



Environmental Management 2018-19 State Results

Statistics data includes students taking exams in the original testing period and includes students retaking exams. The Score Distribution and Standards performance tables show results for original testing period only for accurate evaluation of live testing performance.

Statistics

| Categories | Performance |
|-----------------|-------------|
| Participants | 27 |
| Pass Rate | 22 |
| Pass Percentage | 81.5% |
| Average Score | 74.4 |
| Cut Score | 69 |

Score Distribution

| % Range | # Scores in Range |
|---------|-------------------|
| 0-19 | 0 |
| 19-29 | 0 |
| 29-39 | 0 |
| 39-49 | 0 |
| 49-59 | 0 |
| 59-69 | 5 |
| 69-79 | 14 |
| 79-89 | 5 |
| 89-99 | 1 |
| 99-100 | 0 |

Environmental Management

| | |
|--|--------|
| 1) Content Standard 1.0 Ecological Concepts and Science Principles | 65.65% |
| 1) Performance Standard 1.1 : Explore Ecological Principles | 66.8% |
| 1) 1.1.1 Evaluate the different biogeochemical cycles i.e., water, carbon, nitrogen and phosphorus | 63% |
| 3) 1.1.3 Interpret energy loss through an ecosystem ie: The energy pyramid | 96% |
| 4) 1.1.4 Describe the interdependence of organisms within an ecosystem | 72% |
| 5) 1.1.5 Investigate the processes associated with ecological succession | 50% |
| 7) 1.1.7 Differentiate between renewable and nonrenewable natural resources | 74% |
| 2) Performance Standard 1.2 : Explore Ecosystems | 70.67% |
| 1) 1.2.1 Compare and contrast Nevadas ecosystems i.e., high and low desert, alpine, forest, riparian, and wetlands | 68% |
| 3) 1.2.3 Explore limiting factors within an ecosystem's population | 76% |
| 3) Performance Standard 1.3 : Explore Population Ecology | 59% |
| 3) 1.3.3 Investigate carrying capacity on environmental resources | 82% |
| 4) 1.3.4 Explain how species become endangered or extinct | 36% |
| 2) Content Standard 2.0 Scientific Investigation in the Environment | 85.26% |
| 1) Performance Standard 2.1 : Design and Conduct Scientific Research | 80.8% |
| 1) 2.1.1 List the steps of the scientific method | 92% |
| 2) 2.1.2 Design and conduct a scientific investigation | 88% |
| 3) 2.1.3 Compare results of repeated experiments to determine accuracy and precision | 66% |
| 2) Performance Standard 2.2 : Report Scientific Research | 72% |
| 1) 2.2.1 Organize the major parts of a research report | 72% |
| 2) 2.2.2 Generate a research report to present data findings and analyses with technical resources | 76% |
| 3) 2.2.3 Illustrate how to include proper tables and figures in a research report to support an argument | 68% |
| 3) Performance Standard 2.3 : Understand Scientific Measurement | 94.4% |
| 1) 2.3.1 Describe the systems of measurement used in this country | 96% |
| 2) 2.3.2 Determine the metric prefixes and units used for measuring length, volume weight, temperature, and area | 84% |
| 3) 2.3.3 Convert from one system of units to another system of units | 98% |
| 4) Performance Standard 2.4 : Use Laboratory Tools and Equipment | 91.2% |

