

<b>School District/Independent School Authority Name:</b> Kootenay Lake	<b>School District/Independent School Authority Number:</b> SD8
<b>Developed by:</b> Graeme Marshall, BA, B.Ed., M.Ed. Revised by Dan Rude	<b>Date Developed:</b> First Developed - February 2006 Revised - April 2019 Revised - January 2024
<b>School Name:</b> LV Rogers Secondary	<b>Principal's Name:</b> Mr. Dan Rude
<b>Superintendent Approval Date (for School Districts only):</b>	<b>Superintendent Signature (for School Districts only):</b>
<b>Board/Authority Approval Date:</b> April 23, 2019	<b>Board/Authority Chair Signature:</b>
<b>Course Name:</b> Adventure Tourism Leadership and Safety	<b>Grade Level of Course:</b> 12
<b>Number of Course Credits:</b> 8	<b>Number of Hours of Instruction:</b> 280 hours - plus

**Board/Authority Prerequisite(s):**

- Application process (application process includes student questionnaire / medical form / consent form / 2 required reference letters, Acknowledgment of Risk form)
- Approved students will be required to attend an information meeting prior to the start of ATLAS. At least one parent / guardian must accompany students.
- students must be intermediate skiers / snowboarders or above
- Applicants must be in good health and reasonably good physical condition. positive attitude
- A demonstrated interest in, and aptitude for, outdoor work is essential as much of the work is done in the field, often under adverse and arduous weather conditions.

## Special Training, Facilities or Equipment Required:

- **Lead Teacher / Instructor Requirements and Training:**

\*It should be obvious that the teacher is a critical element in the success and safety of this course. Therefore, the following are considered by the employer.

### Outdoor Teaching / Guiding / Facilitation Experience

- ❑ Certified Teacher with the BC College of Teachers
- ❑ Experience working in the outdoor recreation industry for at least 2 years with reputable organizations (i.e. NOLS, Outward Bound, COLT))
- ❑ Familiarity with and able to adhere to *Youth Safe Outdoors* procedures and recommendations
- ❑ Adherence to SD 8's current fieldtrip guidelines, policies, and administrative procedures
- ❑ Teaching and group facilitation experience
- ❑ Outdoor leadership experience
- ❑ Ability to work within a team
- ❑ Effective communicator in small groups and one on one
- ❑ Ability to work with a variety of people
- ❑ Competence with map and compass navigation (chart reading for water activities) under difficult conditions, including darkness and inclement weather
- ❑ Knowledge of trip area hazards and localized weather patterns
- ❑ Ability to accurately assess and manage risks and environmental hazards inherent in the trip area (i.e. weather, rock fall, avalanche, river crossings, wildlife, etc.)
- ❑ Ability to use and maintain equipment in the field
- ❑ Commitment to minimum impact backcountry practices
- ❑ Ability to assess and make appropriate decisions regarding demonstrated group ability and readiness, route selection and staff ability and readiness.
- ❑ Ability to clearly establish limits and boundaries for student behavior and independence
- ❑ Minimum 50 days extended backcountry travel experience in multiple seasons
- ❑ Documented history of sound assessment and judgment skills
- ❑ Demonstrated the ability to ensure student safety in the appropriate environment
- ❑ Instructors should have a good working knowledge of local natural history, flora and fauna
- ❑ Instructors must be sufficiently fit to participate in all activities on trip and maintain ample energy, strength and focus to assist with physical and emotional obstacles/ emergency response

### **First Aid Knowledge and Training:**

- ❑ Ability to prevent, evaluate and care for medical problems in wilderness settings
- ❑ Minimum 50 hrs First Aid Training, and valid CPR certificate (Advanced Wilderness First Aid or Occupational First Aid Level 3 preferable)
- ❑ Manage emergency situations and utilize appropriate rescue resources

### **Rock Climbing Experience**

- ❑ Working knowledge of climbing techniques and pedagogy, top rope systems, and rescue procedures
- ❑ Successful completion of Association of Canadian Mountain Guides - Top rope Climbing Instructor Course

### **Winter Travel, Winter Camping and Avalanche Awareness**

- ❑ Experience and ability in avalanche assessment and forecasting (Level 2 CAA - Professional Member of the Canadian Avalanche Association)
- ❑ Avalanche Skills Training Instructor
- ❑ Extensive winter mountaineering/ ski touring experience traveling and camping in a variety of conditions
- ❑ Familiarity with travel in a variety of terrain and snow conditions for the particular activity and trip area
- ❑ Competence in the winter, mountain environment
- ❑ Sufficient personal winter backcountry skills to safely lead novices on downhill terrain and cross-country travel. Safely move novices across winter, mountain terrain, down steep snow (25-45 degrees), be personally competent at ski/ snowboard/ snowshoe descents in a variety of snow conditions and be able to construct a variety of snow shelters.

