The course examines the tools, materials, and basic principles used in reupholstering furniture. Techniques involved in using equipment, dismantling furniture, constructing the foundation, making the muslin cover, planning and preparing the platform and covering, and attaching loose wood panels are some of the operations dealt with in the course. The vocational, as well as home, use of these skills is explored. Available to all high school seniors, it is recommended that Wood Finishing, Industrial Arts--5874.04 be considered as an extension of the course. The guide is organized according to behavioral goals with instructional material coordinated under the headings: suggested content ideas, learning opportunities, and resources. The 36-page appendix offers illustrations of each step in the upholstering process, a guide to upholstery equipment, and other procedural guidelines. (Author/NW)
AUTHORIZED COURSE OF INSTRUCTION FOR THE

QUINMESTER PROGRAM

CADE COUNTY PUBLIC SCHOOLS

RENOVATING HOME FURNISHINGS

Home and Family Education--2781.01

DIVISION OF INSTRUCTION--1971
RENOVATING HOME FURNISHINGS

2781.01

Home and Family Education

Written by
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for the
DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida 33132
1973
COURSE DESCRIPTION

This course examines the tools, materials and basic principles used in reupholstering furniture. Techniques involved in using equipment, dismantling furniture, constructing the foundation, making the muslin cover, planning and preparing the platform and covering and attaching loose wood panels will be practiced. The vocational, as well as home, use of these skills will be explored.

COURSE ENROLLMENT GUIDELINES

This course should be made available to all senior high school boys and girls who are interested in obtaining and developing skill in reupholstering furniture. Wood Finishing (Industrial Arts 5874.04) is a recommended extension of this course.

RATIONALE

The art of reupholstering is one of the easiest methods of rejuvenating old furniture, of adding color and fresh beauty to the home, and yet most people are afraid to try it. Many home sewers will aggressively make a slip cover, but hesitate at a job that involves such tools as hammer and tack; to work along with the thread and needle. By learning a few tricks of the trade the homemaker may progress from making slipcovers to reupholstering footstools or pad seats for dining room chairs, upholstered chairs, sofas, outdoor benches, studio couches and bed headboards either for personal use or for gainful employment.

FOREWORD

This course of study has been developed by teachers as part of an effort to make Home and Family Education more meaningful and interesting to students. It is not intended to be a prescription for teaching, but rather an aid to the teacher in meeting the objectives. The wealth of activities and resources are intended to be examples from which the teacher can select those that best meet the needs of the students. To facilitate continuity it is recommended that the teacher be selective in choosing activities and maintain all objectives within the course. Where content ideas are given, they are intended to be general notes and suggestions from the writer(s) to the teacher to further explain objectives and activities. This first edition is a working copy and it is hoped that the teacher will note suggested changes and additions while using it in order to aid in future revision. This course of study was developed under the direction and leadership of Mr. Arthur Lee La Croix, Consultant, and Mrs. Betty Morrow, Teacher-Coordinator, Home and Family Education. If the teacher has not had prior experience or training in the area, it is recommended that course #876, Dade County Adult Home Economics, be taken before teaching this course.
MAJOR GOALS

1. The student will use the techniques, skills and manipulative processes of reupholstering.

2. The student will develop the techniques of good workmanship when reupholstering furniture.

3. The student will reupholster a used piece of furniture.

BEHAVIORAL OUTCOMES

The student will be able to:

1. Select and safely use the correct tools, materials and equipment necessary for the chosen project.

2. Dismantle a chair, measure, stretch and tack webbing to the frame.

3. Explore the basic construction techniques which involve the springs and burlap foundation.

4. Stuff the muslin cover, choose the proper fabric cover and cover the chair.

5. Plan and prepare the platform cover.

6. Cover and attach loose wood panels, select and apply trimmings and skirt and make cushions.
COURSE CONTENT

I. Classification of upholstery work
   A. The pad seat
   B. The tight-spring seat
   C. The overstuffed seat

II. Selection of tools, materials, equipment and project
   A. Hand tools
      1. Type and size of hand tools
      2. Function and purpose of each tool
      3. Importance of quality
      4. Care and storage of tools
   B. Basic materials
      1. Type and size of materials
      2. Function and purposes of materials
      3. Importance of quality
      4. Cost
   C. Sewing machine
      1. Theory and technique of operation and making adjustments
      2. Size and type needles
      3. Care of machine
      4. Care and storage of all machine supplies and safety precautions
   D. Button machine
      1. Types of button machines
      2. Types of attachments and dies used
      3. Theory and techniques of operation and making
      4. Care and storage of supplies with machine
      5. Importance of accuracy when using the machine
      6. Methods used in assembling work
      7. Safety precautions
   E. Cushion machine
      1. Techniques of operation, checking the machine for use, metal cushion box, plunger, mechanical power and foot lever
      2. Correct way to strip cushion cover over metal box
      3. Advantages of mechanical power
      4. Care and storage of the machine
      5. Safety precautions
   F. Upholsterer's bench
      1. Types of benches
      2. Function and purpose of the bench
      3. Correct way to adjust bench
      4. Care and storage of bench
      5. Safety precautions
   G. Safe work practices
      1. Holding tools correctly
      2. Keeping work area clean
      3. Lifting heavy objects correctly
      4. Keeping face away from springs
      5. Connecting, grounding and using electrical equipment with caution
      6. Handling needles with care
      7. Avoiding splinters in old furniture
      8. Keeping tools and supplies on table
      9. Avoiding loose clothing
     10. Depositing waste materials quickly
III. Dismantling furniture

A. Learning to dismantle furniture
   1. Advantages and disadvantages
   2. Function of hand tools
   3. Purpose of removal of tacks and fabric from frame
   4. Selection of suitable materials for repair
   5. Parts to be renewed, repaired and redesigned
   6. Importance of good workmanship
   7. Work and safety precautions

B. Webbing
   1. Techniques in stretching webbing
   2. Functions of hand tools
   3. Methods used in tacking
   4. Purposes of stretching webbing
   5. Techniques used in tacking
   6. Checking the furniture frame
   7. Techniques of measuring webbing
   8. Work precautions

IV. Basic construction

A. Springs and spring edges
   1. Placing and fastening springs to webbing
      a. Techniques of installation
      b. Hand tools used
      c. Importance of spacing springs
      d. Accuracy and techniques used in sewing springs
   2. Selecting springs
      a. Correct ways to select right side of spring
      b. Selection of type spring
      c. Importance of right gauge
   3. Tying springs
      a. Purpose of tying springs
      b. Techniques and skills of tying a slip knot
      c. Techniques and methods used in directional tying
      d. Function and purpose of eight-way tying
   4. Describing various types of springs
      a. Sizes, shapes and types of each
      b. Proper resiliency of springs
      c. Function and purpose

B. Burlap foundations
   1. Attaching burlap
      a. Techniques of measuring
      b. Importance of handling burlap properly
         (1) Accuracy in cutting and sewing burlap
         (2) Purpose of hand sewing
         (3) Work precautions
   2. Learning to slip-tack the burlap
      a. Methods used in base slip-tacking
      b. Techniques in handling burlap
      c. Purpose of slip-tacking

C. Burlap rolled edge
   1. Tools, materials and equipment used
   2. Techniques and methods used
   3. Function and purpose of the rolled edge
   4. Necessity of precision work
   5. Work precautions
V. Muslin cover

A. Filling the muslin cover
   1. Stuffing the cover
      a. Techniques in handling materials
      b. Purpose and function of muslin cover
      c. Principles of construction
      d. Work precautions
   2. Adjusting the stuffing for sewing
      a. Methods used in adjusting stuffings
      b. Principles involved in shaping
      c. Purpose of hand stitching
      d. Work precautions

