



*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
A	Examine atmospheric circulation processes	Describe primary hemispherical circulation cells and their influence on Canadian weather patterns	Explain how low pressure systems form	Examine three-dimensional air movement at frontal boundaries	Examine air stability and interpret resulting weather patterns	Examine effects of the jet stream on synoptic scale weather patterns
B	Interpret weather observation and forecast tools	Discuss weather maps using accurate weather terminology	Interpret atmospheric soundings and Tephigrams	Interpret surface analysis and upper air charts (250 hPa, 500 hPa, 700 hPa, and 850 hPa levels)	Interpret aviation weather products	Interpret meteorograms
C	Describe how weather influences snow and avalanche conditions	Describe weather factors and how they relate to precipitation type and intensity	Explain how snowpack characteristics are influenced by changing weather parameters	Create a ‘Hit-List’ of weather changes important to snow stability	Analyze historical weather with respect to avalanche formation	
D	Describe how the weather is influenced by topography	Identify upslope/ downslope areas for various flow patterns	Describe local mountain circulations using examples	Explain how topography induced weather phenomena affects snow stability		
E	Interpret the CAA avalanche weather products	Summarize all sections of the forecast	Describe how the forecast is created and what information was used	Discuss scale issues and limitations of forecast		

CAA Advanced Weather Skills for Avalanche Workers – DACUM

F	Critique internet and industry forecast resources	Differentiate between weather observations, model outputs, and model analysis	Review Canadian and U.S. forecast products	Describe the advantages and limitations of various numerical weather prediction models	Determine the most important weather resources for your area	
G	Participate in professional weather briefings and discussions	Describe a weather case study resulting in an avalanche or avalanche cycle	Create a weather synopsis using weather forecast resources	Build an avalanche hazard forecast from weather forecast resources		

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