### **Canoeing Experience and Instructor Certification**

- ❑ Experience and ability in leading novice paddlers on large lakes and class 1 rivers
- ❑ Experience in teaching canoe safety and techniques
- ❑ Lakewater Canoe Instructor certification (Recreational Canoeing Association of British Columbia - RCABC)
- ❑ Canoe Tripping Instructor certification (Recreational Canoeing Association of British Columbia - RCABC)

**Facilities:**

- Access to a classroom for in school instructional days
- Climbing gym
- Access to School District No.8 approved areas

**Equipment:**

- Communication devices (i.e. satellite messaging system, VHF radio, cell phone etc.)
- First aid kit and supplies suitable for activity
- class set of avalanche transceivers, probes, shovels
- Extensive gear rental program (i.e. Valhalla Pure Outfitters; Rivers Oceans and Mountain shop)
- Winter tents
- Camp stoves and cooking gear
- Personal flotation devices (PFDs) and requisite canoeing safety equipment
- Canoe paddles
- Tarps
- Climbing helmets
- Climbing harnesses
- Climbing ropes and hardware

\*Students will be required to possess basic outdoor clothing, boots, and standard ski / snowboard gear, backpack, sleeping bag etc.

\*Students who require prescription medicine must bring two sets to the course. One set to be carried by the students in order to administer their own medication, and the other set to be carried by the teacher(s) as back up.

## Course Synopsis:

**ATLAS 12** is designed for students who have a strong personal interest in outdoor recreation. Moreover, students may have a desire to pursue a career in the field of adventure tourism / recreation or a related area. These occupations could include but are not limited to mountain guiding, ski patrol, park warden, outdoor educator, park naturalist, wild land fire fighter, and field assistant.

This course will introduce students to the technical skills required for a variety of adventure-based industries. This opportunity will facilitate students to develop their “outdoor skills resume”, a requirement for many adventure tourism post-secondary programs. Furthermore, in order to increase the likelihood of students gaining employment in this industry and / or furthering their studies in adventure tourism, **ATLAS 12** would, subject to alignment with legislation and School District No. 8 Board Policy & Administrative Procedures, provide successful students with the following certification:

- Avalanche Skills Training Level 1 sanctioned by Avalanche Canada  
(subject to alignment with legislation and Board policy and School District No. 8 administrative procedures)
- Companion Rescue Course sanctioned by Avalanche Canada  
(subject to alignment with legislation and Board policy and School District No. 8 administrative procedures)
- Managing Avalanche Terrain sanctioned by Avalanche Canada  
(subject to alignment with legislation and Board policy and School District No. 8 administrative procedures)
- Advanced Wilderness First Aid sanctioned by Canadian Red Cross
- Bear Awareness and Safety Course
- Flat Water Level 1 sanctioned by the Recreational Canoeing Association of British Columbia (RCABC)
- Canoe Tripping Paddler - sanctioned by the Recreational Canoeing Association of British Columbia (RCABC)

The above certifications are baseline, industry standards for general employment in the field of adventure tourism / recreation and prerequisites for more advanced training / certification in these fields.

A variety of fieldtrips to adventure tourism-based businesses along with interaction with employees and owners of these businesses is also a key component of **ATLAS 12** to familiarize students with the possibilities and realities of a career in adventure tourism locally and abroad.

Local Businesses that may provide work experience opportunities for **ATLAS**:

- Whitewater Winter Resort
- Ministry of Transportation Snow Avalanche Program
- Nelson Cycling Club

## Goals and Rationale:

To meet the demands of the rapidly expanding adventure tourism industry, ATLAS 12 gives students the opportunity to begin acquiring the requisite skills needed to work in outdoor adventure related fields.

The Kootenay region of BC is a haven for Adventure Tourism. Tourism is the fastest growing industry in BC with Adventure Tourism leading the sector. Furthermore, the demand for skilled leaders in the outdoor field is growing rapidly in our communities.

*“Locally and worldwide employment opportunities are extremely good in an industry that has a chronic shortage of fully qualified mountain guides. In British Columbia, alpine guides, ski guides and mountain guides are in high demand and short supply, particularly in the ski guiding industry.” (Thompson Rivers University web site)*

In British Columbia alone there are five post-secondary institutions offering adventure tourism-based programs, Thompson Rivers University, College of the Rockies, Selkirk College, North Island College, and Langara College. These programs are natural progressions for students who take ATLAS 12. Many students who apply for these programs are denied due to a lack of outdoor experience.