B. Fabric cover
   1. Choosing proper fabric cover
      a. Selecting correct fabric for use
      b. Function and purpose of texture
      c. Advantages of colorfast fabric
      d. Types of weaves
      e. Analyzing quality
      f. Analyzing value and cost
   2. Layout plan
      a. Purpose and principles involved in layout plan
      b. Types and uses of fabric
      c. Special handling required for each type of fabric
      d. Disadvantages of using special weave materials
      e. Work precautions

VI. Fabric platform cover

A. Planning and preparing the platform cover
   1. Types of platforms
      a. Advantages of preparing materials to conform
      b. Types of platforms used
      c. Size of platform used
      d. Techniques and methods to make required platform
      e. Accuracy required
      f. Work precautions
   2. Adjustment of materials to conform with platform
      a. Principles involved in layout plan
      b. Steps involved in construction work
      c. Shapes of platforms used
      d. Accuracy required
      e. Selection of materials
      f. Work precautions
   3. Constructive sewing
      a. Types of seams
      b. Size of seams used in upholstery
      c. Selection of type seams to be used
      d. Techniques and methods used to make seams
      e. Shapes and finishes of seams
      f. Accuracy required
      g. Work precautions

B. Cutting covers to fit post corners
   1. Post corner cut
      a. Types of corners
      b. Size of corner
      c. Selection of type to be used
      d. Techniques and methods used to shape the post cut
      e. Shapes of post corners used
      f. Accuracy required
      g. Work precautions
2. Kinds of post corners
   a. Purpose and function of post corners
   b. Purpose of checking right and wrong post corners
   c. Principles of construction
   d. Work precautions
      (1) Accuracy in cutting
      (2) Accuracy in sewing and gimp trim

3. Post corner pleats
   a. Techniques of handling pleats
   b. Work precautions
      (1) Accuracy in cutting
      (2) Accuracy in pleating material to form a "V"

VII. Covering and attaching loose wood panels

A. Panel planning and preparing
   1. Selection of arm panels
      a. Types of arm panels
      b. Size of panels
      c. Selection of materials to be used
      d. Techniques and methods used to make arm panels
      e. Shapes of arm panels used
      f. Work precautions
   2. Panel fitting
      a. Purpose and function of panel
      b. Techniques and methods used
      c. Work precautions
      (1) Accuracy in measuring
      (2) Accuracy in stuffing
      (3) Accuracy in fitting and tacking

B. Outsides and trimmings
   1. Trimming
      a. Selection of trim finish
      b. Function and purpose of trimming
      c. Accuracy required
      d. Kinds of trimmings used
      e. Advantages of using trimming
   2. Ornamental tacks
      a. Techniques and skills of handling hand tools
      b. Work precautions
      (1) Accuracy in spacing
      (2) Accuracy in styling
      (3) Accuracy in tacking
   3. Cardboard tacking strips
      a. Purpose and function of cardboard tacking strips
      b. Techniques of handling materials
      c. Importance of following definite procedure in attaching outside tacking strips
      d. Work precautions
   4. Outside blind slip-tacking
      a. Techniques and skills used in handling tools
      b. Importance of selecting right type and size of needle to fit material weight
      c. Techniques of slip-tacking
      d. Work precautions
      e. Purpose and function of blind sewing
C. Pleated skirts and dust covers
   1. Measuring the skirt
      a. Size and shape of skirt
      b. Techniques of layout plan
      c. Work precautions
         (1) Accuracy in measurements
         (2) Accuracy in styling
   2. Sewing the pleated skirt
      a. Techniques and methods used to make a pleated skirt
      b. Advantages of preparing materials to conform with skirt
      c. Work precautions
         (1) Accuracy in stitching
         (2) Accuracy in marking and cutting
         (3) Accuracy in box pleating
      d. Purpose of welt seam finish used
   D. Making cushions
      1. Measuring the cushion
         a. Size and shape of the cushion
         b. Techniques of layout plan
         c. Types of equipment used
         d. Measure accurately
      2. Finishing the cushion
         a. Types of finished seams
         b. Techniques used in basic welt seam finish
         c. Method of blind slip-tack stitch
         d. Work precautions
      3. Applying dust cover
**Behavioral Outcome:** Select and safely use the correct tools, materials and equipment necessary for the chosen project.

<table>
<thead>
<tr>
<th>Suggested Content Ideas</th>
<th>Learning Opportunities</th>
<th>Resources</th>
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</thead>
<tbody>
<tr>
<td>Upholstering furniture can be a source of great satisfaction. Some of these satisfactions are:</td>
<td>Examine &quot;before&quot; and &quot;after&quot; pictures or slides showing pieces of furniture (especially chairs) which have been reupholstered.</td>
<td>Magazines</td>
</tr>
<tr>
<td>Extrinsic Satisfactions</td>
<td>Divide the chalkboard into two columns entitled EXTRINSIC SATISFACTIONS and INTRINSIC SATISFACTIONS, and list the satisfactions which may be gained from learning reupholstering skills.</td>
<td>Resource agency: Local adult education center where reupholstering is taught</td>
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<tr>
<td>Getting a &quot;new&quot; piece of furniture</td>
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<td>Saving money</td>
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<td>Adding new color and beauty to the home</td>
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<td>Learning a possible wage-earning skill</td>
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<tr>
<td>Intrinsic Satisfactions</td>
<td>Examine pictures placed on the bulletin board which show the three classifications of upholstery work:</td>
<td>Bulletin board idea: &quot;Classified Upholstery Work&quot;</td>
</tr>
<tr>
<td>Developing patience and accuracy</td>
<td>The Pad Seat</td>
<td>All About Upholstering pp. 5-24</td>
</tr>
<tr>
<td>Getting a deep sense of accomplishment</td>
<td>The Tight-Spring Seat</td>
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<tr>
<td>There are three basic forms into which upholstered work may be classified:</td>
<td>The Overstuffed Seat</td>
<td>Transparencies: Series I, II and III Appendix</td>
</tr>
<tr>
<td>The Pad Seat</td>
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<td>The Tight-Spring Seat</td>
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BEHAVIORAL OUTCOME: l. Select and safely use the correct tools, materials and equipment necessary for the chosen project. (continued)

<table>
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<tr>
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<tr>
<td>Before beginning upholstering it is necessary to find a space in which to work.</td>
<td>Identify the characteristics of the classroom that make it a good place to work. Consider such things as: space to move around in, space on which to work, light, ventilation, place for equipment, etc. Make a list of places in the home that could be temporarily changed into an upholstery shop.</td>
<td>All About Upholstering p. 25</td>
</tr>
<tr>
<td>With a minimum amount of tools practically any upholstering job can be done.</td>
<td>Examine a model box with samples of tools that the student is expected to furnish.</td>
<td>Leaflet: Guide to Upholstery Equipment Appendix</td>
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<td>Look at a labeled display of tools that will be available in the department.</td>
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<td>Examine the leaflet, Guide to Upholstery Equipment, which lists the equipment and tools provided in the classroom, those recommended for each student and those required for each student.</td>
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<td></td>
<td>Set a date by which the necessary supplies must be in class, allowing ample time for purchasing.</td>
<td>All About Upholstering pp. 28-33</td>
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<tr>
<td></td>
<td>Observe a demonstration showing the function of the following hand tools:</td>
<td>Upholstery: Refinishing and Restyling pp. 3-4</td>
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<td></td>
<td>Magnetic hammer Pliers</td>
<td>Homes with Character pp. 314-315</td>
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<td></td>
<td>Rubber mallet Skewer pins</td>
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<td></td>
<td>Regular hammer Tape measure</td>
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<td></td>
<td>Shears Rulers</td>
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<td></td>
<td>Curved needles Chalk</td>
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<tr>
<td></td>
<td>Webbing stretcher Knife</td>
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<td></td>
<td>Ripping tool Stuffing irons</td>
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<tr>
<td></td>
<td>Stuffing irons</td>
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<tr>
<td>An understanding of the proper use and care of tools and equipment helps prevent accidents in the laboratory.</td>
<td>As a class, break up into eight groups, each group taking two of the hand tools. In an allotted amount of time each group should determine the proper way to care for and store their tools. Following this, each group should</td>
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</tbody>
</table>

