Canadian Avalanche Association

Course Outline

Avalanche Operations Level 3

Description	Avalanche Operations Level 3 is a senior-level professional course in the Canadian Avalanche Association's Industry Training Program (ITP), designed for experienced avalanche workers and leaders in operational roles such as forecasting, risk management, planning, and program supervision. The Level 3 curriculum emphasizes applied avalanche risk management and builds on the technical and field-based foundations developed in Levels 1 and 2. Level 3 students explore advanced concepts of hazard and risk, structured risk assessment frameworks, and real-world decision-making processes, preparing them to effectively analyze and communicate complex risk scenarios at both organizational and operational levels.
Prerequisites	1. Avalanche Operations Level 2 2. 3 Seasons of avalanche work post Operations Level 2 3. 2 seasons of work as an avalanche technician under an avalanche forecaster 4. Active employment in the avalanche industry
Delivery Methods	1. Classroom-Based Course Instruction focuses on advanced avalanche risk management theory, decision-making frameworks, and applied operational analysis. Learning activities include instructor-led lectures, facilitated discussions, group work, and applied case studies. Students are required to complete significant pre-course readings to prepare for the theoretical depth of the course content. 2. Post-Course Applied Assessment Following completion of the classroom course, students complete an applied assessment component consisting of a professional written report and an oral presentation. Learners develop their report by applying Level 3 concepts to their own operational context or a defined case study.
Course Materials	Students will receive two primary reference texts prior to the start of the course. These materials are provided in hard copy and are mailed to students in advance of the classroom component: • Technical Aspects of Snow Avalanche Risk Management (TASARM) Manual • ISO 31000 – Risk Management: Principles and Guidelines These documents form the core theoretical foundation for the course and are used extensively throughout classroom instruction, discussion, and post-course assessment. Students must also obtain a copy of the *Avalanche Handbook* prior to the course. An additional supplementary reading list will be provided. Additional course materials will be provided either digitally through a designated student Box folder or distributed in print during the in-person portion of the course. These materials may include worksheets,

reference documents, case study resources, and assessment tools required for successful course completion.

Duration

Avalanche Operations Level 3 consists of a five-day, in-person classroom course followed by an applied practicum completed over the remainder of the winter season. The practicum component must be completed by the spring following the classroom course, at which time the report is submitted and an oral presentation is delivered as part of the assessment process.

Course Goals

By the end of this course students will be able to:

- Define hazard and risk terms and concepts as identified in ISO 31000, the Conceptual Model, and TASARM
- Describe a planning framework for avalanche risk management
- Compare how operations assess and manage the avalanche risk; and link to operational decision making
- Describe the avalanche industry performance expectations using the terms liability, negligence, and due diligence
- Communicate hazard and risk in both the workplace and public forums
- Write and orally present a well-reasoned year-end report integrating L3 concepts and principles.

Assessment

To obtain the Avalanche Operations Level 3 certificate, students must successfully complete an evaluation conducted in the spring following the classroom course. The evaluation consists of two components: a written report and an oral presentation that describe how avalanche risk was managed in day-to-day operations using key Level 3 concepts. The written report is due in late May, and the oral presentation takes place in mid June. Students must achieve a minimum grade of 70% in both the written and oral components to be awarded the CAA Avalanche Operations Level 3 certificate.