

Colorado Outdoor Recreational Leadership Course Scope and Sequence

Course Name	Snow Tech		Course Details		
			Course = 0.50 Carnegie Unit Credit		
Course Description					
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	Topics	Competency / Performance Indicator	Outcome / Measurement	CTSO Integration	
Unit 1: Ski/board Fabrication	History of Ski Construction				
	Varieties of Skil construction, materials, and design				
	Ski construction processes				
Unit 2: Alpine Ski/Snowboard Tuning	Base Repair				
	Base Grinding/Maintenance	Structure and Ski Performance			
	Edge Tuning	Side base bevel	Bevel angles and ski performance		
		Polishing			
	Base Cleaning/prep				
	Base Wax	Techniques			
		Temperature changes	Chemical composition of different color waxes		
		Varieties and materials			
Machine tuning basics					
Unit 3: Bindings	History of ski/snowboard bindings				
	Binding anatomy	Alpine			
		Telemark			
		Alpine Touring			
		Snowboard			
	Binding Function and Adjustment	Forward Pressure			
		Retention Settings	DIN/ISO Standards		

			Torque Test	
	Binding Mounting	Equipment Processes	Jigs, Bits, Taps	
Unit 4: Nordic	History			
	Binding systems/norms			
	Tuning	Base Prep and Waxing Binding Mounting		
	Nordic Grooming			
Unit 5: Boot Fitting	Boot History			
	Boot Design and Materials			
	Foot and leg anatomy			
	Boot Fitting Processes	Foot/leg measurements Compatibility Boot Adjustment Procedures		
Unit 6: Adaptive	History of Technological Innovation			
	Equipment Design and Maintenance	Stand	Outriggers	
			Slider	
			Rider Bar	
		Sit	Mono-Ski	
			Bi-Ski	
Unit 7: Snow Industry & Career Exploration	Site Visits	Visually Impaired	Digital guiding system	
		Grooming		
		Snow Making		
		Lift Maintenance		
		Rental/Retail		