Leaflet: Guide to Upholstery Equipment Appendix

All About Upholstering pp. 28-33

Upholstery: Refinishing and Restyling pp. 3-4

Homes with Character pp. 314-315
**BEHAVIORAL OUTCOME:** 1. Select and safely use the correct tools, materials and equipment necessary for the chosen project. (continued)

**SUGGESTED CONTENT IDEAS**

<table>
<thead>
<tr>
<th>LEARNING OPPORTUNITIES</th>
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</table>
| Present prearranged silent skits showing good and poor safety practices while using upholstery tools. Then make a list to be mimeographed entitled “Safety Practices to Follow When Using Upholstery Equipment.” | Resource persons:  
Local upholstery craftsman  
Upholstery equipment salesman |
| Ideas for skit:  
- Tacks held in hand while hammering  
- Scissors in lap  
- Needles or tacks lying around  
- Holding needles in mouth  
- Stapling without watching closely  
- Avoiding splinters in furniture  
- Lifting heavy objects  
| Listen to a guest speaker point out the importance of quality in all tools and materials used in upholstering.  
| Investigate a partially dismantled chair. Play a game with classmates seeing who can name and locate the most upholstery materials in a specified amount of time.  
| Review the parts of the sewing machine and identify their function. If industrial machines are available, learn through observation how to thread and use machine.  
| Discuss what procedure must be used when using a domestic machine for upholstery work, rather than an industrial machine; for example:  
- Use a left and/or right-hand cording foot attachment in place of the regular presser foot to sew in welts.  
- Do not attempt to sew heavy fabric or leather.  

For most upholstery sewing, a domestic, home-type machine will do.

Practice in the use of the sewing machine contributes to accuracy and speed in construction.
BEHAVIORAL OUTCOME: 1. Select and safely use the correct tools, materials and equipment necessary for the chosen project. (continued)

<table>
<thead>
<tr>
<th>SUGGESTED CONTENT IDEAS</th>
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<th>RESOURCES</th>
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</table>
| Working with a partner, take a self-test to check the following procedures for the operation of the sewing machine (domestic and/or industrial):  
  Threading  
  Stopping and starting  
  Guiding fabric  
  Winding bobbin  
  Backstitching  
  Refer to checklist for minor trouble with sewing machine.  
  Observe a demonstration and a display of illustrative materials of the steps in using the button machine:  
  Preparing the machine for use  
  Attaching the button molds  
  Adjusting the button molds  
  Adjusting the handle and applying pressure  
  Using attachments  
  Caring for the machine  
  Using the machine safely  
  Practice handling the button machine.  
  Observe a demonstration showing the techniques for operating a cushion machine safely.  
  Discuss the function and purposes of the upholsterer's bench.  
  Take a field trip to a reupholstering company to observe all of the tools, materials and equipment in use.  
  Choose a project to work on in class in accordance with established criteria. | Your Home and You  
 p. 345  
 Upholstery: Refinishing and Restyling  
 pp. 147-151  
 All About Upholstering  
 pp. 27-28  
 Leaflet:  
 Covering Upholstery Buttons  
 Appendix  
 Leaflet:  
 Using the Cushion Machine to Fill a Cushion  
 Appendix  
 All About Upholstering  
 p. 119  
 Upholstery: Refinishing and Restyling  
 pp. 48-102 |
**BEHAVIORAL OUTCOME:** 2. Dismantle a chair, measure, stretch and tack webbing to the frame.

### SUGGESTED CONTENT IDEAS

The old material from the furniture must first be removed so that the frame can be worked on. This is called "dismantling" or "stripping.

If proper methods for dismantling furniture are followed, the job of measuring furniture for upholstery fabric is much easier.

### LEARNING OPPORTUNITIES

Discuss the meaning and importance of "dismantling" or "stripping" a piece of furniture.

Gather together the following tools for dismantling the chair and review the function of each:
- Ripping tool
- Wooden mallet
- Upholstery hammer
- Pliers

Using illustrative materials go over the correct procedures for dismantling a chair. Locate the following parts of the chair:
- Skirt
- Gimp
- Double welt cord
- Front and side panels
- Lower boxing
- Dust catcher
- Blind stitching twine
- Tacks

Turn the chair upside down on the upholsterer's bench (lifting heavy objects by using the knees rather than the back!), and dismantle the chair.

Examine a chair frame that has had webbing attached. Decide what function the webbing serves.

Get out the tools used for applying webbing to the frame. Discuss the function of each:
- Spring webbing of 10 oz. weight
- 16 oz. size tacks
- 6 oz. size tacks
- Webbing stretcher
- Magnetic hammer

### RESOURCES

**Upholstery:** Refinishing and Restyling
- pp. 9-13

**Leaflet:**
- Dismantling a Chair
- Appendix

**All About Upholstering**
- p. 47

**Upholstery:** Refinishing and Restyling
- pp. 33-34

**All About Upholstering**
- p. 44
BEHAVIORAL OUTCOME: 2. Dismantle a chair, measure, stretch and tack webbing to the frame. (continued)

<table>
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<tr>
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<tr>
<td></td>
<td>Before applying webbing, go over the correct steps. Discuss the following questions: How is webbing measured? Where is webbing used? What is the reason for stretching webbing? How tight should webbing be in the seat? Why is webbing always folded before being finally tacked? How far apart should the webbing be placed?</td>
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<td></td>
<td>Apply webbing to the frame following the correct procedures.</td>
<td>All About Upholstering pp. 47-54</td>
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All About Upholstering
pp. 47-54
BEHAVIORAL OUTCOME: 3. Explore the basic construction techniques which involve the springs and burlap foundation.

<table>
<thead>
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<tr>
<td>When the frame is webbed, or a solid base has been built into the frame, the springs may be mounted.</td>
<td>Review the three classifications of upholstered furniture: (1) tight pad seat, (2) tight spring seat, and (3) the overstuffed seat. Answer the following questions: Which classification does not use springs? Which type uses springs only in the seats? Discuss the function of springs. Determine what function the following tools have in the process of fastening springs to the webbing: Shears Stitching twine Button or curved needles Make a study of springs, finding out what influence each of the following items has on the selection of the appropriate springs: Firmness Soft, Medium, Hard Gauge Height Width of coils Number of coils Resiliency Function Determine what kind of spring should be selected for class project. Observe a demonstration showing the techniques for placing and fastening springs to the webbing.</td>
<td>All About Upholstering pp. 35-36</td>
</tr>
<tr>
<td>The function of springs in upholstered furniture is to absorb shock and give added resilience to the seat. Seat springs are made in three degrees of firmness and several sizes.</td>
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</tbody>
</table>

All About Upholstering p. 74
Leaflet: Placing and Sewing the Springs to the Webbing Appendix: Upholstery: Refinishing and Restyling
BEHAVIORAL OUTCOME: 3. Explore the basic construction techniques which involve the springs and burlap foundation. (continued)

The tops of springs are tied for several reasons: (1) to keep them in place, (2) to keep them at the same height, (3) to enable them to move up and down at the same time without getting out of line or pulling the other springs out of position.

Upholsterers have to be good at tying knots. Knots are used constantly to attach the ends of twine and thread, to hold springs and fabrics in place, and to fasten many parts of the chair securely.

The lock knot is used for: (1) fastening ends of twine to fabric or springs, (2) attaching buttons, (3) providing a means of tightening the twine.

Closely woven burlap is used to form a base for the stuffing and to prevent strands of stuffing material from falling through the springs.

Correctly place and fasten springs to the chair webbing

Watch a demonstration showing how to tie the seat springs. Discuss the reasons why the springs are tied.

Using a piece of twine about 30 inches long, and any convenient object or a board with a tack in it, practice making a lock knot until it can be done automatically.

