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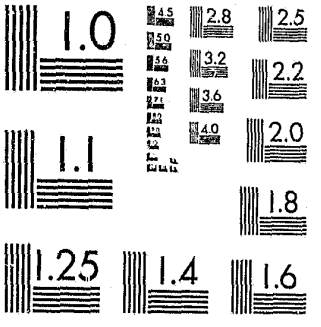


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**National Institute of Law Enforcement and Criminal Justice**
**Law Enforcement Assistance Administration**
**United States Department of Justice**
**Washington, D.C. 20531**

Date Filmed

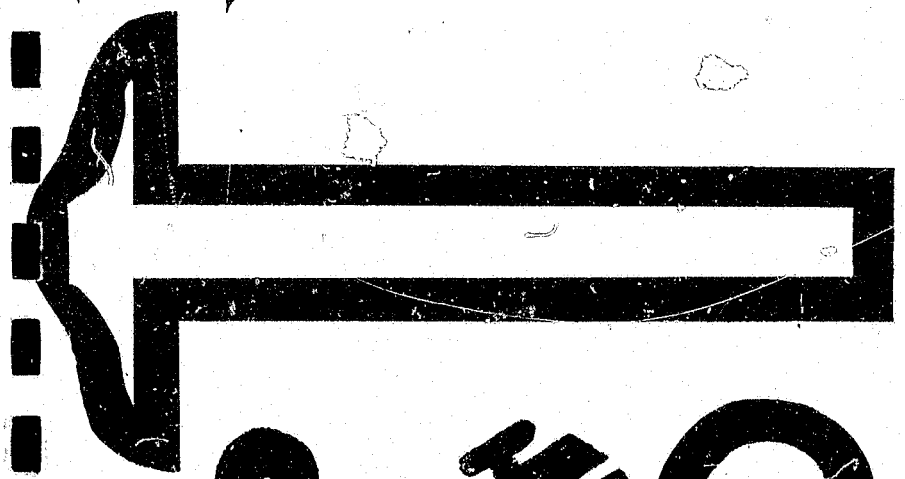
2-20-80

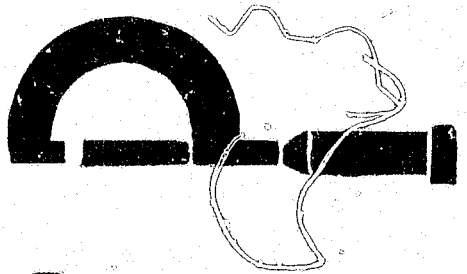
# THE HANDBOOK FOR

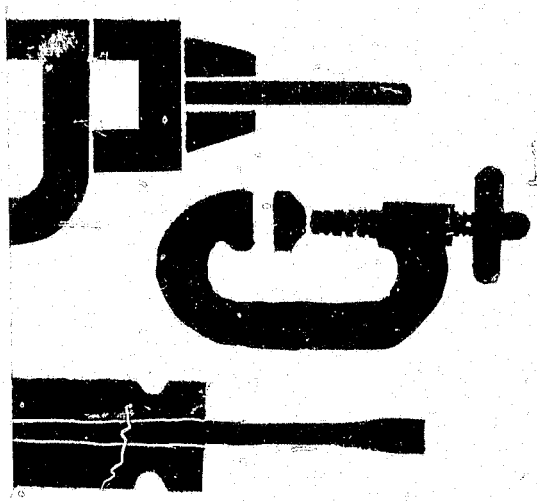
# vocational education

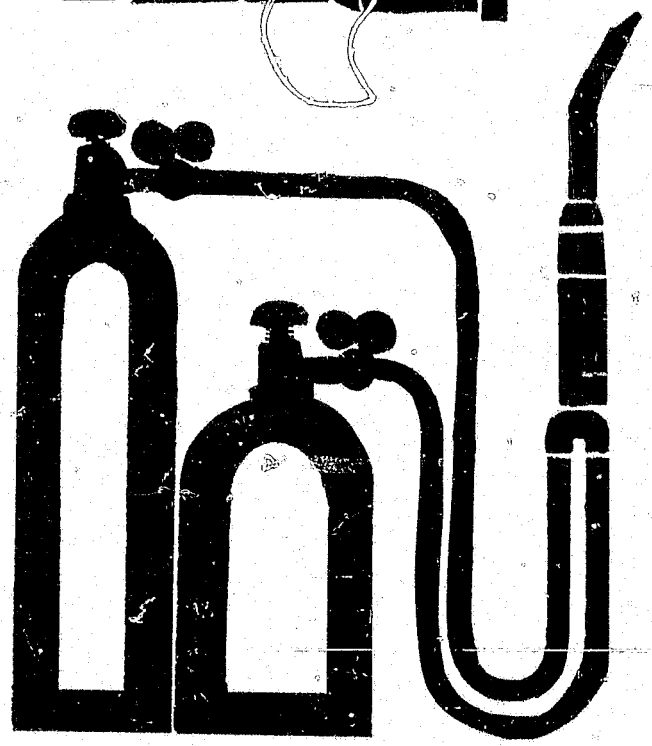
## N.H. STATE PRISON
TREATMENT DIRECTORATE

1978









# HANDBOOK FOR VOCATIONAL EDUCATION

NEW HAMPSHIRE STATE PRISON
Concord, New Hampshire

OCTOBER 1978

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"The Handbook for Vocational Education"

# GOALS OF VOCATIONAL EDUCATION

1. Inmates enrolled in a vocational education program will learn a trade so that he can enter the job market, advance in the trade, and adapt to the changing world of work.

2. Each student will be provided with an individual plan; designed around his interests, abilities and needs.

3. Students will learn to appreciate their own worth and what he can contribute to society.

4. Students will learn about the opportunities in the world of work.

5. Students will be encouraged to get a job and go on to school.

6. Students can take vocational courses for personal growth or to learn vocational skills.

# HANDBOOK FOR
# VOCATIONAL EDUCATION

## What is Vocational Education?

We all must work to earn a living. Would you like a good job? A job that pays well, that you are happy with?

Vocational Education will provide you with the skills that are required of a worker in a trade. With the skills learned in vocational education classes and a good job, you will have a solid future.

## The Purpose of Vocational Education

The purpose of vocational education at the New Hampshire State Prison is to provide you with the classes and shops to learn how to work at a trade. Working at a trade is not just how to do the job, but learning work habits, attitudes, and understanding what a good worker needs to know. This will allow you to enter a trade and progress in useful, satisfying work.

# GOALS OF VOCATIONAL EDUCATION

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2. Each student will be provided with an individual plan; designed around his interests, abilities and needs.

3. Students will learn to appreciate their own worth and what he can contribute to society.

4. Students will learn about the opportunities in the world of work.

5. Students will be encouraged to get a job and go on to school.

6. Students can take vocational courses for personal growth or to learn vocational skills.

## ORIENTATION

Orientation will include a general overview of the Vocational Education programs and distribution of the Handbook for vocational education. This meeting will be held in the south wing of the prison during the reception period. Programs currently offered will be explained and questions answered. Individual attention will be given to each inmate's occupational background, educational achievements, and personal goals. At this time, individual counseling and guidance in an appropriate area of interest will be offered.

## WHO CAN APPLY?

All inmates that are classified Minimum or Medium custody and are housed within the prison may apply for vocational education programs or courses.

Assignment to a vocational education program is considered full-time work.

## HOW TO APPLY

Those inmates that have not been assigned to a vocational education program by the Classification Board may request a work change.

## TRAINING PLAN

Each inmate will have a training plan designed for him by the education staff based on his needs and interests. The training plan will outline the courses that the inmate will take during his stay at the prison.

The courses outlined in the plan will include both vocational education and academic courses, related instruction and work experience.

## TRAINING AGREEMENT

Each inmate must understand and agree to the responsibilities that are part of the training plan.

## CERTIFICATES

All students that complete the required courses in a program will receive from the State Division of Vocational-Technical Education a certificate; stating the hours of instruction and the occupation that he was trained to perform.

## JOBS AND EMPLOYMENT

It is recommended by the vocational education staff that all inmates that do not have jobs and employment skills complete the "Jobs and Employment Training Course" as part of their vocational training plan.

## SCHEDULING

A schedule is set up for each inmate based on his particular program. The division of time between work, vocational training and academic education is arranged on a monthly basis. The division of time between vocational education and vocational hands-on training is arranged on a daily basis between the Industrial Arts teacher and the shop supervisor.

What Vocational Programs* are offered?

| | |
|---|---|
| Auto Body Repair | Food Service |
| Auto Mechanics | Wood Working |
| Small Engine Repair | Graphic Arts |

Jobs and Employment Training

*Includes two hours or more of classroom work a week.

What Vocational Courses are Offered?

A student may take individual courses that are part of a program. Course descriptions are included in this manual for each program.

A student does not have to learn all of the jobs in a program, but may choose to learn one or more. For example a student wants to learn meatcutting. He can learn through the Food Service program by working as a butcher and going to classes, but does not have to take the entire program.

Definitions:

Related Instruction - skills, processes, knowledges required for all occupations in a trade area.

Vocational Instruction - specific skills, processes, knowledges required for a specific occupation.

Academic Instruction - 1.) courses that support specific skills, processes, knowledges required for a specific occupation;

2.) courses that provide general skills, processes, knowledges required for all occupations.

