

**HORTICULTURE
LANDSCAPE
MAINTENANCE
TECHNICIAN
SKILLS STANDARDS
OD36204**



ENDORSED BY
OK TURFGRASS
RESOURCE
FOUNDATION
STATE NURSEYMAN'S
ASSOCIATION
GREENHOUSE
GROWER'S
ASSOCIATION
STATE FLORIST
ASSOCIATION

COMPETENCY-BASED EDUCATION: OKLAHOMA'S RECIPE FOR SUCCESS

BY THE INDUSTRY FOR THE INDUSTRY

Oklahoma's *CareerTech* system of competency-based education uses industry professionals and certification standards to identify the knowledge and abilities needed to master an occupation. This industry input provides the foundation for development of instructional materials that help prepare the comprehensively trained, highly skilled employees demanded by our workplace partners.

TOOLS FOR SUCCESS

CareerTech relies on three basic instructional components to deliver competency-based instruction: skills standards, curriculum materials, and competency assessments.

Skills standards provide the foundation for competency-based instruction in Oklahoma's *CareerTech* system. The skills standards outline the knowledge, skills, and abilities needed to perform related jobs within an industry. Skills standards are aligned with national skills standards; therefore, a student trained to the skills standards possesses technical skills that make him/her employable in both state and national job markets.

Curriculum materials contain information and activities that teach students the knowledge and skills outlined in the skills standards. In addition to complementing classroom instruction, curriculum resources provide supplemental activities to enhance learning and provide hands-on training experiences.

Competency Assessments test the student over material outlined in the skills standards and taught using the curriculum materials. When used with classroom performance evaluations, written competency assessments provide a means of measuring occupational readiness.

Although each of these components satisfy a unique purpose in competency-based education, they work together to reinforce the skills and abilities students need to gain employment and succeed on the job.

MEASURING SUCCESS

Written competency assessments are used to evaluate student performance. Results reports communicate competency assessment scores to students and provide a breakdown of assessment results by duty area. The results breakdown shows how well the student has mastered skills needed to perform major job functions and identifies areas of job responsibility that may require additional instruction and/or training.

Group analysis of student results also provides feedback to instructors seeking to improve the effectiveness of career and technology training. Performance patterns in individual duties indicate opportunities to evaluate training methods and customize instruction.

TRUE TO OUR PURPOSE

"Helping Oklahomans succeed in the workplace" defines the mission of Oklahoma *CareerTech* and its competency-based system of instruction. Skills standards, curriculum, and assessments that identify and reinforce industry expectations provide accountability for programs and assure *CareerTech*'s continued role in preparing skilled workers for a global job market

Copyright 2006
Oklahoma Department of Career and Technology Education
All rights reserved

Printed in the United States of America by the
Oklahoma Department of Career and Technology Education
Stillwater, Oklahoma

The Oklahoma Department of Career and Technology Education does not discriminate on the basis of race, creed, color, national origin, sex, age, veteran status, or qualified handicap.

**HORTICULTURE
LANDSCAPE MAINTENANCE TECHNICIAN
SKILLS STANDARDS
Frequency and Criticality Ratings**

Duty A: Employability Skills

Duty B: Operate Light Equipment

Duty C: Organize Work Supplies For Daily Tasks

Duty D: Maintain Grounds

Duty E: Calibrate and Apply Pesticides and Fertilizers

Duty F: Maintain Equipment

Duty G: Utilize Safety Procedures

Frequency: represents how often the task is performed on the job. Frequency rating scales vary for different occupations. The rating scale used in this publication is presented below:

- 1 = less than once a week
- 2 = at least once a week
- 3 = once or more a day

Criticality: denotes the level of consequence associated with performing a task incorrectly. The rating scale used in this publication is presented below:

- 1 = slight
- 2 = moderate
- 3 = extreme

DUTY A: Employability Skills

CODE	TASK	F/C
A.01	Communicate with customers (i.e. problem solving skills, communication skills, interaction skills, positive attitude, etc.)	3/3
A.02	Interpret and follow written and oral directions	3/3
A.03	Determine daily work assignments	3/2
A.04	Dress appropriately	3/2
A.05	Communicate with co-workers	3/2
A.06	Maintain a courteous and responsive attitude toward all customers and co-workers	3/3
A.07	Work ethic, attendance	3/3

DUTY B: Operate Light Equipment

CODE	TASK	F/C
B.01	Operate small chain saw, edgers, trimmers, and blowers	3/3
B.02	Operate utility vehicles (standard transmission) <ul style="list-style-type: none"> • Shifting 	2/2
B.03	Identify and use hand rake	2/2

B.04	Identify and use shovel	2/2
B.05	Identify and operate mowers	3/3
B.06	Identify and operate aerator and dethatcher, if available	1/1

DUTY C: Organize Work Supplies for Daily Tasks

CODE	TASK	F/C
C.01	Gather appropriate tools for tasks	3/3
C.02	Gather safety supplies	3/2
C.03	Clean and store tools	3/3

DUTY D: Maintain Grounds

CODE	TASK	F/C
D.01	Maintain cool and warm season grasses	3/3
D.02	Water seeded and sodded areas	3/3
D.03	Maintain golf course setup (empty trash, clean facilities, remove leaves and litter, and general upkeep)	2/2
D.04	Change cups	2/2
D.05	Recognize common turf problems <ul style="list-style-type: none"> • Weeds • Diseases • Pests • Environmental 	3/3
D.06	Working knowledge of irrigation sprinkler systems	3/3

DUTY E: Calibrate and Apply Pesticides and Fertilizers

CODE	TASK	F/C
E.01	Operate a spreader (dry and liquid)	2/2
E.02	Operate a sprayer (dry and liquid)	2/2
E.03	Perform maintenance on a spreader	1/2
E.04	Perform maintenance on a sprayer	1/2

DUTY F: Maintain Equipment

CODE	TASK	F/C
F.01	Check for leaks in equipment	3/2
F.02	Fuel equipment	3/3
F.03	Clean equipment	3/3
F.04	Check fluids and lubricate	3/3
F.05	Check tires	2/1
F.06	Calculate fuel ratios for 2 stroke engines	3/2
F.07	Be familiar with equipment operator manuals	3/3

DUTY G: Utilize Safety Procedures

CODE	TASK	F/C
G.01	Use safety with chemicals <ul style="list-style-type: none">• Handling• Storage• Personal Protective Equipment (PPE)• Material Safety Data Sheets (MSDS)	3/3
G.02	Use personal and equipment safety <ul style="list-style-type: none">• Shields• Guards• Safety equipment• Proper clothing	3/3
G.04	Use general safety <ul style="list-style-type: none">• Lifting• Slips, trips and falls	3/3