Not only will this program prepare students for future careers and continuing education in the outdoor field, but also it will give them the skills necessary to enjoy the backcountry safely as recreationalists. Every year in the West-Kootenay, backcountry users are injured or killed by hazards. Many of these people do not have the knowledge and understanding of the terrain they are getting into. Since this area is one of the best wilderness recreation areas in the world, students are *already* participating in these types of activities. The ATLAS Academy is designed to provide students with knowledge of health and safety issues, responsible backcountry practices, as well as outdoor and organizational skills they need to participate safely and responsibly in these lifelong outdoor activities.

In addition to the career preparation and recreation training students will receive from this course, they will have the opportunity to learn in a unique educational setting. Students will be engaged with the curriculum through a hands on, experiential delivery model, which will motivate students through intellectual, physical, and emotional challenges, thus making the curriculum relevant to their daily lives. Many of the students that have expressed an interest in the program are kinesthetic learners, so the experiential model works well for many of our students.

There is a high demand for this program at LV Rogers.

For these reasons, the ATLAS Academy is a life enriching experience for SD 8 students and a benefit to the community at large.

## Indigenous Worldviews and Perspectives:

Smudging ceremony prior to field days led by Aboriginal Educator with LV Rogers  
Discussion of respect for the land and those who came before us

Snowshoeing

Canoeing and camping along Kootenay Lake, a trade route of the Ktunaxa people with pictographs. Minimum impact camping techniques

Shelter building with only naturally available resources  
Fishing on canoe expedition

**BIG IDEAS**

Introduce students to technical skills and the decision making required for safe wilderness travel.

Provide students an opportunity to develop and practice leadership skills in the outdoor arena that will lead to more self-reliance, resiliency, and self-discipline.

Team building - through various activities students will have the opportunity to work closely with others and work towards common goals.

Provide students with basic certification required for employment in the field of Outdoor Recreation and Adventure Tourism.

Learn by doing

## Learning Standards

Curricular Competencies	Content
<p><b><u>Key Study Areas / Modules</u></b></p> <p><b><i>Outdoor Living:</i></b></p> <ul style="list-style-type: none"> <li>• <i>self-care and sanitation and hygiene</i></li> <li>• <i>nutrition and rations</i></li> <li>• <i>equipment and clothing - care and selection</i></li> <li>• <i>stove use and care</i></li> <li>• <i>outdoor mindset</i></li> </ul> <p><b><i>Minimum Impact Camping:</i></b></p> <ul style="list-style-type: none"> <li>• <i>leave no trace principles</i></li> <li>• <i>plan ahead and prepare</i></li> <li>• <i>travel and camp on durable surfaces</i></li> <li>• <i>dispose of waste properly</i></li> <li>• <i>leave what you find</i></li> <li>• <i>minimize campfire impacts</i></li> <li>• <i>respect wildlife</i></li> <li>• <i>consideration of other user groups</i></li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate a level of skill performance for a specific activity</li> <li>• Assess, and maintain personal fitness using principles of training</li> <li>• Demonstrate a willingness to participate in a wide range of activities</li> <li>• Apply leadership skills and decision making related to activity</li> <li>• Demonstrates an ability for self-reflection and personal challenge</li> <li>• Demonstrates personal management, professionalism, preparedness and independence</li> <li>• Select and apply rules, and procedures of safety in a variety of settings</li> <li>• Demonstrate code of responsible behaviour in the outdoor environment</li> </ul>



**Hiking / Snow Travel:**

- *packing and carrying backpack*
- *energy conservation, rest-step*
- *pacing*
- *route selection*
- *terrain classification*

**Backcountry Navigation:**

- *topographical map reading*
- *compass use*
- *GPS navigation*
- *route finding*
- *route plans*

**Avalanche Skills Training:**

**(Subject to relevant legislation, Board policy and School District No. 8 administrative procedures)**

- *identify types of avalanches and avalanche terrain*
- *avalanche formation and release*
- *use appropriate travel techniques in avalanche terrain*
- *recognizing avalanche terrain and danger - decision making, use of avalanche bulletins and the Avaluator*
- *avalanche safety equipment uses*

***Ski/Snowboard Touring within locations approved by School District No. 8:***

- *group travel*
- *group gear*
- *equipment use, care, and selection*
- *hazard evaluation*
- *route finding skills and safe group travel*
- *track setting*
- *winter shelters*