Pre-Vocational Training Courses

| | |
|---|---|
| Gas Welding and Cutting | Blueprint Reading (Mechanical Drawing) |
| Use of Service Manuals | Usng Measuring Tools |
| Using Hand Tools | Shp Safety |

## EVALUATION AND ASSESSMENT

There are a variety of tests that may be used to evaluate and assess the individual to assist him and the education staff with the task of selecting the proper training program. The tests are used to determine the inmate's interests, aptitudes and performance.

The evaluation and assessment tests are given by the Vocational Rehabilitation Unit assigned to the prison.

Tests given for evaluation and assessment purposes are:

1. GATB (General Aptitude Test Battery)

   This battery provides nine separate scores in the following areas: intelligence, verbal, numerical, spatial, form perception, clerical perception, motor coordination, finger dexterity, and manual dexterity.

2. CAI (Career Assessment Inventory)

   These inventories are considered as attempts to quantify interests or provide a score which describes an inmate's feelings of like/dislike to areas of interest.

3. Bennett Mechanical Comprehension

4. Minnesota Importance Questionnaire

# SCHEDULES

| Schedule | | Hours | |
|---|---|---|---|
| W | Full time work | 0800 - 1100 | 1300 - 1500 |
| W1 | Part time work<br>Part time school | 0800 - 1100 | 1300 - 1500 |
| W2 | Part time school<br>Part time work | 0800 - 1100 | 1300 - 1500 |
| P | Four hours work<br>One hour school | | |
| S | Full time school | 0800 - 1100 | 1300 - 1500 |
| V | Full time vocational training | 0800 - 1100 | 1300 - 1500 |
| V1 | Part time vocational training<br>Part time school | 0800 - 1100 | 1300 - 1500 |
| V2 | Part time school<br>Part time vocational training | 0800 - 1100 | 1300 - 1500 |

# STATE OF NEW HAMPSHIRE

## INTER-DEPARTMENT COMMUNICATION

FROM Everett I. Perrin, Jr.
Warden

DATE 12 December 1977

AT (OFFICE)

SUBJECT Work Change Requests

TO All Concerned

1. In order to simplify and expedite requested job changes which do not have a custody classification change, the following procedure is established:

   a. An inmate who desires a job change should make up a request slip showing the job he wants to leave and the job he wants to go to. This slip should be brought, or sent, to his old job supervisor, his new job supervisor, and the Major's office. If all involved parties agree, the change will be made by Classification without a work board action.

   b. If there is not agreement, the slip should be sent to Classification with the comments of the involved persons and a work board hearing will be scheduled.

2. This procedure should help to streamline administrative routines.

EIP/NEP/rt

ATTACHMENT I

COOPERATIVE VOCATIONAL TRAINING PLAN

NEW HAMPSHIRE STATE PRISON

TRAINEE: John Noe OCCUPATIONAL GOAL: Cook

SHOP: Prison Kitchen SHOP SUPERVISOR: Richard Newsky

TRAINING SUPERVISOR: Clayton Longuer TRAINING PERIOD: 10/1/78 TO 6/1/79

| Skills Required | Related Instruction |
|---|---|
| (Work Experience) Objectives | (School) Objectives |

ON-THE-JOB

1. To master the skills, processes, and knowledge that is required to perform as a Cook's Helper as identified on the back of this plan.
2. To perform the work and duties in a helpers capacity and assists an experienced Cook with the tasks identified in the job description as outlined on the back of this plan.
3. To perform other work and duties as assigned by the kitchen steward.

RELATED INSTRUCTION

1. Food Service Program
   - Unit I, What is a Food Service Employee?
   - Unit II, Sanitation
   - Unit III, Safety
   - Unit IV, Nutrition
   - Unit XII, Customer Service Techniques

VOCATIONAL INSTRUCTION

- Unit V, Small Equipment
- Unit VI, Large Equipment
- Unit VII, Large Equipment for Cooking Food
- Unit VIII, Food Preparation
- Unit IX, Cold Food
- Unit X, Hot Food
- Unit XI, Bake Work Station
- Unit XIII, Storeroom Control

ACADEMIC COURSES RECOMMENDED

- Job Related Math
- Job Related English
- Job Related Science

TRAINEE: Signed-John Noe SHOP SUPERVISOR: Signed Richard Newsky

TRAINING SUPERVISOR: Clayton Longuer DATE: 10-6-78

COOK AND COOK'S HELPER - UNIT I - XI

Job Description: Studies menu to insure timely preparation, follow recipe when preparing each food item observing the proper cooking time and temperature required, and use left overs promptly to reduce waste. Clean and sharpen knives, and clean work tables and grills.

Special Requirements: Must know and observe the basic rules of personal hygiene, kitchen sanitation and safety regulations.

Skills Required (Kitchen Lab)

1. Work Relationships
2. Job descriptions
4. Sanitation when preparing and serving food
5. Work habits
6. Personal characteristics

Human Relations, Communication

1. Identify levels of training and experience
2. Develops and maintains good personal and public relations
4. Take part in interview and tour of facility
5. Checklist for grooming for job
6. Personal characteristics, work habits
8. Works cooperatively with employees

Sanitation

1. Prevent food spoilage
2. Demonstrate proper techniques for handling: food, equipment and utensils
3. Know 3 causes of F.B. disease
4. Know diswashing procedure by machine and by hand
5. Practice correct procedures for cleaning and maintenance of: work areas,walls, floors, and garbage, insect/rodent control
6. Practice sanitation when serving food

Safety

1. Report safety hazards
2. Develop healthy work habits
3. Use fire fighting equipment
4. List safety regulations for food establishments
5. Identify causes of accidents and injuries: strainges, cuts, burns, falls, kitchen fires, accidents with equipment

Equipment

1. Sanitation and safety in use of: coffee urn, food warmer, mixer attachments, refrigerators, freezers, deep fat fryer, grill, steam table, trunnion kettle, steam cooker, steam boiler, Convex oven, slicer, small equipment

Basic Preparation

1. Follow recipes (steps)
2. Adjust recipes (size)
3. Set up standardized recipes
4. Accuracy in measuring

Meal Preparation

1. Beverages
3. Cookies
5. Casserole dishes
6. Desserts
7. Egg cookery
8. Fish
9. Fruit
10. Meat
12. Poultry
14. Salads
15. Sandwiches
16. Soup
17. Vegetables

Nutrition

1. Importance of nutrition

Menu Planning

1. Basic principles of menu planning
2. Menu terms
3. Menu for types of food service: counter or cafeteria

# COOPERATIVE VOCATIONAL TRAINING AGREEMENT

## NEW HAMPSHIRE STATE PRISON

TRAINEE: John Doe CELL #: 2020

JOB TITLE: Cook's Helper SHOP:

SHOP SUPERVISOR: Richard Newsky TRAINING SUPERVISOR: Clayton Longuer

TRAINING BEGAN: 10/1/78 TRAINING ENDED:

---

Trainee's Responsibility in Program:

1. The trainee shall abide by the rules, regulations and policies of the shop and the school during his period of training.
2. The trainee shall regularly and faithfully perform the work and duties of his job and school program.
3. The trainee will not attempt to change the training plan without discussing the changes with and meeting the approval of the Supervisor of Vocational Training.
4. The trainee will know that if his conduct or work is not satisfactory that his training can be discontinued with loss of credit.

Shop Foreman's Responsibility in the Program:

1. The shop supervisor shall provide bonafide training in the occupation listed.
2. The shop supervisor shall not transfer or dismiss the trainee without first discussing the matter with the Supervisor of Vocational Training.
3. The shop supervisor shall check the attitude and ability displayed by the trainee on the job, enabling the Supervisor of Vocational Training to encourage, adjust or correct any matter that will tend to improve the trainee's performance.
4. The shop supervisor will evaluate the trainee during each month, enabling the Supervisor of Vocational Training to issue a report card grade.
5. The trainee's rate of pay for training on the job and in school shall be determined by the shop supervisor and the Supervisor of Vocational Training, based on current institutional pay procedures.

School's Responsibility in the Program:

1. The school shall provide related instruction to the trainee pertaining to the occupation listed.
2. The school shall issue credit to the trainee for each work experience program completed, subject to the guidelines for awarding "Experiential Credit" in the Adult High School Diploma Program.
3. The school shall issue the trainee a vocational certificate of achievement upon mastering the skills, processes, and knowledge indicated in his training plan and upon the recommendation of the shop supervisor and the Supervisor of Vocational Training.

TRAINEE'S SIGNATURE: John Doe

SHOP SUPERVISOR: Richard Newsky

SUPV. OF VOCATIONAL TRAINING: Clayton Longuer

# NEW HAMPSHIRE
# STATE DEPARTMENT OF EDUCATION

*Commissioner of Education*
NEWELL J. PAIRE

*Division of Vocational Technical Education*
NEAL D. ANDREW, Chief

# *Adult Education Certificate*

_____

*has satisfactorily completed a Course of* 474 *hours in* Automobile Mechanic (Helper)

*in an approved class*

ADULT VOCATIONAL-TECHNICAL EDUCATION

*and is awarded this Certificate*

*This* 13th *day of* July *19* 73

Consultant, Adult Education

Supervisor, Vocational Programs

"JOBS AND EMPLOYMENT TRAINING"

Performance Objectives: Within an 80 hour training period the student through reading assignments, audio-visual aids and performing instructor assigned projects will:

1. Demonstrate an ability to successfully:

    a. Match skills to jobs;
    b. Fill out job applications;
    c. Complete a job interview;
    d. Obtain job training;
    e. Obtain unemployment insurance.

