

Colorado Outdoor Recreational Leadership Course Scope and Sequence

Course Name	White Water Rafting Guide		Course Details	Level 4 course in the Outdoor Recreational Leadership Pathway. Prerequisites: River Orientation and White Water Rafting
			Course = 0.50 Carnegie Unit Credit	
Course Description	The classroom portion includes a review of the logistics, equipment, clothing, safety considerations, risk management, outdoor ethics, river reading fundamentals, and leadership skills. The remainder of the course will be spent with a licensed outfitter practices all related and required skills while on the river.			
Note:	This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all essential knowledge and skills are covered.			
SCED Identification #		Schedule calculation based on 60% of a semester instructional time. Scope and sequence allows for additional time for guest speakers, student presentations, field trips, remediation, or other content topics.		
All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The Essential Skills Framework for this course can be found at https://www.cde.state.co.us/standardsandinstruction/essentialskills				
Unit Number, Title and Brief Description	CTE or Academic Standard Alignment	Competency / Performance Indicator	Outcome / Measurement	CTSO Integration
Unit 1: Equipment	Introduction to the uses, designs construction, and repair of; rafts, paddles, personal flotation devices, helmets, throw ropes, repair kits, and first aid kits. Outfitting the raft for whitewater. Proper clothing Required group equipment for comfort and safety			
Unit 2: Rigging the Raft	Raft rigging techniques for use in whitewater. Paddle boat vs. Oar boat Safety and efficiency considerations			

	Securing boats and equipment to vehicles and trailers. Proper knots and balancing the load. Loading and unloading the rafts from vehicles and trailers De-rigging the load.			
Unit 3: Moving Water Features	Fundamentals of river currents Volume, gradient, obstacles, waves, hazards Types of rapids International Rapid Rating Scale	Explain how river rapids are formed and identify the intensity of rapids using the standard I-VI classification system.		
Unit 4: River Reading Responsibilities for River Guides	Customer Safety Scouting techniques Selecting a course Private and public property considerations.	Identify hazards Demonstrate steps for scouting and running rapids.		
Unit 5: Maneuvering the Raft in Whitewater	Strokes for customers Strokes for guides Experiencing total boat control Using currents and features Ferrying, eddy turns, peelouts, right and left turns.	Demonstrate the proper techniques for rigging and maneuvering a raft on a Class III river. Understand the effects of river currents, eddies, and irregular waves have on the maneuverability of a vessel.		
Unit 6: Orientation of the Guide to the Customer	Safety considerations of guests in and out of the boat	Identify and demonstrate the proper fitting, wearing, and use of personal flotation devices.		

	Weather and river conditions vs personal equipment and clothing Proper use and fit of outfitter equipment Passenger riding and positioning in the boat Passenger what to do in the event of an accident Safety procedures for swimming a rapid and getting back into the boat River Corridor Ethics Sanitation, litter prevention, and human waste disposal.	Repeat from memory an appropriate river safety orientation for passengers engaging in whitewater sports		
Unit 7: Safety Talk to Customers	River Commands Power, weight, and balance Getting the most from your crew			
Unit 8: On-River Orientation of the trip	Paddle signals Spacing of the rafts Responsibilities of the lead and sweep boats River etiquette (among the outfitters) Guide and passenger behaviors at the put-in, on the river, and at the take-out.			
Unit 9: Trip Leader Responsibilities	State Requirements Timing Issues Evacuation Protocols	Recall and employ minimal impact techniques for river corridors Operate a commercial type whitewater craft on an		

		appropriate section of river normally used for commercial whitewater rafting.		
Unit 10: Emergency Procedures/River Rescue	Rescue Philosophy Decision making Incident command and scene organization Proper use of rescue equipment Throw ropes, belaying, knots, mechanical advantages, boat tows Contract rescues, swimming, wading Line crossing Entrapments Low head dam rescue Self-rescues Hypothermia and first aid considerations	Understand and demonstrate basic river rescue and emergency procedures.		

Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc)

[CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Standard 1: Oral Expression and Listening

- Prepared Graduate 1: Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.

- Students develop leadership and teamwork skills through guide and customer interactions, crew management, trip leadership responsibilities, and emergency response scenarios that require effective communication and collaboration.
- Prepared Graduate 2: Deliver effective oral presentations for varied audiences and varied purposes.
 - Students develop and deliver river safety orientations, customer briefings, paddle commands, and trip information presentations designed to communicate safety procedures, expectations, and technical information to rafting participants.

Standard 2: Reading for All Purposes

- Prepared Graduate 4: Read a wide range of informational texts to build knowledge and to better understand the human experience.
 - Students interpret river classifications, hydrology concepts, weather and river conditions, safety protocols, rescue procedures, state regulations, equipment specifications, and environmental ethics to develop professional rafting guide competencies.
- Prepared Graduate 5: Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.
 - Students develop and apply specialized vocabulary related to river hydrology, whitewater classification, rafting techniques, rescue systems, customer orientation, risk management, incident command, and river corridor management.

Standard 4: Research Inquiry and Design

- Prepared Graduate 10: Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.
 - Students evaluate river conditions, hazards, weather patterns, rescue options, customer safety considerations, trip logistics, environmental impacts, and emergency response procedures to make informed decisions related to commercial whitewater rafting operations and risk management.

Note: *Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.*