Tie springs in place on chair.

Determine what function burlap serves in covering the springs.

Estimate the size of the piece of burlap needed by following standard measuring procedure.

SUGGESTED CONTENT IDEAS

LEARNING OPPORTUNITIES

RESOURCES

Leaflet:
Placing and Sewing the Springs to the Webbing
Appendix

Upholstery: Refinishing and Restyling
pp. 40-43

Upholstery: Refinishing and Restyling
pp. 43-55

All About Upholstering
pp. 76-80

Estimate the size of the piece of burlap needed by following standard measuring procedure.
BEHAVIORAL OUTCOME: 3. Explore the basic construction techniques which involve the springs and burlap foundation. (continued)

<table>
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<tbody>
<tr>
<td>Burlap is only slip-tacked to the chair because the tacks are to be knocked out after the springs are stretched by the burlap.</td>
<td>Discuss the functions of the following tools used in covering the seat with burlap: Upholstery hammer Shears Wooden mallet Ripping tool Tape measure</td>
<td>Leaflet: Covering the Seat With Burlap Appendix</td>
</tr>
<tr>
<td>After the burlap has been fastened over the springs, the next step in building a rounded spring seat is to form an edge roll along the exposed edges.</td>
<td>Watch a demonstration of how the burlap is slip-tacked to the chair, and then sewn to the springs.</td>
<td>Upholstery: Refinishing and Restyling pp. 62-66</td>
</tr>
<tr>
<td></td>
<td>Measure, cut, slip-tack and sew burlap in place.</td>
<td>All About Upholstering p. 94</td>
</tr>
<tr>
<td></td>
<td>Watch a demonstration of how an edge roll is formed out of the burlap along the exposed edges.</td>
<td>Leaflet: The Burlap Edge Roll Appendix</td>
</tr>
<tr>
<td></td>
<td>Answer the following questions: What function does the burlap rolled edge serve? What equipment is used? How is the burlap kept tight and free of wrinkles? How much stuffing is used? How is the stuffing regulator used? Make the burlap edge roll.</td>
<td></td>
</tr>
</tbody>
</table>
**BEHAVIORAL OUTCOME:** 4. Stuff the muslin cover and choose the proper fabric cover and cover the chair.

<table>
<thead>
<tr>
<th>SUGGESTED CONTENT IDEAS</th>
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<th>RESOURCES</th>
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</thead>
</table>
| The word "stuffing" is a general term used to describe the various fibers used in the filling of upholstered furniture. | Look at a display of the following stuffing materials that are used over the burlap-covered springs. For each material find out its (1) origin, (2) characteristics and (3) usage:  
  Tow  
  Hair  
  Moss  
  Cotton  
  Watch a demonstration of how the stuffing is secured in place, noting how these techniques are done:  
  Picking and fluffing tow  
  Stitching tow in place  
  Weaving and felting hair or moss in thin layers over tow  
  Forming a slight crown at center of seat  
  Applying cotton pad  
  Add stuffing to the burlap cover.  
  Discuss the advantages of using a muslin cover over the stuffing before applying the final cover. Include:  
  Adjusting the padding through the muslin easily  
  Learning the various steps of measuring, sewing, tacking, and finishing on some material that can be thrown away in case of error without costing a great deal of money  
  Getting practice in applying the final cover.  
  Watch the methods used in measuring the chair in order to cut the muslin. Follow each step carefully and measure and cut muslin of correct size. | All About Upholstering  
  pp. 37-39  
  All About Upholstering  
  pp. 97-98  
  Upholstery: Replacing and Restyling  
  p. 77  
  Upholstery: Replacing and Restyling  
  p. 78 |
**SUGGESTED CONTENT IDEAS**

- Observe a demonstration of applying the muslin cover to the chair. Note the correct use of the following tools:
  - Magnetic hammer
  - Tape measure
  - Ripping tool
  - Wooden mallet
- Carefully secure the muslin cover to the chair.

**LEARNING OPPORTUNITIES**

- Discuss the importance of the following factors in the selection of the final fabric cover:
  - **Fabric**
  - Color
  - Texture
  - Pattern
  - Durability
  - Chair
  - Style
  - Size
  - Use
- Write a paragraph describing the type of fabric cover needed for project. Include all of the factors mentioned above.
- In small groups do research on textiles that are suitable for upholstery, finding out the following information: (1) characteristics, (2) how to care for each, (3) what special handling is required, and (4) cost per yard. Report findings to class. Collect swatches of these materials.

<table>
<thead>
<tr>
<th>Textile</th>
<th>Characteristics</th>
<th>Care</th>
<th>Handling</th>
<th>Cost per Yard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tapestry</td>
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<tr>
<td>Matelasse</td>
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<td></td>
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<tr>
<td>Satin</td>
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<tr>
<td>Brocade</td>
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<tr>
<td>Velvet</td>
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<tr>
<td>Tweed</td>
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<td>Frieze</td>
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<td>Damask</td>
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<td>Brocatelle</td>
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<td>Boucle</td>
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<td>Velour</td>
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<td>Sailcloth</td>
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<tr>
<td>Vinyl</td>
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</table>

**RESOURCES**

- Leaflet: *Applying the Muslin Cover*
- Appendix
- All About Upholstering p. 131
BEHAVIORAL OUTCOME: 4. Stuff the muslin cover, choose the proper fabric cover and cover the chair. (continued)

<table>
<thead>
<tr>
<th>SUGGESTED CONTENT IDEAS</th>
<th>LEARNING OPPORTUNITIES</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the beginning upholsterer the best material should have a small or an over-all pattern.</td>
<td>Discuss the disadvantages of using drapery and slipcover fabrics.</td>
<td>All About Upholstering p. 131</td>
</tr>
<tr>
<td></td>
<td>Compare the quality of several samples of upholstery fabrics by using a few simple tests. Feeling for starchiness Hand squeezing fabric and testing for wrinkles Holding material up to light and checking tightness or looseness of weave</td>
<td></td>
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<tr>
<td></td>
<td>Decide on what type of fabric is best for the beginning upholsterer.</td>
<td>Upholstery: Refinishing and Restyling pp. 112-116</td>
</tr>
<tr>
<td></td>
<td>Discuss the purpose of using a layout plan for measuring yardage of fabric needed.</td>
<td>Leaflets: Techniques in Measuring for Fabric Appendix</td>
</tr>
<tr>
<td></td>
<td>Following the master cutting plan procedure, determine the number of yards of material needed.</td>
<td>All About Upholstering pp. 136-139</td>
</tr>
<tr>
<td></td>
<td>After obtaining fabric, lay it out on a long table or work bench, face down, using clean paper to cover top of bench. Transfer cutting plan from paper to fabric using a yard stick and a sharpened piece of chalk. Mark the name or abbreviation on each piece. Cut.</td>
<td>Upholstery: Refinishing and Restyling pp. 123-127</td>
</tr>
<tr>
<td></td>
<td>Examine a display of the different kinds of seams used in upholstery work. With the class make a chart which shows when to use the various kinds of seams.</td>
<td></td>
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</tbody>
</table>
**BEHAVIORAL OUTCOME:** 4. Stuff the muslin cover, choose the proper fabric cover and cover the chair. (continued)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>When the fabric cover is tacked to within a few inches of the posts or arm stumps, fold and cut it to fit around these parts.</td>
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<table>
<thead>
<tr>
<th>LEARNING OPPORTUNITIES</th>
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<tbody>
<tr>
<td>Using scrap materials practice making the different types, sizes, shapes of seams and seam finishes.</td>
</tr>
<tr>
<td>Looking at pictures of upholstered chairs, find out how many types of corners there are which must be fitted with the fabric cover.</td>
</tr>
<tr>
<td>Watch a demonstration of the techniques and methods used to shape the post cut.</td>
</tr>
<tr>
<td>Decide what method must be used to fit the post corner on project chair. Have this method checked by instructor.</td>
</tr>
<tr>
<td>Observe a demonstration of covering the chair seat with the final fabric cover. Make a list of the steps followed and equipment used. Proceed to use the same steps and cover the chair seat.</td>
</tr>
<tr>
<td>Discuss the procedures used for covering the following types of backs: Open backs Closed backs Scroll backs Continuous closed back and arms</td>
</tr>
<tr>
<td>Break up into groups according to type of chair back to be upholstered. As a group, make a list of all the steps which must be followed, in their proper order, and a list of all the equipment needed. Have the list checked first by instructor and proceed to cover the chair back.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RESOURCES</th>
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<tbody>
<tr>
<td>All About Upholstering pp. 136-138</td>
</tr>
<tr>
<td>All About Upholstering pp. 142-145</td>
</tr>
<tr>
<td>Upholstery: Refinishing and Restyling pp. 133-136</td>
</tr>
</tbody>
</table>
SUGGESTED CONTENT IDEAS

The next step in upholstering the chair is to cover the outside of the back.