2. Have knowledge of:

    a. Good and bad job habits;
    b. Appropriate dress and behavior;
    c. Skills and attributes that lead to promotion;
    d. Worker/supervisor relationships;
    e. How problems at work can affect the family;
    f. How to utilize employment agencies;
    g. How employment affects a person's self-image;
    h. Other benefits if you're unemployed;
    i. Other sources for jobs.

Activities: The central activity will be observing a video presentation with a question and answer period directly following the presentation. The video presentation will be supplemented by instructor assigned projects such as matching job skills with help wanted ads, filling out a job application, completing a job interview and role playing by the students and the instructor.

Reading assignments will not be assigned from a textbook, but rather newspaper ads, job requirements and information about jobs-careers from New Hampshire View and other job-career resources, such as College and Tech school catalogs, etc.

The activities will be designed to provide the student with the skills and knowledges so that he can successfully compete for employment on his own or know where and how to seek assistance in job procurements and maintenance.

Evaluation: The course will consist of eight competency based units of instruction with a pre-test and post-test for each unit as well as a performance test.

Upon successful completion of the eight units the student must successfully complete a final performance test which will include but not limited to seeking and obtaining employment.

Auto Body Repair

This program is a full-time school assignment. It will take the student about seven months to complete the program.

The student may choose to complete sections or units of the program with the instructor's permission.

AUTO BODY SCHOOL INMATE TRAINING DESCRIPTION

POSITION: Vocational Training NUMBER OF POSITIONS: 6

TRAINING: Within a 26 week (780 hours) training period the student through reading assignments, audio-visual aids, and performing instructor assigned repairs on autos, trucks, motorcycles, and snowmobiles will learn the following:

1. Paint removal
2. Panel repair
3. Panel replacement
4. Panel alignment
5. Oxyacetylene torch
6. Surface preparation
7. Paint preparation
8. Spray painting
9. Frames and single unit bodies
10. Front end alignment
11. Interior trim
12. Auto body maintenance

# AUTO BODY REPAIR

| Unit | Description and Activities | Typical Hours |
|---|---|---|
| 1. | Safety and Shop Orientation<br>The student will demonstrate an ability to exercise precautions regarding shop safety. This will be accomplished by reading assignments, viewing film strips, and by demonstrations while employed repairing a fender, showmachine cowl, or motorcycle body parts. Completion requirements: successfully pass a written and a competency test. | 10 |
| 2. | Basic Hand Tools<br>The student will demonstrate an ability to use common hand tools. The tools that will be used while employed on the repair project are: screw drivers, pliers, gripping tools, tin shears, chisels, punches, wrenches, socket sets, hammers, dollies, spoons. and body picks. Completion requirements: successfully pass written and competency tests. | 40 |
| 3. | Vocabulary - Job related<br>The student will identify and define the technical terms in daily use in the auto body shop. The student will gain knowledge of the shapes and designs of auto bodies, individual panel construction, and how panels are assembled to form individual units by reading assignments and demonstrations while employed on a repair project. Completion requirements: successfully pass a written test. | 10 |
| 4. | Paint Materials<br>The student will demonstrate an ability to use materials commonly found in the spray painting shop and use the spray painting equipment to prime, seal, and paint a fender, snowmachine cowl, or motorcycle body parts. The learning process will include reading assignments, viewing film strips and demonstrations. Completion requirements: successfully pass written and competency tests. | 15 |
| | The student will demonstrate sufficient skills after completion of Units 1-4 to bump out a dent, grind, fill, sand, featheredge, prime, block sand, mask, mix primer, and then refinish the repair with lacquer paint, with a minimum of supervision. Completion requirements: complete repair project. | 100 |
| 5. | Hand Tools and Sanders<br>The student will demonstrate an ability to use sanding equipment and the hand tools used by the auto body repairman for bumping, dinging, shrinking, shaping, filing, and sanding while employed repairing damaged body panels. The repair project will include the entire side, front end, or rear end that has been damaged. The learning process will include reading assignments, viewing film strips, and demonstrations. Completion requirements: successfully pass written and competency tests. | 100 |
| 6. | Metal Straightening and Paint Removal<br>The student will demonstrate an ability to straighten dented areas of a body using a hammer and dolly, a slide hammer, and by using driving tools while employed repairing a sideswipe, rear end, front end, or rollover collision damage. The repair project will include using the | 30 |

Unit Description and Activities — Typical Hours

common methods of paint removal. The learning process will include reading assignments, viewing film strips, and demonstrations. Completion requirements: successfully pass written and competency tests.

7. Welding, Oxyacetylene and Electric Arc — 80
The student will demonstrate an ability to:
   a. Explain the gas welding and cutting process;
   b. Employ the proper procedure in preparing and shutting down an oxyacetylene torch;
   c. Deposit a string bead with and without a filler rod;
   d. Perform two different cuts in the manual oxygen cutting process.

This will be accomplished by reading assignments, viewing film strips, demonstrations, and performing welding, brazing and cutting operations while employed repairing accident damage and rust holes. Completion requirements: successfully pass written and competency tests.

8. Removing Dents Using Pull Rods — 20
The student will demonstrate an ability to straighten dented areas of the body using a slide hammer and pull rods by reading assignments, demonstrations, and performing repairs on a damaged panel. Completion requirements: successfully pass written and competency tests.

9. Shrinking Sheet Metal — 15
The student will demonstrate an ability to shrink metal using a heating torch and hand tools, and the quenching method. The shrinking operation will be included in the repair project, as most damaged panels that have been stretched or torn must be shrunk. The learning process will include reading assignments, viewing film strips, and demonstrations. Completion requirements: successfully pass written and competency tests.

10. Filling Dents, Replacing Panels — 100
The student will demonstrate an ability to correctly:
   a. Repair a door including removal, replacement and alignment;
   b. Repair a hood including removal, replacement and alignment;
   c. Repair a front fender including removal, replacement and alignment;
   d. Remove, replace and align the grill and bumper assemblies;
   e. Remove, repair, and replace rocker panels;
   f. Remove, adjust the aim, and replace the headlight assemblies.

This will be accomplished by reading assignments, viewing film strips, demonstrations and repairing, replacing and aligning panels on damaged vehicles. Completion requirements: successfully pass written and competency tests.

The student will demonstrate sufficient skills after completion of Units 1 - 10 to perform as an Automobile Body Repairman Helper, Metal. — 300-445

| Unit Description and Activities | Typical Hours |
|---|---|
| 11. Repairing Fiberglass<br>The student will demonstrate an ability to use fiberglass resin, cloth, and filler while repairing a damaged fiberglass panel. The learning process will include reading assignments, demonstrations, and repairing a snowmachine cowl, outboard motor cowl, or damaged panels on a fiberglass automobile. Completion requirements: successfully pass written and competency tests. | 25 |
| 12. Straightening with Power Tools<br>The student will demonstrate an ability to use measuring devices and guages in major body alignment. The student will be introduced to structural damage that occurs to the frame and underbody parts during a major collision. The student will learn how to determine the extent of damage and how to correct misalignment. This will be accomplished by reading assignments, viewing film strips, and demonstrations on an automobile. Completion requirements: successfully pass written and competency tests. | 15 |
| 13. Spray Painting Equipment<br>The student will demonstrate an ability to use the spray painting equipment and understand the functions of the body shop spray equipment and the proper spray gun motion. While completing the requirements for all Units the student is employed repairing damaged vehicles which require priming, sealing, and painting. This Unit will extend the student's knowledge beyond the spray gun to include air regulators, water traps, lines and pressures, and air compressors. The learning process will include reading assignments, viewing film strips, and demonstrations with shop equipment. Completion requirements: successfully pass written and competency tests. | 80 |
| 14. Preparing the Surface for Paint Masking<br>The student will demonstrate an ability to properly prepare a surface for spray painting and properly mask various parts of the vehicle. All of the repair projects that a student completes must be painted. During the process the student learns to properly prepare the surface and mask the vehicle. This Unit will reinforce the knowledges and skills acquired from performing these operations. The learning process will include reading assignments, viewing film strips, and demonstrations. Completion requirements: successfully pass written and competency tests. | 80 |
| 15. Paint Preparation, Painting<br>The student will demonstrate an ability to prepare for a spray painting job and spray paint a panel including priming, sealing, and painting with enamel and lacquer. This will be accomplished by painting a completed and properly prepared repair project that the student has repaired. The learning process will include reading assignments, viewing film strips, and demonstrations. Prerequisites - Units 13, 14. Completion requirements: successfully pass written and competency tests. | 80 |
| The student will demonstrate sufficient skills after completion of Units 1 - 15 to perform as a Used Car Renovator. | 450-725 |

| Unit Description and Activities | Typical Hours |
|---|---|

16. Door Hardware, Window Glass Service — 20
The student will demonstrate an ability to disassemble a door and components; then assemble the door and its components, making all necessary adjustments. This will be accomplished by reading assignments, demonstrations, and repairing a damaged door or replacing a broken window glass. Completion requirements: successfully pass written and competency tests.

17. Windshield, Rear Window Removal, Installation — 20
The student will demonstrate an ability to remove and install a rear window, windshield, rear view mirror, and door glass. This will be accomplished by reading assignments, viewing film strips, demonstrations, and removing and installing the glass on a vehicle. Completion requirements: successfully pass written and competency tests.

18. Auto Body Maintenance — 50
The student will demonstrate an ability to correctly detal an automobile including cleaningthe interior, exterior, and replacing the hardware. Auto body maintenance includes trouble shooting and repairing water leaks, air leaks, rattles, squeaks, glass replacement, reconditioning interior and exterior paint, buffing, polishing, and upholstery repair and replacement. This will be accomplished by reading assignments, demonstrations and detailing the repair projects. Completion requirements: successfully pass written and competency tests.

