

Avalanche Operations Level 3

When reading the following course goals and learning objectives, assume that each goal and objective begins with the following phrase:
By the end of the course/lesson, learners will be able to...

Course Goals:		Related Learning Objectives:							
		1	2	3	4	5	6	7	8
A	Apply Components of Hazard and Risk	Define avalanche hazard	Define avalanche risk	Define probability /likelihood	Define vulnerability (sectors)	Define exposure (terrain/time) (sectors)	Define consequence	Describe risk perception	Introduce acceptable or threshold risk
B	Apply Structure to Analyze, Assess and Forecast Hazard	Describe forecasting processes (model)	Describe different scales space/time	Analyze weather forecast, snowpack, avalanche occurrence data	Determine strength and weight of data	Identify data gaps	Discuss/define individual feel	Assess likelihood of triggering and size of avalanches	Address confidence & uncertainty
C	Apply Structured Process for Assessing Risk	Formulate problems	Analyze exposure and vulnerability	Apply risk assessment – quantitative, qualitative	Apply an operational risk band	Incorporate feedback loop	Define appropriate documentation		
D	Analyze decision making mode and link to avalanche risk management options	Review decision making modes	Describe reasoning processes (guts, reason)	Link decision making mode to experience	Link decision modes to scale	Discuss on site/spot forecasting	Account for spatial variability	Describe bias and heuristics and apply de-biasing techniques	
E	Identify Cross-Sector Options for Risk Management	Identify risk control options	Describe cross sector options for risk management	Apply risk control	Evaluate risk control results	Explain insurance risk management	Apply benefit/cost analysis	Discuss components of avalanche safety plan outline (ASP)	

F	Communicate Hazard & Risk in Workplace & Public Forums	Define target audience	Describe effective methods of communication for hazard and risk	Demonstrate effective writing techniques	Explain rating systems	Demonstrate effective workplace communication	Demonstrate effective public communication	Discuss media communications	
G	Scope of Practice for L3 operations	Discuss maintenance and improvement upon the L3 skill set	Discuss requirements for QAP designation						

***Each goal and objective may be comprised of several classroom and field based lectures.**