LEARNING OPPORTUNITIES

Looking at different types of chair arms, discuss the procedures for covering the arms and wings. Consider these points about covering the arms:
- When should burlap be tacked on?
- Should padding be used? Why? Where? When?
- Why should the fabric cover be stretched?
- What equipment is used?

Watch a demonstration on covering the chair arms and wings. Proceed to cover these using correct techniques.

Watch a demonstration of how to cover the back. As each of the following steps is done, write down in outline form the tools and techniques used:
- Tacking welts or brush edging in place
- Tacking burlap or chip board over open cavity
- Piecing together back cover for a sofa
- Centering back cover
- Turning under 5/8" seam and skewering the cover in place along top edge
- Pulling cover down over back
- Folding under sides of back and hand-sewing it to inside cover and outside arm cover
- Tacking lower edge along bottom side of back seat rail

To completely upholster the chair, discuss the function served by a dust panel. A dust panel must be tacked to the bottom to prevent stuffing and dust from falling out.

RESOURCES

All About Upholstering pp. 46-150
Upholstery: Refinishing and Restyling pp. 129-132
All About Upholstering pp. 150-151
Leaflet: Installing the Dust Catcher Appendix
BEHAVIORAL OUTCOME: 4. Stuff the muslin cover, choose the proper fabric cover and cover the chair. (continued)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Look at the material that is usually used for dust panels, cambric, and observe the method used for measuring the fabric. View a demonstration to see how the cambric is properly tacked in place. Tack the cambric in place on bottom of project chair.</td>
<td>All About Upholstering p. 150</td>
<td></td>
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</tbody>
</table>
BEHAVIORAL OUTCOME: 5. Plan and prepare the platform cover.

<table>
<thead>
<tr>
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<th>RESOURCES</th>
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</thead>
</table>
| A platform seat is a seat that is to have a loose cushion. Platform covers are not needed for the pad seat or the tight-spring seat. A platform cover is applied after (1) burlap has been put over the springs, and (2) a spring-edge roll has been secured along the edges to help retain a loose cushion. The platform should be covered with denim or velourette of the same color as the cover fabric. | **Looking at a partly upholstered chair or an illustration, discuss:**
- When a platform cover is used
- The function of a platform cover
- Types of platforms and platform covers
  - Platform between arms at back arm stump
  - Platform in front of arms
  - Platform cover between arms
  - Platform cover for "T" cushion

**Discuss what type of fabric should be used for the platform cover.** Watch a demonstration of how to measure and cut fabric for the platform cover. Observe the techniques used in applying the fabric to the platform.

**Make a list of the work precautions which should be used when applying the material to the cover.**

**Get out the tools used for covering a platform.** Discuss the use of each:
- Upholstery hammer
- Upholstery pins
- Regulator
- Upholstery thread
- Rigging tool
- Tape measure
- Wooden mallet
- Curved needle

**Join the platform cover to the platform.** | All About Upholstering
pp. 209, 141

Leaflets:
Covering a Platform
Appendix
**BEHAVIORAL OUTCOME:** Cover and attach loose wood panels, select and apply trimmings and skirt and make cushions.

<table>
<thead>
<tr>
<th>SUGGESTED CONTENT IDEAS</th>
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<th>RESOURCES</th>
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</thead>
<tbody>
<tr>
<td>Panels are usually used functionally to face arm stumps and back posts that might otherwise be difficult to cover; they may also be used decoratively.</td>
<td>Look at pictures and analyze the difference between the overlay panels, the stuffed panels and the borders. Determine what purpose these panels serve.</td>
<td><em>All About Upholstering</em> pp. 126-128</td>
</tr>
<tr>
<td>To make and cover arm panels the following materials are needed: Upholstery fabric ¼&quot; plywood Cotton Upholstery welt cord Upholstery chalk #3 tacks Finishing nails</td>
<td>Make a list of the materials used to make and/or cover arm panels. Watch a demonstration of how to lower arm panels. Write down all of the equipment that is used.</td>
<td><em>Upholstery: Refinishing and Restyling</em> pp. 136-138</td>
</tr>
<tr>
<td>Trim is functional as well as decorative and must be taken into consideration when planning the final cover.</td>
<td>Look at a display of the following trimmings used on upholstered chairs. Make a chart showing the function and advantages of each type of trim.</td>
<td><em>Leaflet: Covering Panels</em> Appendix</td>
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<tr>
<td></td>
<td></td>
<td><em>All About Upholstering</em> pp. 121-126</td>
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<td></td>
<td></td>
<td><em>Upholstery: Refinishing and Restyling</em> pp. 116-118</td>
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<td></td>
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<td><em>All About Upholstering</em> p. 121</td>
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</table>
BEHAVIORAL OUTCOME: 6. Cover and attach loose wood panels, select and apply trimmings and skirt and make cushions. (continued)

<table>
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<tr>
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<tbody>
<tr>
<td>Edges that might otherwise appear unfinished may be covered with gimp.</td>
<td>Explain the function of the following supplies and equipment used to trim a chair with gimp. Show the method for applying the gimp. Gimp tacks Tape measure Upholstery glue Upholstery hammer #12 tacks Regulator Ripping tool Wooden mallet</td>
<td>Leaflet: <em>Trimming a Chair With Gimp</em></td>
</tr>
<tr>
<td>Decorative nails may be applied in several ways. One is to have the heads touching so a line of them follows the line of the chair. Often the nails are spaced along the edge. The bottom edges of upholstered pieces also may be finished off with skirts made of the cover fabric.</td>
<td>Look at a display of ornamental nails. Classify them according to type of metal, shape and size. Watch a demonstration showing different ways of applying decorative nails.</td>
<td>All About Upholstering p. 126</td>
</tr>
<tr>
<td></td>
<td>Look at illustrations of the various sizes and shapes of skirts. Compare the dimensions and circumferences for the different styles. Discuss how to measure the width of the skirt, including enough width for:  Fastening skirt 3/4&quot; above edge of bottom  Hanging skirt within 1/2&quot; of the floor  Making correct width of hem  1/4&quot; hem for heavyweight fabric  1&quot; hem for middle weight fabric  1-1/2&quot; hem for lightweight fabric  Tacking 5/8&quot; at the top</td>
<td>Upholstery: Refinishing and Restyling pp. 138-139</td>
</tr>
<tr>
<td>To determine the length of fabric needed, measure the distance around the upholstered piece, add the pleat allowance and include 1&quot; extra for closing seam at back corner.</td>
<td>Practice measuring the width and length of the skirt material for several chairs of different sizes.</td>
<td>All About Upholstering pp. 123-125</td>
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</tbody>
</table>
**BEHAVIORAL OUTCOME:** 6. Cover and attach loose wood panels, select and apply trimmings and skirt and make cushions. (continued)