19. Removing Interior Trim, Weatherstrip, Upholstery — 30
The student will demonstrate an ability to remove and replace interior trim, weatherstrip, and upholstery while employed repairing a damaged panel. The learning process will include reading assignments, demonstrations and a repair project that includes removing and replacing interior trim, weatherstrip, or upholstery. Completion requirements: successfully pass written and competency tests.

20. Wheel Alignment — 8
The student will identify front end component parts and explain their function. This will be accomplished by reading assignments, viewing film strips, and demonstrations. Completion requirements: successfully pass written test.
For an extensive Unit on Front End Alignment the student is encouraged to pursue that Unit offered by Automotive Mechanics.

21. Power Seats, Windows, Tailgates and Tops — 10
The student will demonstrate an ability to troubleshoot and correct the cause of failure of electrical powered accessories. The learning process will include reading assignments, demonstrations and an electrical system failure that must be corrected. Completion requirements: successfully pass written and competency tests.

22. Recovering Convertible Tops, Fabric Roofs, Woodgrain Overlay — 8
The student will demonstrate an understanding of the maintenance, repair, removal, and installation of convertible tops, fabric roofs, and woodgrain overlays. This will be accomplished by reading assignments and demonstrations. Completion requirements: successfully pass written test.

| Unit | Description and Activities | Typical Hours |
|---|---|---|

23. Customizing Auto Bodies — 8
The student will demonstrate an understanding of how special effects such as mural painting, scalloping, striping, scaling, cobwebbing and lacing are created. The learning process will include reading assignments, demonstrations and a special effects project. Completion requirements: successfully pass written and competency tests.

24. Estimating Auto Body Repairs — 10
The student will demonstrate an ability to use a variety of shop manuals. The student will write estimates of accident damage, rust repairs, and parts replacement. This will be accomplished by reading assignments, demonstrations and a vehicle that is to be repaired but requires estimating the cost. Completion requirements: successfully pass written and competency tests.

25. Shop Organization and Management — 10
The student will demonstrate an understanding of the business requirements, equipment, tools, operating practices, and the layout of the Auto Body Shop. This will be accomplished by reading assignments, demonstrations, and working in the Auto Body School. Completion Requirements: successfully pass written and competency tests.

26. Final Exams
Written exam - 50-100 questions and problems taken from each Unit.
Competency test - The instructor will select a project or observe an on-going project to determine the level of performance. The exam will include an overall repair (rust and dents) and refinishing project.
Example: Using paint remover, strip the old finish completely, repair all rust and dents, prime, putty, block sand, color coat, finish sand, wash, paint door jams, mask completely, tack wipe, mix paint, spray paint (enamel or lacquer), detail, assemble trim, overall cleaning--prep for delivery to customer, with a minimum of supervision.

The competency exam will determine the level of performance. The exam will determine whether the student has gained sufficient knowledges and skills to perform as a:

a. Automobile Painter Apprentice
b. Automobile Body Repairman Apprentice
c. Automobile Body Combination Apprentice (Painter & Repairman) — 780-900

Auto Mechanics:

This program is a full-time school assignment. It will take the student about seven months to complete the program.

The student may choose to complete sections or units of the program, with the instructor's permission.

APPENDIX III

AUTO MECHANIC SCHOOL INMATE TRAINING DESCRIPTION

POSITION: Vocational Training NUMBER OF POSITIONS: 10

TRAINING: Within a 26 week (780 hours) training period the student through reading assignments, audio-visual aids and performing instructor assigned repairs on autos, trucks, motorcycles, and snowmobiles will learn the following:

1. Service station attendant
   a. lubrication and preventive maintenance
   b. wheel bearing service
   c. state inspection
2. Automobile mechanic helper
   a. unit disassembly and removal
   b. perform overhauls assisted by mechanic
3. Automobile service mechanic
   a. tune-up (electric and fuel systems)
   b. charging systems
   c. brake systems
   d. springs and suspension
   e. smog control systems
4. Automobile mechanic entry
   a. performs unit overhaul
   b. automatic transmission minor service
   c. front end alignment

# AUTO MECHANICS

## Unit #1

Orientation and Safety

This Unit is designed to familiarize the student with the auto mechanics trade, the tools and equipment used, the shop rules and regulations, and all safety procedures. The student will complete reading assignments, watch safety filmstrips and tour the shop area.

Evaluation - Written Test — Average Hours - 9

## Unit #2

Lubrication and Preventative Maintenance

This unit is designed to familiarize the student with lubrication and oil change procedures, and preventative maintenance operations such as fluid level checks, fan belt adjustments, lubricating latch mechanisms, etc. The student will complete reading assignments, watch filmstrips, and perform lubrication and preventative maintenance operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test — Average Hours - 29

## Unit #3

Wheel Bearing Service

This Unit is designed to familiarize the student with the procedures involved in cleaning, repacking, replacing and adjusting wheel bearings. The student will complete reading assignments, watch filmstrips, and perform wheel bearing service operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test — Average Hours - 13

## Unit #4

Tire Services

This Unit is designed to familiarize the student with tire and tube repair, tire balancing, and the use of the tire changer. The student will complete reading assignments, watch filmstrips, and complete tire service operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test — Average Hours - 31

Unit #5

State Inspection

This Unit is designed to familiarize the student with the laws relating to the New Hampshire State Inspection Program and the procedures involved in performing a State inspection. The student will complete reading assignments, watch filmstrips, and complete a State inspection on a live vehicle.

Evaluation - Written Test and Competency Test Average Hours - 18

WHEN THE STUDENT HAS SUCCESSFULLY COMPLETED UNITS 1 THROUGH 5, HE IS ELIGIBLE FOR A SERVICE STATION ATTENDANT CERTIFICATE.

Unit #6

Engine Operation, Measurements and Performance

This Unit is designed to familiarize the student with how and why an engine operates. Instruction is also provided on friction losses, methods of computing engine size and horsepower and methods of increasing power output in an engine. The Student will complete reading assignments, and watch filmstrips.

Evaluation - Written Test Average Hours - 9

Unit #7

Engine Types and Construction

This Unit is designed to familiarize the student with the various ways engines are classified and the basic construction of the four stroke internal combustion engine. The student will complete reading assignments and watch filmstrips.

Evaluation - Written Test Average Hours - 21

Unit #8

Valve Service

This Unit is designed to familiarize the student with the various procedures involved in performing a valve overhaul, the special tools and equipment necessary, and the related theory. The student will complete reading assignments, watch filmstrips and perform valve service operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 85

Unit #9

Piston and Rod Service

This Unit is designed to familiarize the student with the various procedures involved in performing service on pistons and rods, the special tools and equipment necessary, and the related theory. The student will complete reading assignments, watch filmstrips, and perform piston and rod service operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 68

Unit #10

Crankshaft and Block Service

This unit is designed to familiarize the student with the various procedures involved in performing service on engine blocks and crankshafts, the special tools and equipment used, and the related theory. The student will complete reading assignments, watch filmstrips, and perform crankshaft and block service operations on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 68

WHEN THE STUDENT HAS SUCCESSFULLY COMPLETED UNITS 1 THROUGH 10, HE IS ELIGIBLE FOR AN AUTOMOBILE MECHANIC HELPER CERTIFICATE.

Unit #11

Automotive Fuel Systems and Fuels

This Unit is designed to familiarize the student with the theory of operation and servicing procedures for all components of the fuel system. The student will complete reading assignments, watch filmstrips and perform fuel system repairs and adjustments on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 58

Unit #12

Engine Lubricating Systems

This Unit is designed to familiarize the student with the theory of operation and the servicing procedures relating to the engine lubricating system. The student will complete reading assignments, watch filmstrips and perform engine lubricating system repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 20

Unit #13

Automotive Cooling Systems

This Unit is designed to familiarize the student with the theory of operation and the servicing procedures relating to the cooling system. The student will complete reading assignments, watch filmstrips, and perform cooling system repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 21

Unit #14

Battery and Starting Motor

This Unit is designed to familiarize the student with the construction, theory of operation, and servicing procedures for the battery, starting motor, and other starting system components. The student will complete reading assignments, watch filmstrips, and perform starting system repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 34

Unit #15

Charging Systems

This Unit is designed to familiarize the student with the construction, theory of operation, and servicing procedures for the charging system. The student will complete reading assignments, watch filmstrips, and perform charging system repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 34

Unit #16

Ignition Systems

This unit is designed to familiarize the student with the construction, theory of operation, and servicing procedures for the ignition system. The student will complete reading assignments, watch filmstrips, and perform ignition system repairs and adjustments on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 63

Unit #17

Springs and Suspension

This unit is designed to familiarize the student with the construction, theory of operation, and servicing procedures for an automobile spring and suspension system. The student will complete reading assignments, watch filmstrips and perform spring and suspension system repairs on live vehicles

and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 31

Unit #18

Brake Systems

This Unit is designed to familiarize the student with the construction, theory of operation and servicing procedures for the automotive brake system. The student will complete reading assignments, watch filmstrips, and perform brake system repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 35

WHEN THE STUDENT HAS SUCCESSFULLY COMPLETED UNITS 1 THROUGH 18, HE IS ELIGIBLE FOR AN AUTOMOBILE SERVICE MECHANIC CERTIFICATE.

