

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Pest Control Operations
Occupational Area: Agriscience and Natural Resources

Community College CIP: 0102040802 - 24 College Credit Hours
School District CIP: 0102040803 - 720 Clock hours

Program Number: A020408
Grade Level: Applied Technology Diploma (ATD)
Standard Length: 24 College Credit Hours/720 Clock hours
Faculty Credentials: See Special Notes

Basic Skills:

English 10

Math 10

Reading 10

Program SOC Code: 37-3012.00 - Pesticide Handlers, Sprayers, and
Applicators, Vegetation

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as pest control operators (industry title) or pesticide handlers, sprayers, and applicators, vegetation (37-3012.00).

The content includes, but is not limited to, instruction that prepares individuals to identify pests, select the appropriate pesticide, and apply pesticides safely. Subject matter includes correct workplace practices, route planning, pest identification, safety, pesticide categories, and alternative control methods.

- II. **LABORATORY ACTIVITIES:** Laboratory activities include pest identification, care and maintenance of pest control equipment, application techniques, and field trips to pest control businesses and to residential and commercial sites.

- III. **SPECIAL NOTE:** Either a community college or school district may offer the Applied Technology Diploma program as college credit or vocational credit (vocational technical Center may offer only as vocational credit). Students completing an ATD at a vocational technical center will be awarded the guarantee college credit upon enrollment to the community college.

This program is part of the Pest Control Technology AS degree and guarantees transfer of 24 credit hours toward the related AS degree. Minimum entrance requirements for this program include a high school diploma or GED. Students must meet the minimum basic skills levels to complete the program.

Faculty teaching this program must have a minimum of an AS degree in the discipline area or meet the "exceptional cases" criteria as established by the Southern Association for Colleges and Schools.

No fees will be charged for the transfer of credit from a vocational technical center to a community college. The established statewide fee structure will be adhered to by both delivery systems.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01. Apply pesticides and agricultural chemicals safely and efficiently.
02. List and explain laws and regulations relative to the safe application of pest control materials.
03. Maintain equipment used to apply pest control materials.
04. Qualify for appropriate certification to apply pest control materials.
05. Assist in keeping accurate records required by law and for business purposes.
06. Identify pests and the appropriate chemicals used to control them.
07. Market and merchandise goods and services.
08. Demonstrate adequate communication, employability, human and interpersonal relations skills.

July 2007

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Pest Control Operations
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Community College CIP: 0102040802
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Vegetation

01.0 APPLY PESTICIDES AND AGRICULTURAL CHEMICALS SAFELY AND EFFICIENTLY
- The student will be able to:

- 01.01 Recognize pesticide and chemical poisoning symptoms.
- 01.02 Read and interpret packaging labels and guidelines for safety.
- 01.03 Read and interpret package labels for application rates and instructions.
- 01.04 Recommend kinds of pesticides and agricultural chemicals to be used in specific situations.
- 01.05 Use protective clothing and equipment when handling agricultural chemicals.
- 01.06 Recognize symptoms of pesticide, chemical, and residue damage.
- 01.07 Calculate coverage of chemical.
- 01.08 Assess compatibility of selected chemicals.
- 01.09 Determine rate and volume of chemical to be applied.
- 01.10 Select time of chemical application.
- 01.11 Select and match nozzles for equipment type, chemical used, and pattern of application.
- 01.12 Safely store chemicals.
- 01.13 Mix chemicals and carrying agents.
- 01.14 Apply granular or dry chemical materials.
- 01.15 Apply liquid materials.
- 01.16 Adjust ground speed of chemical application equipment.
- 01.17 Dispose of used chemical containers.

02.0 LIST AND EXPLAIN LAWS AND REGULATIONS RELATIVE TO THE SAFE APPLICATION OF PEST CONTROL MATERIALS - The student will be able to:

- 02.01 Observe local, state, and federal pesticide and agricultural chemical regulations.
- 02.02 Observe EPA regulations.
- 02.03 List agencies responsible for the regulation of the pest control and chemical application industry.
- 02.04 Attend workshops and seminars to upgrade skills and knowledge.
- 02.05 List sources of up-to-date information and services.
- 02.06 List societies, organizations, and associations relative to the occupation or profession.

03.0 MAINTAIN EQUIPMENT USED TO APPLY PEST CONTROL MATERIALS--The student will be able to:

- 03.01 Inspect safety equipment for cleanliness, effectiveness, and proper fit.
- 03.02 Inspect equipment for leaks, clogs, and other malfunctions, and identify improper equipment for the job.
- 03.03 Adjust pressure and spray patterns.
- 03.04 Adjust equipment height and width.
- 03.05 Adjust mixing apparatus.

- 03.06 Repair or replace hoses, nozzles, and cut-off valves.
 - 03.07 Prepare equipment for storage.
 - 03.08 Lubricate equipment.
 - 03.09 Follow operator's manuals.
 - 03.10 Repair and/or maintain dusters.
 - 03.11 Repair and/or maintain fumigators.
 - 03.12 Assist in keeping vehicle maintenance records.
 - 03.13 Maintain and use shop equipment and tools.
 - 03.14 Clean and flush chemical application equipment.
 - 03.15 Select appropriate equipment to be used with each chemical.
- 04.0 QUALIFY FOR APPROPRIATE CERTIFICATION TO APPLY PEST CONTROL MATERIALS - The student will be able to:
- 04.01 Interpret certification and licensing requirements.
 - 04.02 Identify qualifications needed for various certificates or licensures.
 - 04.03 Apply for license or certificate.
 - 04.04 Maintain license or certificate.
- 05.0 ASSIST IN KEEPING ACCURATE RECORDS REQUIRED BY LAW AND FOR BUSINESS PURPOSES - The student will be able to:
- 05.01 Assist in maintaining personnel records.
 - 05.02 Assist in maintaining health and accident records.
 - 05.03 Assist in keeping equipment maintenance records.
 - 05.04 Assist in keeping pesticide application records.
 - 05.05 Assist in maintaining inventory of pesticides and chemicals.
- 06.0 IDENTIFY PESTS AND THE APPROPRIATE CHEMICALS USED TO CONTROL THEM - The student will be able to:
- 06.01 Identify fungi and bacteria and their symptoms.
 - 06.02 Recognize symptoms of insects and nematodes.
 - 06.03 Classify feeding habits and life cycles of insects.
 - 06.04 Describe life cycles of bacteria and fungi.
 - 06.05 Consider the pest, host being attacked, and chemical when recommending chemical control measures.
 - 06.06 Assess environmental impact when recommending chemical control measures.
 - 06.07 Identify insect, weed, and other pests.
- 07.0 MARKET AND MERCHANDISE GOODS AND SERVICES--The student will be able to:
- 07.01 Handle customer complaints and questions.
 - 07.02 Take orders for goods and services by telephone.
 - 07.03 Advise customers in the selection of goods or services.
- 08.0 DEMONSTRATE ADEQUATE COMMUNICATION, EMPLOYABILITY, HUMAN, AND INTERPERSONAL RELATIONS SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application form correctly.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other person.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.

08.09 Demonstrate acceptable employee health habits.