

Crafts of Cleveland Leather Co.
2824 Lorain Ave., Cleveland, Ohio.

The Handcrafters
1-99 W. Brown St., Waupun, Wisconsin.

Herman Oak Leather Co.
4050 N. First St., St. Louis, Missouri.

Tandy Leather Company
2757 West Flagler St., Miami, Florida.