| | |
|--|--------|
| 2) 2.4.2 Describe safety in science laboratories | 80% |
| 3) 2.4.3 Calibrate and use laboratory and field equipment and instruments according to standard operating procedures | 96% |
| 4) 2.4.4 Analyze and interpret results of sample measurements | 92% |
| 3) Content Standard 3.0 Evaluating Environmental Quality | 76.44% |
| 1) Performance Standard 3.1 : Investigate Air Quality | 78.18% |
| 1) 3.1.1 Identify components that make up the atmosphere | 81.33% |
| 2) 3.1.2 Identify types of air pollutants | 78.67% |
| 4) 3.1.4 Interpret the role of the atmosphere in creating the greenhouse effect | 84% |
| 8) 3.1.8 Investigate the cause and effects of acid rain produced through change in atmospheric composition | 76% |
| 10) 3.1.10 Explore effects of air pollution on humans, animals, and vegetation | 68% |
| 2) Performance Standard 3.2 : Investigate Water Quality | 69.82% |
| 1) 3.2.1 Identify the components of fresh and salt water | 56% |
| 2) 3.2.2 Identify types of water pollutants | 97.33% |
| 3) 3.2.3 Differentiate between point and nonpoint source pollution | 70% |
| 4) 3.2.4 Explore the effects of human activity on water quality | 56% |
| 3) Performance Standard 3.3 : Investigate Soil Science | 87.2% |
| 3) 3.3.3 Identify land uses, capability factors, and land capability classes | 96% |
| 4) 3.3.4 Perform a soil texture analysis | 100% |
| 5) 3.3.5 Explain how the physical qualities of the soil influence the infiltration and percolation of water | 86% |
| 8) 3.3.8 Examine the chemical and biological characteristics of soil | 68% |
| 4) Content Standard 4.0 Exploring Concepts of Sustainable Use | 84% |
| 1) Performance Standard 4.1 : Investigate Sustainable Use Practices | 78.67% |
| 1) 4.1.1 Define sustainable use | 96% |
| 3) 4.1.3 Identify sustainable agriculture practices | 70% |
| 4) Performance Standard 4.4 : Explore Mineral Extraction Resources | 100% |
| 2) 4.4.2 Summarize the importance of mineral resources to society | 100% |
| 5) Content Standard 5.0 Using GIS and GPS | 94.67% |
| 1) Performance Standard 5.1 : Understand the operation of a GPS | 94.67% |
| 2) 5.1.2 Demonstrate the ability to use a GPS unit, including waypoints, distance and calibration | 94% |

| | |
|--|--------|
| 3) 5.1.3 Explain how a GPS unit acquires its signals to define a location | 96% |
| 6) Content Standard 6.0 Explore Energy Sources | 64% |
| 1) Performance Standard 6.1 : Investigate Conventional Fuels | 88% |
| 1) 6.1.1 Identify conventional energy sources | 88% |
| 2) Performance Standard 6.2 : Investigate Alternative Energy Resources | 40% |
| 1) 6.2.1 Identify renewable energy sources, i.e., solar, wind, hydropower, and cogeneration | 40% |
| 7) Content Standard 7.0 Hydrology and Hydrogeology | 72.8% |
| 1) Performance Standard 7.1 : Explore Hydrology Principles | 40% |
| 1) 7.1.1 Describe the worlds surface water supplies | 40% |
| 2) Performance Standard 7.2 : Explore Principles of Hydrogeology | 88.8% |
| 1) 7.2.1 Differentiate the role of ground water, aquifers and surface water in the geochemical cycle | 90% |
| 4) 7.2.4 Identify environmental hazards associated with groundwater supplies | 84% |
| 5) 7.2.5 Describe precautions taken to prevent/reduce contamination of groundwater supplies | 96% |
| 4) Performance Standard 7.3 : Investigate Watersheds | 68% |
| 1) 7.3.1 Identify properties of watersheds | 72% |
| 2) 7.3.2 Explain watershed management | 60% |
| 8) Content Standard 8.0 Environmental Law and Public Policy | 68% |
| 1) Performance Standard 8.1 : Explore Current Environmental Issues | 65% |
| 1) 8.1.1 Distinguish between the concepts of conservation and preservation of natural resources | 66% |
| 4) 8.1.4 Analyze the effect of non-native and invasive species on the environment | 64% |
| 2) Performance Standard 8.2 : Understand the Purposes of Major Laws Impacting Environmental Services | 71% |
| 1) 8.2.1 Explain requirements of the Clean Air Act | 76% |
| 3) 8.2.3 Explain requirements of the Clean Water Act | 84% |
| 5) 8.2.5 Explain requirements of Safe Drinking Water Act | 62% |
| 9) Content Standard 9.0 Assess Environmental Site Management | 82.86% |
| 1) Performance Standard 9.1 : Explore Hazardous Materials Management Systems | 72% |
| 2) 9.1.2 Describe risks associated with hazardous materials | 92% |

| | |
|---|--------|
| 5) 9.1.5 Interpret MSDS sheets | 52% |
| 5) Performance Standard 9.5 : Explore Waste Water Treatments | 52% |
| 1) 9.5.1 Define wastewater | 52% |
| 6) Performance Standard 9.6 : Explore Public Drinking Water Treatments | 96% |
| 1) 9.6.1 Examine the chemical and physical properties of drinking water | 94.67% |
| 3) 9.6.3 Illustrate the steps in the public drinking water treatment process, highlighting the chemistry in the process | 100% |
| 10) Content Standard 10.0 Explore Career Opportunities in Environmental Systems | 12% |
| 1) Performance Standard 10.1 : Explore Careers in Environmental Systems | 12% |
| 1) 10.1.1 Research potential careers in environmental science and management systems | 4% |
| 2) 10.1.2 Determine employability skills for a career in the environmental industry | 20% |