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</thead>
<tbody>
<tr>
<td>Discuss the importance of accuracy in stitching, marking and cutting, and box pleating as it applies to sewing the skirt to the chair.</td>
<td>Watch a demonstration showing how to sew the skirt to the chair. List the steps in order, and list the equipment used in each step.</td>
<td>All About Upholstering pp. 114-116, 217</td>
</tr>
<tr>
<td>The procedure is the same for making any cushion regardless of size or shape.</td>
<td>Compare the loose cushions made with cotton to those made with foam rubber and poly-foam. Answer the following questions: Are the covers cut and sewn in the same manner? How are the covers filled?</td>
<td>Upholstery: Refinishing and Restyling pp. 96-98</td>
</tr>
<tr>
<td>Discuss practice measuring cushions of different sizes to learn the techniques for measuring the fabric. Observe a demonstration of how to sew the cushion cover. Tell how each of the following tools is used: Curved needle Regulator Wax Upholstery pins Stitching twine Shears Cushion stretcher Tape measure</td>
<td>Watch a demonstration that shows the techniques used in filling the cushion by (1) hand, (2) hand irons, and (3) filling machine. Discuss the following questions about making cushions: Why must a cushion be made extra firm? What is used to give firmness to the edge? Why is cotton placed in the front corners of the muslin cover? How much allowance should be made for a foam filling? What is the best type of foam cushion filling?</td>
<td>Leaflets: Making a Cushion Appendix</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY

BOOKS


PERIODICALS


SERIES
THE PAD SEAT

BEST COPY AVAILABLE

TIGHT-PAD
CHAIR FRAME

FRAME WEBBED
SERIES I
THE PAD SEAT

STUFFING STITCHED TO BURLAP

After the stitching, more loose stuffing is added in the center of the seat and back to build up a crown. The cover fabric cannot be drawn uniformly taut over surface lacking this crown.
SERIES I
THE PAD SEAT

COTTON OVER STUFFING

MUSLIN COVER
SERIES I
THE PAD SEAT

FINAL COVER

APPLYING BACK COVER
SERIES I
THE PAD SEAT

TACKING CAMBRIC TO BOTTOM

(a)
SERIES II
THE TIGHT-SPRING SEAT

TIGHT SPRING CHAIR FP

FRAME WEBBED
SERIES II
THE TIGHT-SPRING SEAT

SPRINGS SEWED AND TIED

EDGE ROLL BUILT UP AROUND FRONT EDGE OF SEAT TO ARM STUMPS AND AROUND BACK TO ARMS
SERIES II
THE TIGHT-SPRING SEAT

STUFFING STITCHED TO BURLAP

COTTON OVER STUFFING
SERIES II
THE TIGHT-SPRING SEAT

MUSLIN COVER

BACK FABRIC CUT AND SEWED

ARM FABRIC CUT AND SEWED

SEAT FABRIC CUT AND SEWED

FINISH COVER CUT AND SEWED
SERIES II
THE TIGHT-SPRING SEAT

HAND SEWING OF ARMS

FINISH COVER APPLIED

ONE LAYER OF COTTON

HAND SEW ALONG HERE
SERIES II

THE TIGHT-SPRING SEAT

APPLYING COVER TO BACK
AND OUTSIDE ARM

TACKING CAMBRIC TO BOTTOM
SERIES II
THE OVERSTUFFED SEAT

EASY CHAIR FR
3" MINIMUM
8" TO 11"

FRAME WEBBED
SERIES III

THE OVERSTUFFED SEAT

BURLAP OVER WEBBING ON BACK

INSTALLATION OF SPRINGS
SERIES III

THE OVERSTUFFED SEAT

BURLAP OVER SPRINGS

EDGE TREATMENT
SERIES III

THE OVERSTUFFED SEAT

STUFFING STITCHED TO BURLAP

COTTON IN PLACE
SERIES III

THE OVERSTUFFED SEAT

MUSLIN COVER

Note that the muslin is stitched down around the front edge of the seat to keep the springs down well back of the seat.

COVER CUT AND SEWED
SERIES III
THE OVERSTUFFED SEAT

CUSHION CONSTRUCTION

SEWED COVER WITH OPEN EDGES
READY TO BE STUFFED

NOTES: The above two drawings illustrate the method of stuffing the cushion. The stuffing is placed in the front of the cushion while being rolled into the final cover with hand tools or a stuffing machine. Any excess stuff is then placed back to the T ends at the front of the cushion later.

MARSHALL UNIT COVERED WITH COTTON
READY TO BE STUFFED INTO COVER

INTERSPRING (MARSHALL UNIT)
FOR CUSHION

FINISHED COVER

KICK PLEAT SKIRT

APPLIED PANEL WITH COVER

HAND SEW EDGES
The following is a list of equipment often used in upholstery. Those items provided in the department are designated with one asterisk. The underlined items are essential in upholstery and are required of each student. Those with two asterisks are not required but are recommended for easier working.

### I. Hand tools
1. Magnetic hammer
2. Rubber mallet
3. Regular hammer
4. Shears
5. Curved needles
6. Straight needles
7. Webbing stretcher
8. Regulator
9. Ripping tool
10. Pliers
11. Skewer pins
12. Tape measure
13. Rulers
14. Chalk
15. Knife
16. Stuffing irons
17. Screwdriver
18. Power staplers
19. Spring clip clenchers
20. Edge wire clip pliers
21. Metal webbing stretchers
22. Special chisels and pliers for removing staples and nails

### II. Basic materials
1. Webbing
2. Burlap
3. Muslin
4. Cambric
5. Fabric
6. Cotton felts
7. Rubber products
8. Moss
9. Sisal
10. Curled hair
11. Kapok
12. Down
13. Springs
14. Tacks
15. Twine
16. Thread
17. Gimp
18. Welt cord
19. Cardboard tacking

### III. Equipment and Machines
1. Long tables
2. Sewing machine and attachments
   a. Needles
   b. Bobbins
   c. Thread
3. Button machine and attachments
4. Cushion machine
5. Upholsterer's bench
Covering Upholstery Buttons

Introductory information:

Covered buttons will help to hold the cotton or filling in place. They will also greatly enhance the beauty of furniture.

Supplies:

- Button twine
- Upholstery buttons
- Upholstery fabric
- Paper

Equipment:

- Button machine
- Button dyes
- Shears

Safety and precautions:

1. Cut upholstery fabric large enough to overlap the button top.
2. Plastic buttons will sometimes require paper to cover the button top.

Procedure or steps:

1. Select the same size button and button die.
2. Place the bottom die in the bottom hole.
3. Place the bottom of the button with the shank down in the hole of the bottom die.
4. Turn the top die over, place it on the upholstery fabric and cut to size.
5. Place the fabric wrong side up on the top die.
6. Lay the top of the button on the upholstery fabric.
7. Push the top of the button and the fabric into the hole in the die.
8. Lay the top die on top of the bottom die and press the button together by lowering the hand layer two or three times.

References:

None

Questions:

1. Why are the die sizes so important?
2. Where should the bottom die be placed?
3. What side should the upholstery fabric be placed on the top button die?
4. Why must the hand lever be lowered two or three times?
Using the Cushion Machine to Fill a Cushion

Introductory information:
When a cushion is filled by using a cushion machine, it will hold its shape longer and will have a neater appearance than when it is filled by hand. Less time and skill are required to fill cushions when using the machine.

Supplies:
- Upholstery cotton
- Springs
- Foam rubber
- Cushion cover
- Poly-foam

Equipment:
- Cushion machine
- Tape measure
- Shears

Safety and precautions:
1. Safety lock must be in place before the cushion is filled.
2. Plunger must be in the proper position before the cushion can be filled.

