



**NORTHWEST ARKANSAS
COMMUNITY COLLEGE**



**TRAIL
TECHNICIAN
PROGRAM**

Trail Technician

General Assessment Information

Blueprint Contents

General Assessment Information
Written Assessment Information

Specific Competencies Covered in the Test
Sample Written Items

Test Type: NorthWest Arkansas Community College (NWACC) selected NOCTI/Nocti Business Solutions as its development and delivery partner for the Trail Technician Level 1 certification. This certification covers the essential skills and techniques required to create and maintain well-designed, safe, and sustainable mountain bike trails and is available for individuals seeking certification. [Order Credential Assessment](#)



03.0101 – Natural Resources/Conservation,
General
03.0104 – Environmental Science
03.0205 – Water, Wetlands, and Marine
Resources Management
03.0508 – Urban Forestry
03.0201 – Natural Resource Recreation
and Tourism
49.0202 – Construction/Heavy
Equipment/Earthmoving Equipment
Operation (for trail building with
machinery)
31.03 – Parks, Recreation and Leisure
Facilities Management



Architecture and Construction;
Agriculture, Food & Natural Resources
(ALL)



17-1012.00 Landscape Architects;
47-1011.00 First-Line Supervisors of
Construction Trades and Extraction
Workers

Written Assessment

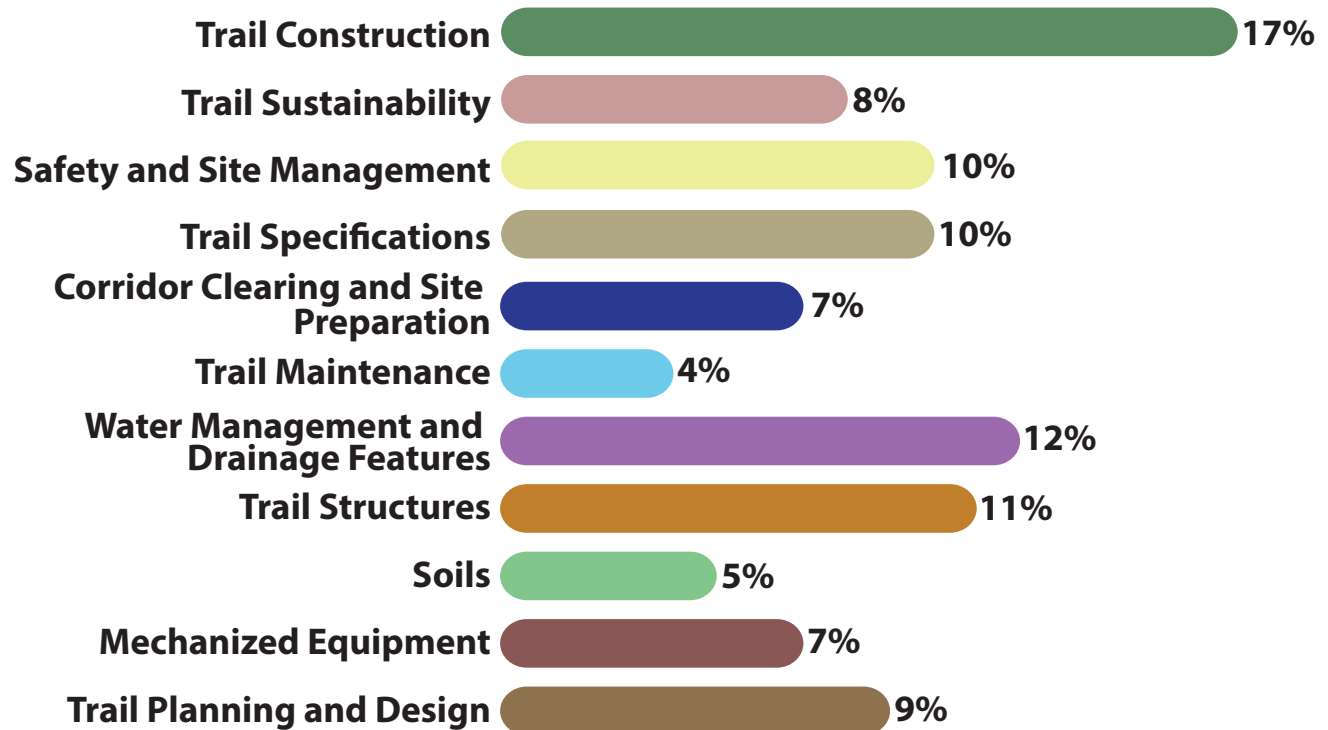
This written assessment consists of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours

Number of Questions: 126

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Competencies and Skills Tested in this Assessment

Trail Construction

- Identify trail sustainability principles
- Describe hand-built trail construction
- Discuss trails finish work
- Define decommissioning trails

Trail Sustainability

- Describe sheet flow, slope, and erosion
- Identify drainage principles
- Describe user impact on trails

Safety and Site Management

- Discuss PPE and safety training
- Identify tools and tool safety
- Discuss worksite safety

Trail Specifications

- Describe corridor height and width
- Describe trail tread width, slope, and grade
- Identify protrusions and obstacles

Corridor Clearing and Site Preparation

- Describe corridor clearing
- Describe tree removal and chainsaw use
- Discuss material and debris management

(Continued on the following page)

Specific Standards and Competencies (continued)

Trail Maintenance

- Describe trail maintenance and sustainability goals
- Discuss tread maintenance and hand tools

Water Management and Drainage Features

- Describe outsloping and application of drainage features
- Identify locations of drainage features

Trail Structures

- Identify water crossing structures
- Discuss retaining walls
- Describe tread hardening

Soils

- Identify types of soils
- Identify characteristics of soils

Mechanized Equipment

- Describe the operation of mechanized equipment
- Identify types of mechanized equipment

Trail Planning and Design

- Determine site elevations
- Describe trail objectives and design

Sample Questions

When soil is displaced from a trail, it can result in

- A. better conditions for vegetation
- B. rutted tread and trail widening
- C. a stream crossing
- D. trail narrowing and compaction

How large is the safety zone radius while working on a trail?

- A. 6 feet
- B. 15 feet
- C. specific to the proper use of each tool or machine
- D. just within ear shot of next nearest trail worker

A characteristic of insloped tread is

- A. it promotes sheet flow across the trail
- B. it requires minimal maintenance
- C. users cannot maintain speed through the turn
- D. the tread is sloped inward toward the hill

To operate a chainsaw on public lands, the trail technician must

- A. be able to identify local tree species
- B. use an approved model of chainsaw
- C. have 5 years of chainsaw operational experience
- D. meet the required agency certification criteria

The trail tread is outsloped to

- A. promote drainage across the tread
- B. make the trail more challenging for users
- C. minimize fill
- D. manage spoils

(Continued on the following page)

Sample Questions (continued)

The purpose of a grade reversal is to

- A. provide a passing zone
- B. provide rest areas
- C. divert water off the trail
- D. make a jumpable feature

Rocks should be placed in a retaining wall

- A. with large spaces between the rocks
- B. in tight contact with adjacent rocks
- C. rounded side up to shed water
- D. slightly outsloped to shed water

To determine how much clay is in soil,

- A. dig a borrow pit
- B. roll it in your hand
- C. smell it
- D. jump on it

What equipment transports materials, and can traverse muddy terrain?

- A. mini excavator
- B. trail dozer
- C. mechanized wheelbarrow
- D. plate compactor

Control points are used in trail planning and design to help define

- A. areas to include or avoid
- B. the end point of a trail system
- C. a list of resources for trail users
- D. what tools to use for construction