Unit #19

Standard Transmissions

This Unit is designed to familiarize the student with the construction, theory of operation and servicing procedures for standard transmissions. The student will complete reading assignments, watch filmstrips, and perform standard transmission repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 34

Unit #20

Automatic Transmission Minor Service

This Unit is designed to familiarize the student with the servicing procedures involved in performing minor transmission servicing procedures such as changing transmission fluid, replacing and cleaning filters, adjusting bands, etc. The student will complete reading assignments, watch filmstrips, and perform automatic transmission minor service and repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 16

Unit #21

Drive Lines

This Unit is designed to familiarize the student with the construction, theory of operation and servicing procedures for automobile drive lines. The student will complete reading assignments, watch filmstrips, and perform automobile driveline repairs to live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 18

Unit #22

Rear Axles and Differentials

This Unit is desinged to familiarize the student with the construction, theory of operation, and servicing procedures for automobile rear axles and differentials. The student will complete reading assignments, watch filmstrips, and perform rear axle and differential repairs on live vehicles and lab equipment.

Evaluation - Written Test and Competency Test Average Hours - 21

Unit #23

Steering Systems

This Unit is designed to familiarize the student with the construction, theory of operation, and servicing procedures for the automotive steering system. The student will complete reading assignments, watch filmstrips, and perform steering system repairs and adjustments.

Evaluation - Written Test and Competency Test Average Hours - 41

Small Engine Repair:

This program is a full-time school assignment. It will take the student about seven months to complete the program.

The student may choose to complete sections or units of the program with the instructor's permission.

APPENDIX IV

SMALL ENGINE SCHOOL INMATE TRAINING DESCRIPTION

POSITION: Vocational Training NUMBER OF POSITIONS: 8

TRAINING: Within a 26 week (780 hours) training period the student through reading assignments, audio-visual aids, and performing instructor assigned repairs on small engines, will learn the following:

1. Shop safety and orientation
2. Engine types and design
   a. Four stroke cycle engine and theory
   b. Two stroke cycle engine and theory
3. Engine component
4. Engine cooling systems
5. Engine lubrication systems
6. Engine electrical systems
7. Engine carburetors
8. Tune-up procedures
9. Tune-up equipment and its uses
10. Engine overhaul procedures
11. Engine overhaul equipment and its uses
12. Related drive mechanisms
13. Engine repairs manuals and parts manuals

## SMALL ENGINE REPAIR

Job Description:

Program completers will be qualified to perform preventive and corrective maintenance on two-cycle/four-cycle engines of a wide variety.

Specifically, he performs repairs and tune-ups of engines and associated equipment on lawnmowers, garden tractors, snowmobiles, motorcycles, outboard motors. He replaces and adjusts parts of the fuel, cooling and ignition systems.

He might do major overhaul of engines, track alignment, welding or repair of equipment powered by the small engine.

## LEVELS - OF ACTIVITY/PROFICIENCY I

Student will:

Unit 1. Exercise precaution regarding shop safety
- a. demonstrate on machines
- b. know small engine repair shop hazards

Unit 2. Select and use proper classes of fire extinguishers
- **a. describe types and uses
- b. demonstrates - type of fire - uses correct extinguisher

Unit 3. Use common fasteners
- a. know types - and, identifies and make correct applications
- *b. demonstrates selection of bolts and screws, tops and dies, snap rings, etc.

Unit 4. Use specialty tools
- a. know types - when to use
- **b. demonstrate proper use of analysers, compression testers, guages, pullers
- c. uses manuals

Unit 5. Describe or demonstrate potential/kinetic energy
- a. knows principles of energy/both kinetic and potential
- *b. describe practical applications of both
- c. calculate work force formulas

Unit 6. Describe or demonstrate the measurement of power
- *a. know calculations of power - ft. lbs., power/work/time relationships. Relates horsepower to engine output.

Resources: mock-ups - cutaways
displays
actual engines
rotary valve
loop scavenged
poppet valve

Unit 7. Describe/demonstrate the cycle of operation of the two stroke cycle internal combustion engine.
- a. Will describe action of:
  1. Reed valves
  2. Poppets
  3. Rotary valve
  4. Loop scavenged
- b. trace fuel/air mixture in each

Unit 8. Demonstrate the cycle of operation of four stroke
- a. know and describe in detail
- b. demonstrate with engine what is accomplished on each stroke

Resources: Mock-ups
Actual engine

Unit 9. Identify principle parts of two stroke cycle engine
- a. Correctly label or identify parts

Resources: chart, photograph, actual disassembled engines

Unit 10. Identify principle parts of four stroke cycle engine
- a. correctly label or identify parts

Resources: chart, photograph, actual disassembled engines

Unit 11. Describe or identify the functions of the parts of a four stroke cycle engine: i.e., cylinder, piston, rings, flywheel and cooling, lubrication, valves, retainers, cones, ignition cam

Need: media, manuals

Unit 12. Disassembly of a four stroke cycle engine, one cylinder
- a. demonstrate ability to use correct tools/procedures in disassembly of a real engine

Resources:

Specialty tools: engine, pullers, spring clip pliers, engine, hand tools, manuals

Unit 13. Demonstrate an ability to reassemble a one cycle four stroke cycle engine
- a. perform assembly operation using correct tools, procedures to specifications. (new gaskets) refills oil, gas.

Resources: engine, hand tools, specialty tools, manuals, gaskets, oil, gasoline, seals, o-rings (compressor for rings), ring installer, presses, feeler guages

Unit 14. Describe functions of a two stroke cycle engine - all parts - cooling, etc.

Resources: chart, mock-up engine

Unit 15. Disassemble a two stroke cycle engine, in proper order/sequence, using specialty tools.

Resources: engine, specialty tools, hand tools, manual

Unit 16. Reassemble a two stroke cycle, reverse procedures/adjust-fit as required.

Resources: ring compressor, specialty tools, gas and oil, correct mixture

## INTERMEDIATE LEVEL - POWER MECHANICS

Unit 1. Describe/demonstrate certain requirements of an engine fuel system.
a. Know mixtures - requirements, suction, gravity, fuel pumps

Resources: sufficient types of small engines with different fuel systems

Unit 2. Describe/demonstrate requirements of fuel supply
a. know troubleshooting techniques based on:
1. compression
2. proper fuel air mixture
3. ignition
b. demonstrate knowledge of procedures to follow in event of fuel starvation.

Inspection (NOTE: Other than carburetion)

Resources: fuel systems, mock-up fuel pumps

Unit 3. Describe or demonstrate the function of the parts of a typical fuel system
a. operation of fuel pumps
b. combination of fuel delivery systems

Resources: model, mock-up, diagram of a diaphragm fuel pump

Unit 4. Identify and describe the functions of the parts of a simple carburetor
a. know function and location of each part; systems, choke, needle, valves, jets, float, throttle

Resources: exploded view of simple carburetor, previously disassembled carburetor

Unit 5. Perform minor external carburetor adjustments
a. readjusts all external adjustments, is to start idle, accelerate, work under load

Resources: carburetor, tackometer, specialty tools, manuals attached to an operating piece of machinery

Unit 6. Remove and disassemble a carburetor
a. remove assembly, disassemble, inspect for wear

Resources: one cylinder engine with float type carburetor, hand tools, manual

Unit 7. Reassemble and install a carburetor
- a. perform all reassembly processes in correct order, replace gaskets, seals, maintain record of each step, adjustments made.

Resources: carburetor with accessory, hand tools, specialty tools, manual

Unit 8. Identify and describe the function of the parts on an engine speed governor
- a. gain access to governor, examine all linkages, describe function, determine effect of spring tension, reassemble

Resources: mech. engine speed governor, air valve speed governor, manual, specialty tools

Unit 9. Adjust engine speed governors, air vane mechanisms
- a. with a workable engine, perform adjustments using tachometer and a running engine, to linkages. Record. RPM's to specifications
- b. measure the effects of adjustments

Resources: tachometer, manual, specialty tools

Unit 10. Describe the means for reducing fruction in an engine
- a. describe functions of oil and lube system
- b. describe functions of bearings
- c. describe classification of oil-uses-viscosity

Unit 11. Describe types of lubricating systems
- a. know principles of splash, pumps of various types and design functions

Resources: illustrations of lube systems of various types of two and four stroke cycle engines. Demonstration engines, mock-up

Unit 12. Drain and refill crankcase on a one cylinder four stroke cycle engine
- a. drain crankcase on an engine attached to an accessory
- b. select proper viscosity, amount, type of oil
- c. refill to correct level

Resources: oil, hand tools, manual, containers, spouts

Unit 13. Prepare mixture of gasoline and oil for a one cylinder, two stroke cycle engine
- a. select proper grade of gasoline
- b. select proper oil
- c. know oil is suspended in gasoline
- d. measure exact amounts for mixture
- e. know procedure for proper mixing, temperature effect
- f. fills tank

Resources: operating engine, gasoline, oil, strainer containers, spouts

Unit 14. Describe the functions of a typical cooling system
- a. know parts, functions
- b. clean, inspects the air cooling system
- c. correct defects or reports same

Resources: diagrams, engines, specialty and common tools

Unit 15. Describe function of the parts of a water cooled system (one or two cylinder outboard engine)
- a. knows parts and functions
- b. disassembles shrouds, top of water jacket, inspects, reports condition

Resources: outboard marine engine, manual, tools

## FINAL LEVEL OF COMPETENCY

The student will:

Unit 1. Describe the electron theory of current flow
- a. knows random motion of electrons, directional movement of electrons
- b. knows:
  1. insulators - theory
  2. conductors
  3. electrical potential
  4. types of circuits - open, closed, short
  5. Ohms Law - amps, volts, resistance
  6. causes of excessive volts, amps or resistance

Resources: meters, charts, samples of conductors and insulators

Unit 2. Describe magnetism and electromagnetism
- a. know theory of magnetism flux, flux density - induction of current/production of electro-magnetic fields; coils - primary and secondary

Resources: electromagnetism materials, cutaway coils from magnet systems, instructional resources

Unit 3. Describe the relationship of electromagnetism to design and function of a typical magnet
- a. know functions of a magnet
- b. draw or describe production of high voltage current in sec. wiring of a magnet coil
- c. trace a wiring diagram of current flow
- d. describe function of permanent magnets in flywheel

Resources: small engine magnets, wiring diagrams, exploded view of magnets

Unit 4. Identify and describe the function of the parts of a magnet
- a. describe functions of one complete magnet cycle
- b. remove all parts, pulls, flywheel; examines all parts; names and describes functions; reassembles

Resources: demonstration engine, hand tools, specialty tools, manuals, puller

Unit 5. Demonstrate the correct operation of ignition system breaker points
a. remove all parts to get at breaker points, clean points, check point operation, adjust to proper gap setting, reassembles engine

Resources: engine tools, feeler guage, manual, cleaning solvent

Unit 6. Demonstrate an ability to describe the basic differences between spark plugs
a. describe importance of correct plug to engine operation
b. describe heat range, need for different plugs, gaps and thread size

Resources: assortment of spark plugs

Unit 6A. c. describe type of plug fouling - describes possible causes for each; oil fouling, carbon fouling, fuel fouling, lead fouling and burned electrodes
d. describe methods of correction for each condition

Resources: assortment of used spark plugs with failed or burned conditions

Unit 7. Correctly clean and regap spark plug electrodes
a. demonstrate correct procedure for cleaning, including the filing of center electrode, and correctly sets gap

Resources: correct plug gap feeler guage (wire) point file, wire brush, and cleaning solvent

Unit 8. Describe or demonstrate the troubleshooting process
a. given an engine with a variety of known problems (instructor induced), will accurately describe the systems, list probable causes, and give corrective steps

Resources: engine, serviceable, test equipment, manuals, specialty tools

Unit 9. Demonstrate or describe the tune-up process
a. perform all steps of tune-up
1. spark plug cleaned - gapped
2. drain and refill crankcase
3. on two cycle, fill tank with correct misture
4. clean or replace air filter
5. fuel system cleaned
6. test compression - record results, compare
7. check engine speed governor, if equipped
8. check, clean, adjust all magnet parts, including points - or CDI systems, starter-generator systems
9. run and adjusts engine, tests for operation

Resources: engine,hand tools, specialty tools, tack-dwell meters, analysers, a selection of parts, service manual, compression tester

Unit 10. Read and interpret service manuals
- a. identify makes and models of engines
- b. finds and interpret sections regarding problems in maintenance, troubleshooting, specs.

Resources: service manuals

Unit 11. a. In 60 minutes, remove, recondition, and reinstall ignition systems parts to manufacturers specifications, using correct tools and procedures on magnet types and adjust timing CDI types

Resources: starter - generator (alternator systems)

b. maintain a work log of operations

Resources: engine, common and specialty tools, timing devices, manual, notebook

Unit 12. Replace a head gasket on a one cylinder engine
- a. remove all shrouds
- b. remove carbon
- c. replace parts - torque head bolts to correct ft./lbs. in proper sequence

Resources: engine, common tools, gaskets, manual, torque wrench

Unit 13. Remove, examine and reinstall valves in a one cylinder engine
- a. remove and examine valves and associated parts
- b. recondition valves - valve seats
- c. test springs
- d. reinstall all parts, set gaps as specified

Resources: tools, manuals, valve lathe, valve seat, grinder, feeler guages, valve spring compressor

Unit 14. Remove, examine, recondition, replace parts of the piston assembly
- a. remove all necessary parts
- b. describe functions of rings
- c. clean, examines all parts, identifies wear and causes, suggests corrections
- d. remove ridge, deglaze cylinder walls
- e. clean ring grooves, replace rings
- f. remove - inspects replace piston pins
- g. reinstall piston, assembly, space rings correctly

Resources: tools, manual, ring groove cleaner, ring installer, ring compressor, cylinder hose, torque wrench, ridge seamer, new rings,gaskets

Unit 15. Remove, examine, measure for wear and replace parts of the crankshaft and camshaft assembly
- a. perform all necessary repairs to bring engine performance up to specifications

Resources: specialty tools, manuals, replacement parts, micrometer

Food Service

This program is a part-time work and part-time school assignment. The student will receive on-the-job training and attend classes to learn the skills required for his job.

In the classroom the student will earn the subjects outlined in his training plan which may include vocational courses, related courses, and academic courses.

On-the-job the student will apply the skills learned in class to the job under the supervision of the kitchen steward.

APPENDIX V

COOK AND COOK'S HELPER

Unit V - Small Equipment for Food Preparation and Service

Unit V-1 - Hand Utensils

Unit V-2- Knives

Unit V-3 - Can Opener

Unit V-4 - Dippers

Unit V-5 - Weighing and Measuring Equipment

Unit VI - Large Equipment for Food Preparation and Service

Unit VI-1 - Cleaning and Disposal Equipment

Unit VI-2 - Cold Storage Equipment

Unit VI-3 - Beverage Equipment

Unit VI-4 - Food Cutting Equipment

Unit VI-5 - Mixing Equipment

Unit VI-6 - Holding and Serving Equipment

Unit VII - Large Equipment for Cooking Food

Unit VII-1 - Toasters

Unit VII-2 - Surface Cooking Equipment

Unit VII-3 - Ovens

Unit VII-4 - Steaming Equipment

Unit VIII - Techniques of Food Preparation

Unit VIII-1 - Quality Food Preparation

Unit VIII-2 - Terminology Used in Food Preparation

Unit VIII-3 - Convenience Foods

Unit VIII-4 - Techniques of Portioning Food

Unit VIII-5 - Work Simplification and Work Schedules

Unit IX - Cold Food Work Station

Unit IX-1 - Beverages

Unit IX-2 - Salads

Unit IX-3 - Sandwiches

Unit IX-4 - Garnishes and Condiments

Unit X - Hot Food Work Station

Unit X-1 - Milk, Milk Products, and Eggs

Unit X-2 - Vegetables

Unit X-3 - Cereals and Pastas

Unit X-4 - Soups and Sauces

Unit X-5 - Meats, Poultry and Seafood

Unit XI - Bake Work Station

Unit XI-1 - Desserts

Unit XI-2 - Cakes, Cookies and Pastries

Unit XI-3 - Breads

Unit XIII - Procedures for Storeroom Control

Unit XIII-1 - Receiving and Issuing Procedures

Unit XIII-2 - Storage for Food and Supplies

BAKER AND BAKER'S HELPER

Unit V - Small Equipment for Food Preparation and Service

Unit V-1 - Hand Utensils

Unit V-2 - Knives

Unit V-3 - Can Opener

Unit V-3 - Dippers

Unit V-5 - Weighing and Measuring Equipment

Unit VI - Large Equipment for Food Preparation and Service

Unit VI-1 - Cleaning and Disposal Equipment

Unit VI-2 - Cold Storage Equipment

Unit VI-3 - Beverage Equipment

Unit VI-4 - Food Cutting Equipment

Unit VI-5 - Mixing Equipment

Unit VI-6 - Holding and Serving Equipment

Unit VII - Large Equipment for Cooking Food

Unit VII-1 - Toasters

Unit VII-2 - Surface Cooking Equipment

Unit VII-3 - Ovens

Unit VII-4 - Steaming Equipment

Unit VIII - Techniques of Food Preparation

Unit VIII-1 - Quality Food Preparation

Unit VIII-2 - Terminology Used in Food Preparation

Unit VIII-3 - Convenience Foods

Unit VIII-4 - Techniques of Portioning Food

Unit VIII-5 - Work Simplification and Work Schedules

Unit XI - Bake Work Station

Unit XI-1 - Desserts

Unit XI-2 - Cakes, Cookies and Pastries

Unit XI-3 - Breads

BUTCHER

Unit V - Small Equipment for Food Preparation and Service

Unit V-1 - Hand Utensils

Unit V-2 - Knives

Unit V-3 - Can Opener

Unit V-4 - Dippers

Unit V-5 - Weighing and Measuring Equipment

Unit VI - Large Equipment for Food Preparation and Service

Unit VI-1 - Cleaning and Disposal Equipment

Unit VI-2 - Cold Storage Equipment

Unit VI-4 - Food Cutting Equipment

Unit VI-5 - Mixing Equipment

Unit VI-6 - Holding and Serving Equipment

Unit VII - Large Equipment for Cooking Food

Unit VII-2 - Surface Cooking Equipment

Unit VII-3 - Ovens

Unit VII-4 - Steaming Equipment

Unit VIII - Techniques of Food Preparation

Unit VIII-1 - Quality Food Preparation

Unit VIII-2 - Terminology Used in Food Preparation

Unit VIII-3 - Convenience Foods

Unit VIII-4 - Techniques of Portioning Food

Unit VIII-5 - Work Simplification and Work Schedules

Unit IX - Cold Food Work Station

Unit IX-3 - Sandwiches

Unit X - Hot Food Work Station

Unit X-5 - Meats, Poultry and Seafood

Unit XIII - Procedures for Storeroom Control

Unit XIII-1 - Receiving and Issuing Procedures

Unit XIII-2 - Storage of Food and Supplies

VEGETABLE PREP MAN

Unit V - Small Equipment for Food Preparation and Service

Unit V-1 - Hand Utensils

Unit V-2 - Knives

Unit V-3 - Can Opener

Unit V-4 - Dippers

Unit V-5 - Weighing and Measuring Equipment

Unit VI - Large Equipment for Food Preparation and Service

Unit VI-1 - Cleaning and Disposal Equipment

Unit VI-2 - Cold Storage Equipment

Unit VI-4 - Food Cutting Equipment

Unit VI-6 - Holding and Serving Equipment

Unit VIII - Techniques of Food Preparation

Unit VIII-1 - Quality Food Preparation

Unit VIII-2 - Terminology Used in Food Preparation

Unit VIII-3 - Convenience Foods

Unit VIII-4 - Techniques of Portioning Food

Unit VIII-5 - Work Simplification and Work Schedules

Unit IX - Cold Food Work Station

Unit IX-2 - Salads

Unit IX-4 - Garnishes and Condiments

Unit XIII- Procedures for Storeroom Control

Unit XIII-1 - Receiving and Issuing Procedures

Unit XIII-2 - Storage for Food and Supplies

DINING FACILITY ATTENDANT (Dining Room Man, Lineman, Kitchen Janitor)