Procedure or steps:
1. Open and fold back both sides of the machine.
2. Push the plunger to the rear of the machine until it hits the stop.
3. Open the machine to the desired width of the cushion by turning the handle counter-clockwise.
4. Place one layer of cotton in the pan allowing 5" on each end for overlap.
5. Place and center the cushion on top of the cotton.
6. Place and center one layer of cotton on top of the cushion allowing 5" of overlap on each end.
7. Lay one strip of cotton 5" wide and the length of the cushion on each side.
8. Close the pan and set the safety lock.
9. Compress the cushion by turning the handle clock-wise just enough to slip the cushion cover over the front of the pan.
10. Slide the cushion over the pan until the cushion boxing is flush with the front of the machine.
11. Using both hands, one on either side of the cushion cover, hold the cushion as tight as possible.
12. Fill the cushion cover by pressing up and down on the foot pedal.
13. Pull the cushion toward the operator to remove it.

Reference:
Bergen, John
All About Upholstering
First Edition, 1952
Pages 119-120

Questions:
1. Why must the safety lock be in place before the cushion can be stuffed?
2. In what position does the plunger have to be before the cushion can be stuffed?
3. What would happen if the cotton overlaps the plunger?
Dismantling a Chair

Introductory Information:

This is a very important step in upholstery. These steps are a must for the student. If these methods are followed it will make the job of measuring furniture for the upholstery fabric much easier.

Supplies:

None

Equipment:

- Ripping tool
- Wooden mallet
- Upholstery hammer
- Pliers
- Shears

Safety and precautions:

1. Do not drop ornamental nail heads on the floor.
2. Use pliers when removing old welt cord and tacking strips.

Procedure or steps:

1. Remove skirts, gimp, double welt cord, front and side panels.
2. Remove the lower boxing and the dust catcher.
3. Remove blind stitching twine, and tacks from outside of back.
4. Remove outside of back.
5. Remove tacks from material or pull strips from the inside of the back, bottom. **DO NOT REMOVE INSIDE OF BACK.**
6. Remove blind stitching twine and tacks from right and left outside of arms.
7. Remove right and left outside of arms.
8. Remove tacks from material or pull strips from the right and left inside of arm, bottom. **DO NOT REMOVE RIGHT AND LEFT INSIDE OF ARMS.**
9. Remove the right and left outside of wings.

**NOTE:** Dismantling process is now completed. The chair, as it stands now, is ready to be measured for the upholstery material.

Reference:

None

Questions:

1. Why should the inside of the back be left on?
2. Why are both outside of arms removed?
3. What is the purpose of dismantling a chair in this manner?
Placing and Sewing the Springs to the Webbing

Introductory Information:

The size of springs used for a particular type of chair has been standardized.

The springs should not be less than 2" above the seat rail when tied down.
They should not be too springy, yet not so depressed that they will lose their
springiness, thereby forming a hard seat and putting excessive strain on
the twine holding them.

Supplies:

Springs

Equipment:

Shears
Stitching twine
Button or curved needle

Safety and precautions:

1. Place as many springs as the seat will hold, yet spacing them so
   they will not touch each other.
2. Keep legs clear when pulling the button needle through the webbing.

Procedure or steps:

1. Place the springs in rows.
2. From the underside of the webbing, force the needle through and
   up as close as possible to the outside edge of the bottom coil of
   the spring.
3. Push the needle down and through the webbing on the inner side of
   the coil, forming a loop around it. Tie a skip knot underneath.
4. Make 3-4 stitches for each spring.
5. Arrange the stitches around the spring in such a manner that the
   third stitch will be close to the next adjoining spring.
6. Repeat this procedure until all the springs are firmly secured.
7. Make a double knot in the twine when the final stitch has been made
   to secure the end of the twine to the spring.

Reference:

Bergen, John
All About Upholstering
First Edition, 1952
Pages 76-77

Questions:

1. Why should the springs be placed in rows?
2. Why should the springs not touch each other?
3. What would be the correct amount of springs in a given seat?
Covering the Seat With Burlap

Introductory information:

Closely woven burlap is used to form a base for the stuffing and to prevent strands of stuffing material from falling through the springs.

Supplies:

- Upholstery burlap
- #3 tacks
- Upholstery chalk

Equipment:

- Upholstery hammer
- Wooden mallet
- Ripping tool
- Shears
- Tape measure

Safety and precautions:

1. Tack the burlap in the center of each seat rail so as not to split the rail.

Procedure or steps:

1. Lay the burlap over the springs, allowing a 2" overhang on all sides.
2. Beginning at the front turn the edge of the burlap over and slip-tack to the seat rail.
3. Stretch the burlap to the rear of the seat, turn the edge of the burlap over and slip-tack it across the rear seat rail.
4. Stretch the burlap to one side of the seat, turn over and slip-tack it along the side seat rail. Repeat this process on the other side of the seat.
5. Notch the burlap to fit the corner posts, turn all corners over and slip-tack.
6. When burlap is in place, drive all tacks home.

Reference:

Bergen, John
All About Upholstering
First Edition, 1952
Pages 91-92

Questions:

1. Why is a 2" overlap allowed when measuring for the burlap?
2. When should the burlap be cut to fit the post corners?
3. How tight should the burlap be pulled?
THE BURLAP EDGE ROLL

EDGE ROLL TACKED

STITCHING OF BURLAP STRIP

LARGE EDGE ROLL

TAPERED EDGE ROLL
Applying the Muslin Cover

Introductory Information:

The purpose of a muslin cover is largely that of holding the stuffing in place. By using a muslin cover, it can readily be seen whether the stuffing is evenly distributed or needs redistributing through the use of a stuffing regulator poked through the muslin.

Supplies:

Muslin
#3 tacks

Equipment:

Magnetic hammer
Shears
Tape measure
Regulator
Ripping tool
Chalk
Wooden mallet
Ruler

Safety and precautions:

1. Do not pull muslin too tight as it will cause pull marks.
2. Slip-tack cover first, then when stuffing is in place and all pull marks are cut, drive tacks home.

Procedure or steps:

1. Measure from front to back, then side to side and allow 3" all around for the stuffing.
2. Cut the muslin.
3. Slip-tack the muslin in place by tacking at all four centers.
4. Pull snug and slip-tack towards all corners.
5. Flat fold square corners.
6. Pleat round corners.
7. Remove pull marks by releasing tension.
8. Regulate and drive tacks home.

Reference:

Bergen, John
All About Upholstering
First Edition, 1952
Pages 61-62

Questions:

1. What makes pull marks?
2. What is the purpose of a muslin cover?
3. How are pull marks removed?
Desired results and objectives:

1. To obtain exact measurements of each section of the chair, allow one to two inches more over-all for sewing and tacking.

2. These measurements are then laid out into squares on a piece of paper to determine the necessary yardage for the chair.

3. This layout is then copied onto the fabric ready to be cut.

Information:

1. Seat:
   a. Reversible cushion
   b. Solid seat
   c. Attached cushion
2. Cushion boxing or seat boxing
3. Platform and nosing
4. Extra nose or boxing
5. Inside arms
6. Arm panels or boxing
7. Inside wings
8. Inside back
9. Inside back panels or boxing
10. Inside back cushion
11. Back cushion boxing
12. Outside wings
13. Outside arms
14. Outside back
15. Skirts
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</table>
Techniques in Measuring for Fabric (continued)
Installing the Dust Catcher

Introductory information:

The final operation in upholstering a piece of furniture is that of covering the bottom of the furniture with cambric. Cambric, originally a fine linen fabric, is now made from cotton. It is used to cover the bottom of the finished seat to keep dust from entering the furniture and particles of the stuffing from falling to the floor.

Supplies:

Cambric
#3 tacks

Equipment:

Tape measure
Wooden mallet
Upholstery hammer
Shears
Ripping tool

Safety and precautions:

1. Place a protective cover over the horses to keep the upholstery fabric from becoming soiled.

Procedure or steps:

1. Place a protective cover over the upholstery horses.
2. Place furniture on the horses upside down.
3. Measure the length and width of the bottom area to be covered.
4. Add 2" all around and cut.
5. Starting from the front center after the edge is turned under, drive in one tack.
6. Stretch the cambric tight to the back. Turn under and drive in the second tack.
7. Stretch the cambric to the right side of the chair bottom, turn under and drive in a tack. Repeat this step for the left side of the chair bottom.
8. Drive tacks in approximately 1" apart.
9. Cut and trim as needed.

