Table 3: Level 2 Avalanche Training

Program	Audience	Learning Outcomes	Core Curriculum Content	Prerequisites	Course Format	Performance Measures	Instructor Qualifications & Student: Instructor Ratio
Level 2 Avalanche Training	*Advancing winter backcountry travelers with prior avalanche training and experience	-Link season weather history and relevant snowpack processes to current snowpack structure and layering. -Use local avalanche advisory as well as other resources available - remote weather stations, reports, and forecasts. -Create an avalanche hazard assessment without a local advisory. -Prioritize relevancy of observations and snowpack tests based on avalanche hazard and problem(s) and apply at a local scale. Key record keeping. -Gain deeper understanding of avalanche formation, triggering, and release mechanisms, including links to Avalanche Problems. -Recognize and manage risk: human factors, motivations, objectives, and limitations - through planning and communication. -Apply tools for planning, decision-making, and travel with consideration of group risk management and awareness of safe margins. -Practice travel protocols and techniques to mitigate risk exposure in a variety of avalanche terrain situations and challenges.	**Pre-Course** • Review Avalanche Fundamentals • Consider additional, targeted pre-course material for students to facilitate foundational topics **Concepts in Avalanche Hazard** • Identify/review Avalanche Problems (conditions, formation, characteristics) • Avalanche Character + Location(s) and distribution of the Avalanche Problems, sensitivity to triggering • Integrate likelihood, exposure, consequence, and trend concepts **Understanding Avalanche Release** • Understanding avalanche release – initiation, fracture, propagation • Snowpack characteristics, and Triggering. **Snowpack & Weather** • Relate seasonal snowpack layering to weather events/history • Storms (layers) and non-storm intervals (surfaces, weak layer formation), leading • Avalanche events -linking snowpack structure to Avalanche Problems • Layer formation processes- fragments, rounds, facets, surface conditions • Influences of wind, temperature, snowpack depth on layer formation • Relevance of settlement, creep, and glide; links to snowpack stability **Terrain** • Scale of terrain- region, range, basin, slope, features avalanche paths and specific terrain features • Link terrain aspect and elevation to avalanche problems & character • Identify snow cover over terrain. Snow cover distribution weak/shallow; strong/deep. Track Stability & snow quality. • Use of terrain rose to illustrate and track Avalanche Character, and safe terrain with snow quality. • Estimate avalanche size(s) given terrain scale and avalanche character **Applied Information Gathering & Planning** • Review a current avalanche advisory for reference when available • In lieu of (or in addition to) public avalanche forecast, identify local and internet resources for snow, weather, and avalanche information • Utilize Field Book- for documenting critical Information • Relate weather station data to snowpack history and current snowpack observed • Identify key information and questions to consider in estimating avalanche hazard and problems • Incorporate recent observations and reports to assess present conditions • Identify and manage areas of uncertainty with targeted observations and appropriate terrain selection and boundaries • Review and practice basic trip planning outline presented in Avalanche Fundamentals (i.e. group objectives, leadership, decision points, contingencies, and emergency plans) • Use maps and map technology to identify simple, challenging, and complex terrain in local area. Anticipate terrain challenges given Avalanche Character. • Plan route, objectives, and terrain options for current snowpack and weather conditions • Consider communication and emergency response options for day and multi-day or remote trips **Communication, Teamwork & Decision-Making** • Human factors revisited, identify influences of individual and group factors • Communicate to identify objectives/goals (ensure <u>full</u> group buy-in), establish teamwork/roles, and manage group • Consider and communicate about group goals, abilities, motivations, and	-Level 1 Avalanche Training -Avalanche Rescue -Participants must be prepared and fit enough to travel during daylight hours on touring skis, splitboard, snowshoes, or snowmobile in backcountry terrain in winter conditions for three consecutive days.	24 hours Minimum: 60% field time	Instructor Coaching and Feedback. **Participation in daily trip planning and execution, including:** • Relevant observations Information resources • Team-based • decision-making/ support tools • Group feedback **Self Evaluation:** • Identify individual strengths and limitations of skills and knowledge; identify mentors and learning tools to further develop personal skills and knowledge. No Formal Testing or Evaluation.	-All Instructors: AAA Professional Member -Lead Instructor: Minimum 4 seasons as an Advanced Recreational Avalanche Instructor -Maximum 6:1

			limitations throughout the day; impacts of these factors on route and terrain selection • Identify conditions in the field that may challenge communication and decisions • Designate and follow through with group check-ins, decision points, and timeframe for day **Field Observations & Snowpack Evaluation** • Target observations & snowpack tests to fill knowledge gaps and address current/suspected Avalanche Character • Identify and prioritize critical "red flag" observations of terrain, snowpack, and weather • Pertinent weather observations and trends: sky-cover, wind, temperature, solar radiation, precipitation • Additional snowpack observations: snow surface mapping, snowpack depth/distribution, settlement, note daily changes, link key weather and affect on snowpack. • Recording observations- Key concepts: Weather & snowpack obs. Drafting snow profiles • Make observations and informal tests while moving through terrain • Dig snow pits in relevant (aspect, elevation, Avalanche Problem), appropriate locations • Importance of craftsmanship and consistency for standardized observations • Snow pit practices: o Identify layers (hand hardness, strong vs. weak, suspect grain types), o Perform snowpack tests appropriate to conditions (CT, ECT, PST, DTT) o Note shear quality and/or fracture character • Interpretation of pit results and integration with other snowpack observations • Limitation of snow pits and value of multiple tests/locations to recognize patterns **Travel** • Recognize gaps in knowledge prior to field travel and prioritize observations needed • Trailhead Check: teamwork & communication, beacons & safety equipment. • Implement plan to field: route and trail; identify and use safer route alternatives when faced with changing or unanticipated conditions • Practice group travel protocols appropriate to terrain (spacing, one at a time, safe zones) • Group management techniques for safe and efficient uphill and downhill movement **End of day review**: • Observations of snowpack and instabilities, weather, terrain. Group teamwork, managing risk through the day; • Review close calls/mistakes, decisions • Reflections, learning				