Unit XII - Customer Service Techniques - Included in Related Instruction

DISHWASHERS (Potman)

Included in Related Instruction

RELATED COURSES
FOOD SERVICE

COURSE UNIT DESCRIPTIONS

Tasks, Work Experiences, Study Assignments

Unit I-1: What is a Food Service Employee?

Unit I-2: What is a Food Service Employee?

Unit II-1: Sanitation, Food contamination and Illnesses

Unit II-2: Sanitation, Sanitation Codes

Unit II-3: Sanitation, Procedures for Dishwashing

Unit II-4: Sanitation, Cleaning vs. Sanitizing

Unit II-5: Sanitation, Pest Prevention

Unit II-6: Sanitation, Care of Furniture, Floors, and Surface Areas

Unit III-1: Safety, Safety Precautions

Unit III-2: Safety, Fire Safety

Unit IV-1: Nutrition, Factors Influencing Eating Behavior

Unit IV-2: Nutrition, The Basic Four Food Groups

Unit IV-3: Nutrition, Nutrients

Unit IV-4: Nutrition, Nutrition for Persons of Various Ages

Unit IV-5: Nutrition, Planning Nutrious Meals

Unit XII-1: Customer Service Techniques, Preparing the Table

Unit XII-2: Customer Service Techniques, Meeting the Public

Unit XII-3: Customer Service Techniques, Writing and Placing Orders

Unit XII-4: Customer Srevice Techniques, Serving Customers

Unit XII-5: Customer Service Techniques, Fundamentals of Bus Service

Unit XII-6: Customer Service Techniques, Handling Money

Unit XII-7: Customer Service Techniques, Sidework and Closing Duties

KITCHEN INMATE JOB DESCRIPTIONS

POSITION: Cook NUMBER OF POSITIONS: 2

DUTIES: Studies menu to insure timely preparation, follow recipe when preparing each food item observing the proper cooking time and temperature required, and use left overs promptly to reduce waste. Clean and sharpen knives, and clean work tables and grills.

SPECIAL REQUIREMENTS: Must know and observe the basic rules of personal hygiene, kitchen sanitation and safety regulations.

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POSITION: Baker NUMBER OF POSITIONS: 2

DUTIES: Responsible for preparing and serving all bakery products. Keeps shop floor, tables, and tools washed and cleaned.

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POSITION: Vegetable Prep Man NUMBER OF POSITIONS: 1

DUTIES: Prepares all vegetables required to be served with the main meal. Maintains the vegetable cellar, walk-in refrigerator, and stainless refrigerator. Unloads produce trucks and properly stores vegetables.

SPECIAL REQUIREMENTS: Incumbent should be in good physical condition.

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POSITION: Baker's Helper NUMBER OF POSITIONS: 1

DUTIES: Helps baker to prepare all bakery products and serve on the line. Assumes duties of baker in his absence. Keeps shop floor, table and tools washed and clean.

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POSITION: Butcher NUMBER OF POSITIONS: 1

DUTIES: Responsible for the cutting, wrapping and storage of all meats used in the culinary department. Cleans and maintains all butcher utensils and tools in the butcher shop, butcher meat room and meat box refrigerator. Unloads and properly secures all meat deliveries.

KITCHEN INMATE JOB DESCRIPTIONS (con't)

POSITION: Bookkeeper/Storeroom Clerk NUMBER OF POSITIONS: 1

DUTIES: Maintains inventory of all stock in storeroom, post and deduct items as received or used, enter unit and case prices on inventory cards, and maintain up-to-date balance. Properly store items in reasonable order of classification, keep storeroom clean and orderly, prepare weekly list of out-of-stock items, and keep steward's office clean and orderly.

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POSITION: Pot Man NUMBER OF POSITIONS: 1

DUTIES: Responsible for maintaining all pots, pans, and utensils in a standard of cleanliness and dryness together with proper stacking and storing at all times. Maintains the working sink and keeps surrounding floor area clean and dry.

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POSITION: Dishwasher NUMBER OF POSITIONS: 2

DUTIES: Responsible for the complete washing, cleaning and drying of all culinary department food trays, silverware, cups, glasses, bowls, and pitchers. Insures cleanliness of dishroom at all times, mops floor after every meal, and cleans annex cart after each meal.

---

POSITION: Lineman NUMBER OF POSITIONS: 2

DUTIES: Responsible to clean steam table, bread table, and daisy table after every meal. Cleans toaster and adjoining table after each meal, and keeps cupboard stocked as necessary. Cleans floor behind serving line after every meal, assists in serving line at all meals and makes toast for breakfast.

---

POSITION: Kitchen Janitor NUMBER OF POSITIONS: 2

DUTIES: Responsible for maintaining the kitchen, shower room, and kitchen windows in a clean standard at all times. Washes kitchen floor before noon meal and after night meal, and disposes of the trash. Takes care of all laundry, cleans outside yard, and G.I. kitchen Saturday afternoon. Also ensures cleanliness of kettles, hoods, vents, and tables underneath.

KITCHEN INMATE JOB DESCRIPTIONS (con't)

POSITION: Dining Room Man NUMBER OF POSITIONS: 4

DUTIES: Responsible for washing dining room tables with soap and hot water, cleanliness of windows and walk in kitchen, washing dining room floor after each meal, and hold a G.I. on Wednesday afternoon. Helps in unloading all types of delivery trucks, delivers all cell feeds as assigned, and assists in serving line. Helps janitors in cleaning outside yard.

Graphic Arts

This program is a part-time work and part-time school assignment. The student will receive on-the-job training and attend classes to learn the skills required for his job.

In the classroom the student will learn the subjects outlined in his training plan which may include vocational courses, related courses, and academic courses.

On-the-job the student will apply the skills learned in class to the job under the supervision of the shop manager.

# GRAPHIC ARTS
# COURSES
# BY JOB

Binderyman

Unit A - Bindery and Finishing
Lesson 1 - "Mechanical and Sewn Bindings"
Lesson 2 - "Operations"
Lesson 3 - "Packaging and Dissemination of Printed materials"

Unit B - Raw Materials
Lesson 1 - "Paper"

Cameraman

Unit A - Process Photography
Lesson 1 - "Line Photography"
Lesson 2 - "Halftone Photography"
Lesson 3 - "Film Contacting Operations"

Layup Man

Unit B - Typesetting (Image Generation)
Lesson 1 - "Photographic Composition"

Unit A - Process Photography (Image Conversion)
Lesson 1 - "Line Photography"
Lesson 2 - "Halftone Photography"
Lesson 3 - "Film Contacting Operations"

Unit B - Stripping Procedures
Lesson 1 - "Job Specifications"
Lesson 2 - "Masking Sheet Layout"
Lesson 3 - "Stripping and Opaquing Procedures:

Unit C - Image Carrier Preparation
Lesson 1 - "Letterpress Printing Plates"
Lesson 2 - "Silkscreen Image Carriers"
Lesson 3 - "Offset Printing Plates"

Letterpressman

Unit C - Image Carrier Preparation
Lesson 1 - "Letterpress Printing Plates"

Unit D - Image Transfer Techniques
Lesson 1 - "Letterpress Printing Procedures"

Unit B - Raw Materials
Lesson 1 - "Paper"
Lesson 2 - "Ink"

Linotype Operator

Unit A - Layout and Design
Lesson 3 - "Typography"

Unit B - Typesetting (Image Generation)
Lesson 1 - "Photographic Composition"
Lesson 2 - "Strike-On"
Lesson 3 - "Hot Type"
Lesson 4 - "Adhesive Lettering"

Unit C - Assembly
Lesson 1 - "Pasteup for Graphic Arts Photography"
Lesson 2 - "Basic Pasteup Techniques"
Lesson 3 - "Copy for Pasteup"
Lesson 4 - "Multiple Color Pasteups"

TEST - SECTION II

ANSWER KEY

Unit D - Image Transfer Techniques
Lesson 1 - "Letterpress Printing Procedures"
Lesson 2 - "Silkscreen Printing Procedure"
Lesson 3 - "Offset Printing Procedures"

TEST - SECTION III

ANSWER KEY

Offset Pressman

Unit C - Image Carrier Preparation
Lesson 3 - "Offset Printing Plates"