Reference:

Pope, Blanche Romick
Upholstering Home Furniture
Page 157

Questions:

1. Why should a protective cover be placed over the upholstery horses?
2. What purpose does the cambric serve?
3. At what point should one start to tack the cambric?
Covering a Platform

Introductory information:

The platform in back of the spring edge roll should be covered with platform fabric if the student wishes to save fabric. Otherwise, the platform may be covered with the same fabric as the furniture.

Supplies:

<table>
<thead>
<tr>
<th>Platform or upholstery fabric</th>
<th>Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3 tacks</td>
<td>Stitching twine</td>
</tr>
</tbody>
</table>

Equipment:

<table>
<thead>
<tr>
<th>Upholstery hammer</th>
<th>Wooden mallet</th>
<th>Upholstery pins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulator</td>
<td>Curved needle</td>
<td>Sewing machine</td>
</tr>
<tr>
<td>Ripping tool</td>
<td>Wax</td>
<td>Upholstery thread</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tape measure</td>
</tr>
</tbody>
</table>

Safety and precautions:

1. Be sure to make an allowance for the stuffing before the fabric is cut.
2. Stay-tack platform until it is cut and pulled.
3. Be sure that seam is hand sewn to the burlap.

Procedure or steps:

1. Measure and cut a banding long enough to reach from the back edge of the spring edge roll forward to the spring edge wire. Allow \( \frac{1}{2} \)" at each side for the seams.
2. Cut band wide enough to permit tucking in around the ends of the spring edge rolls at the arm stumps.
3. Fit, miter, and pin the band at the corner.
5. Sew a welt to the bottom edge of the band, letting the face of the fabric cover hang down over the seat rails.
6. Sew the band to the platform fabric.
7. Place cotton over the platform, center the cover on the seat.
8. Pin the front edge of the platform fabric to the back edge of spring roll.
9. Slip-tack the fabric to the top edge of the side and back rails.
10. Hand sew the front seam of the platform fabric to the back edge of the spring edge roll.
11. Pull the banding over the roll and pin the seam of the welt to the spring edge wire.
12. Lock stitch the welt seam to the burlap over the spring edge wire.
13. Make cuts on the platform fabric pull through, pull tight, and drive the tacks home.

Reference: Bergen, John
All About Upholstering
First Edition, 1952
Pages 100-102

Questions:

1. Why should the platform be hand stitched to the burlap?
2. Explain why the corners are mitered.
Covering Panels

Introductory information:

Panels are usually for functional purposes to face arm stumps and back posts that might otherwise be difficult to cover, but they may also be used decoratively. Whether or not a panel lies with the grain of the material or on a bias depends on the position of the panel when installed.

Supplies:

- Upholstery material
- Cotton
- Upholstery chalk
- Upholstery welt cord
- #3 tacks
- Finishing nails

Equipment:

- Magnetic hammer
- Ripping tool
- Wooden mallet
- Tape measure
- Regulator
- Shears

Safety and precautions:

1. Do not drive finishing nails through plastic.
2. Be extremely careful when using the regulator on fabric.

Procedure or steps:

1. Cut the fabric at least 3" bigger all around to allow for the padding.
2. Place and tack one or two layers of cotton on the panel.
3. Place the fabric over the panel, then turn the panel upside down.
4. Starting in the center of one side, fold the material over the panel and slip-tack it.
5. From the center work to the top, then to the bottom, slip-tacking it.
6. Pull fabric tight and repeat this procedure on the other side.
7. Notch fabric both top and bottom before the corners are made.
8. Drive tacks home.

Reference:

Berger, John
All About Upholstering
First Edition, 1952
Pages 126-128

Questions:

1. How much bigger should the fabric be cut to allow for the padding?
2. Why should the fabric be notched before the corners are made?
Trimming a Chair With Gimp

Introductory information:

The primary purposes of using gimp on a chair are to prevent fraying of the upholstery material and to enhance the appearance of the chair.

Supplies:

- Gimp
- Upholstery glue
- Gimp tacks
- #12 tacks

Equipment:

- Shears
- Ripping tool
- Upholstery hammer
- Tape measure
- Regulator
- Wooden mallet

Safety and precautions:

1. Gimp must be started by tacking the wrong side up.
2. Using too much glue will cause the gimp to become stiff when dry.
3. Be sure all tacks are covered.

Procedure or steps:

1. Tack the end of the gimp wrong side up to the frame and turn the gimp over.
2. Apply the upholstery glue to the back of the gimp, smooth the glue evenly with finger.
3. Place the gimp along the edge of the frame being careful not to stretch it.
4. Slip-tack the gimp about 1\(\frac{1}{2}\)" from the point where the glue ends.
5. Fold and overlay the gimp at the corners then glue to insure a neat corner.
6. Join the free end of the gimp to the starting point by turning under one-half inch and glue in place.

Reference:

Bergen, John
All About Upholstering
First Edition, 1952
Pages 122-123

Questions:

1. How should the gimp be started?
2. Should the gimp be stretched?
3. Why should the gimp be slip-tacked?
Making a Cushion

Introductory information:

Before the outside of arms and the outside of the back are installed, the cushion is made. Making the cushion at this time will enable the student to add more stuffing to the chair if the cushion does not fit.

Supplies:

- Upholstery thread
- Upholstery chalk
- Upholstery material
- Upholstery welt cord

Equipment:

- Sewing machine
- Curved needle
- Wax
- Stitching twine
- Cushion stretcher

Cotton
- Foam rubber
- Poly-foam

Regulator
- Upholstery pins
- Shears
- Tape measure

Safety and precautions:

1. Before cutting the material make sure the measurements are correct.
2. Be sure both sides of the cushion are cut so as to be reversible.

Procedure or steps:

1. Measure the length and width of the seat, then cut one piece of fabric 2" bigger all around.
2. Lay the fabric right side up flat on the seat.
3. Hold a pencil or chalk vertically to the fabric and with the back of the fingers flat against the inside arms and inside back of the chair, mark the fabric to the shape of the seat.
4. Cut the fabric ½" outside of the chalk mark to allow for the welt cord.
5. Reverse the fabric, cut the other side of the cushion, matching the pattern.
6. For the cushion boxing, measure the old boxing or the cushion, and add 1" to the width.
7. Cut welt cord strips ½" wide, use as many strips as needed to circle the cushion twice.
8. Sew the strips together diagonally on the machine as shown in Figure 1:
   a. First strip face up.
   b. Second strip over or face down.
   c. Sew from top left hand corner to bottom right hand corner.

continued
Making a Cushion
continued

Fig. 1

9. Sew the welt cord, the welt cord strips and one side of the cushion together in one operation.
10. Stop about 2" on each side of the joining point.
11. Smooth the welt covers snugly in place at the joining point, sew them together with a flat seam.
12. Cut the welt cord for the ends to butt together at the joint.
13. Fold the cover over the welt cord and complete the sewing. Repeat this operation on the other side of the cushion.
14. Cut two lengths of boxing, one centered along the front, the other along the back of the cover.
15. Sew the boxing to the welted top cover, joining the ends of the boxing preferably at the back.
16. Pin the boxing and the bottom cover together at all corners.
17. Sew the boxing and bottom cover together along the sides and front, aligning the corners.

NOTE: Leave the back of the cushion open for stuffing.

References:
1. Bergen, John
   All About Upholstering
   First Edition, 1952
   Pages 114-120
2. Pope, Blanche Romick
   Upholstering Home Furniture
   Page 309

Questions:

1. Why should measurements be double checked before cutting the fabric?
2. Why is it so important that the welt cord strips be cut 1½" wide?
3. How would a cushion boxing be measured?