Unit D - Image Transfer Techniques
Lesson 3 - "Offset Printing Procedures"

TEST - SECTION III

ANSWER KEY

Unit B - Raw Materials
Lesson 1 - "Paper"
Lesson 2 - "Ink"

TEST - SECTION IV

ANSWER KEY

Paper Cutter

Unit A - Bindery and Finishing
Lesson 2 -"Operations"
Lesson 3 -"Packaging and Dissemination of Printed Materials"

Unit C - The Administration of a Printing Plant
Lesson 1 - "Planning and Preparation for Printing on Job"

Unit B - Raw Materials
Lesson 1 - "Paper"

Platemaker

Unit C - Image Carrier Preparation
Lesson 1 - "LetterPress Printing Plates"
Lesson 2 - "Silkscreen Image Carriers"
Lesson 3 - "Offset Printing Plates"

# RELATED COURSES
# PRINTING OCCUPATIONS

SECTION I

Unit A - "Mankinds Greatest Invention"

- Lesson 1 - "Printing in the Past"
- Lesson 2 - "The Scope of Printing Today"
- Lesson 3 - "Nature of the Printed Message"
- Lesson 4 - "Overview of Printing Process"
- Test - Section I
- Answer Key

SECTION II

Unit A - "Layout and Design"

- Lesson 1 - "General Layout and Design"
- Lesson 2 - "Book Design"
- Lesson 3 - "Typography"
- Transparencies
- Test - Section II
- Answer Key

SECTION IV

Unit B - "Raw Materials"

- Lesson 1 - "Paper"
- Lesson 2 - "Ink"
- Test - Section IV
- Answer Key

SECTION V

Unit A - "Management"

- Lesson 1 - "Research and Development Personnel"
- Lesson 2 - "Clerical Personnel and Their Roles"
- Lesson 3 - "Designers (Layout Artists)"
- Lesson 4 - "Sales and Distribution"

Unit B - "Labor"

- Lesson 1 - "Typesetters and Image Generators"
- Lesson 2 - "Pressman (Letterpress and Lithographic)"
- Lesson 3 - "Bindery Personnel"
- Lesson 4 - "Photography"

Unit C - "The Administration of a Printing Plant"

- Lesson 1 - "Planning and Preparation for Printing a Job"
- Lesson 2 - "Plant Administration"

# RELATED COURSES
# PRINTING OCCUPATIONS

Unit D - "Entry to a Career in Printing"
Lesson 1 - "Educational Opportunities"
Lesson 2 - "Job Selection and Securing"
Test - Section V
Answer Key

APPENDIX F - Terms

APPENDIX G - Test
Comprehensive Test for Printing

APPENDIX H - Answer Key

Shop Safety

PRINT SHOP INMATE JOB DESCRIPTIONS

POSITION: Office Clerk/Shipper NUMBER OF POSITIONS: 1

DUTIES: Performs office clerk functions such as answering telephone, taking messages, and assists supervisors in maintaining paper stock. Also performs wrapping, shipping, and boxing functions, is responsible for shipping receipts and labels, job ticket inventory, and use of elevator. Acts as shop runner, performs some janitorial functions, and loads and unloads delivery trucks.

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POSITION: Paper Cutter NUMBER OF POSITIONS: 1

DUTIES: Operates a large 36" power paper cutter to cut and prepare paper for printing using job ticket to determine type and size of paper. Performs maintenance on paper cutter, assists with shipping procedures, and assists supervisors in maintaining proper inventories of paper stock.

SPECIAL REQUIREMENTS: Accuracy is required in cutting procedures and counting sheets of paper for correct job to reduce waste.

---

POSITION: Phototypesetter Operator NUMBER OF POSITIONS: 1

DUTIES: Operates intricate computerized typesetter, and performs minor maintenance and cleanliness.

SPECIAL REQUIREMENTS: Requires special abilities in reading, proofreading, knowledge of points, spelling, grammar, concentration, and maintaining accuracy. Dexterity is required in operating keyboard for both speed and accuracy.

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POSITION: Phototypesetter Operator Trainee NUMBER OF POSITIONS: 1

DUTIES: Assists operator and is in a training status to learn complete operation. Needs some special requirements as operator.

---

POSITION: Offset Pressman NUMBER OF POSITIONS: 4

DUTIES: Set up and operate press for various types of printing, mixes chemicals for fountain solutions, set proper adjustments on dampener and inking rolls, adjusts press, and continuously checks copy being printed. Cleans and oils press, and performs minor repairs as necessary under supervision.

SPECIAL REQUIREMENTS: Possess ability to recognize different brands and weight of paper stock.

PRINT SHOP INMATE JOB DESCRIPTIONS (con't)

POSITION: Setter Pressman NUMBER OF POSITIONS: 4

DUTIES: Performs care and maintenance of press, ability to lock up form in chaise, inking of machine, make proper adjustments and constantly checks copy. Must be able to change packing on press, clean press, and number and perforate.

SPECIAL REQUIREMENTS: Possess ability to recognize different brands and weight of paper stock.

---

POSITION: Cameraman NUMBER OF POSITIONS: 1

DUTIES: Perform various functions such as setting up camera, scaling copy, shooting line and halftone work, and expose, develop, and process film. Makes contact prints, duplicates film, and performs maintenance and cleanliness details.

---

POSITION: Binderyman NUMBER OF POSITIONS: 4

DUTIES: Operates bindery equipment, such as stitchers, folders, paper drills, perforator, punching and binding machine, and padding press. Maintains proper sequence of numbered work and performs minor maintenance and cleanliness details.

SPECIAL REQUIREMENTS: Ability and dexterity needed in the collating process.

Wood Working

This program is a part-time work and part-time school assignment. The student will receive on-the-job training and attend classes to learn the skills required for his job.

In the classroom the student will learn the subjects outlined in his training plan which may include vocational courses, related courses, and academic courses.

On-the-job the student will apply the skills learned in the classroom to the job under the supervision of the shop foreman.

APPENDIX VI

# WOODWORKING COURSES
# BY JOB

## Carpenter and Carpenter's Helper

| | |
|---|---|
| Section II | Getting Out the Rough Stock |
| Section III | Completing the Squaring Operations |
| Section IV | Making Pieces of Curved or Irregular Designs |
| Section V | Decorating, Shaping and Bending Woods |
| Section VI | Cutting Holes |
| Section VII | Making Joints |
| Section VIII | Assembling |
| Section X | Tool Maintenance |
| Section XI | Machine Woodworking |
| Section XIII | Materials in Woodworking |

Unit 76 - Woods: Kinds, Qualities and Uses

## Finishing Room Man

| | |
|---|---|
| Section IX | Finishing Projects |

## Janitor/Machine Maintenance Man

| | |
|---|---|
| Section I | Getting Started in Woodworking |
| Unit 7 | Safety |
| Section XI | Machine Woodworking |

## Sander/Scraper

| | |
|---|---|
| Section I | Getting Started in Woodworking |
| Unit 7 | Safety |
| Section VIII | Assembling |
| Unit 38 | Scraping a Surface |
| Unit 39 | Sanding a Surface |
| Unit 41 | Preparing the Project for Finishing |

## Tool Room Man

| | |
|---|---|
| Section I | Getting Started in Woodworking |
| Unit 3 | Measurement |
| Unit 7 | Safety |
| Section X | Sharpening Hand Tools |

## Curriculum Textbook

Wood: Materials and Processes

# WOOD WORKING
# RELATED COURSES

| | |
|---|---|
| Section I | Getting Started in Woodworking |
| Section XII | Major Industrial Areas |
| Section XIII | Materials in Woodworking |
| Section XI | Machine Woodworking |

Blueprint Reading

Safety

Curriculum Textbook:

Wood: Materials and Processes

WOOD SHOP INMATE JOB DESCRIPTIONS

POSITION: Carpenter NUMBER OF POSITIONS: 4

DUTIES: Operates various wood working equipment such as table and radial arm saws, planers, pointers, sanders during the manufacturing process of constructing a multitude of wood shop products. Also uses various hand tools such as hammers, chisels, planes, squares, saws, etc.

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POSITION: Carpenter's Helper NUMBER OF POSITIONS: 3

DUTIES: Works with carpenters in preparing stock and assembling projects. Uses much of the same equipment and tools but works at a lesser skill level than the carpenters.

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POSITION: Finishing Room Man NUMBER OF POSITIONS: 1

DUTIES: Prepares assembled projects for final finishing. Applies finish coat on wood items using paints, lacquers, polyureathanes, thinners, brushes, and other finishing materials. Maintains inventory of finishing room supplies.

SPECIAL REQUIREMENTS: Requires a high degree of skill with particular attention to detail and neatness.

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POSITION: Janitor/Machine Maintenance Man NUMBER OF POSITIONS: 1

DUTIES: Performs all janitorial functions of the shop including sweeping carrying trash, dusting, sorting and cleaning. Performs minor maintenance functions on various types of wood shop equipment depending on skill level of incumbent.

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POSITION: Sander/Scraper NUMBER OF POSITIONS: 2

DUTIES: Prepares furniture for refinishing by sanding and scraping. Low level of skill required.

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POSITION: Tool Room Man NUMBER OF POSITIONS: 1

DUTIES: Responsible for sharpening tools such as saws, planes, chisels, etc. Maintains control of all tools issued within the shop under supervision, assists supervisor in material and supply controls, and inventories of items such as lumber, nails, screws, hardware, etc.

END