***Advanced Wilderness First Aid and CPR:***

- *planning and accident prevention*
- *hazard assessment*
- *patient assessment*
- *airway emergencies*
- *breathing and circulation emergencies*
- *cardiac and respiratory arrest (includes CPR-C)*
- *wound care*
- *head and spine injuries*
- *bone, muscle and joint injuries*
- *sudden medical emergencies*
- *environmental emergencies*
- *poisons*
- *extended patient care*
- *evacuation: transporting the ill or injured person*

**Rock Climbing:**

- *care and use of climbing equipment*
- *hazard evaluation*
- *knots, rope handling and rope systems*
- *signals and belaying*
- *rock climbing techniques*
- *rappelling and anchors*

**Canoeing Skills:**

- *forward, stopping and reverse*
- *basic turns while paddling forward*
- *spins and Sideslip maneuvers*
- *capsizes and Rescues*
- *canoeing Safety guidelines and equipment*
- *paddles, PFDs and other gear*
- *storing and waterproofing gear*
- *paddling positions and boat trim*
- *handling waves and wind*
- *launching and landing*

**Canoe Expedition Skills:**

- *properly loading canoes and waterproofing gear*
- *rescues of loaded canoes*
- *menu and food preparation, cooking and food safety*
- *navigation and group travel and safety*
- *environmental considerations*
- *campsite selection*

### **Survival Skills:**

- *survival psychology - fear, will to live,*
- *STOP acronym*
- *energy budget*
- *The Ten Essentials*
- *possible sources of food and water*
- *signaling for help & rescue*
- *building emergency shelters with tarps and debris*
- *snow shelter construction*
- *basic knots for most common outdoor applications*
- *fire-starting in all conditions*
- *Survival Pattern concept*
- *demonstrate acceptable survival techniques in a supervised survival scenario*

### **Bear Awareness:**

- *human safety risk from bears*
- *main situations leading to human injury*
- *bears, what are they all about?*
- *bear characteristics*
- *distinguishing between grizzly & black bear & their habitat requirements.*
- *bear society & bear to bear interaction*
- *needs and motivations of bears*
- *bear to human interaction*
- *human habituation*
- *human food-conditioned*
- *human avoidance*
- *what to do in a bear encounter*
- *bear deterrents and practice with inert bear spray*
- *preventing encounters with bears & field safety*

***Environmental / Community Service and Educational Outreach:***

- *Student presentations delivering the Hug-a-Tree and Survive program to various Grade 3 classes throughout School District #8.*
- *Hug-a-Tree and Survive is an AdventureSmart program that helps lost children survive in the woods. It teaches children how not to become lost in the woods, and what to do should they become lost.*
- *service projects - student led projects*
- *ATLAS Legacy Projects*

### Big Ideas - Elaborations

ATLAS is a place based, outdoor education academy that predominantly takes place in outdoor and wilderness settings. It is a “career prep” course designed for students who have a strong personal interest in adventure recreation or a desire to seek employment in any of the related fields of adventure tourism.

Students participate in a variety of group-based activities and adventures that emphasize leadership, team building, and risk management.

### Curricular Competencies - Elaborations

The educational philosophy in ATLAS blends academic study (lecture, reading, writing, etc.) with an experiential or “learn by doing” approach.

### Content – Elaborations

## Recommended Instructional Components:

### Recommended Assessment Components: Ensure alignment with the [Principles of Quality Assessment](#)

- Students will be assessed and evaluated in a variety of forms consistent with those promoted by the Ministry of Education and other outdoor educational organizations.
- Evaluation will often be criterion-referenced
- Final evaluation will include a student self-evaluation, an anecdotal report, final test, graded report card.
- In class, pre-trip assignments (SLOMOS, menus, equipment checks, post trip evaluations, avalanche skills training, mapping assignments, first aid, etc.) **50%**

Practical components for day trips and out-trip skills  
(5Ps - punctual, prepared, polite, positive, professional) **50%**

## Learning Resources:

### Books

- Outdoor Leadership: Techniques, Common-sense, Self-confidence
  - Advanced Wilderness and Remote First Aid Manual - Red Cross
  - Avaluator V2.0 - Avalanche Canada
  - Avalanche Skills Training - Avalanche Canada
  - Recreational Canoeing Association of BC - Instructor Manual
  - Mountaineering: Freedom of the Hills
  - Google Earth
  - Avalanche Canada website
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### Additional Information:

- The objectives of ATLAS 12 are flexible to the needs and skills of the students; therefore, some modifications to the curriculum may be made during the course.
- As this is an outdoor based course, weather events may cause the cancellation of some field days. In the event of such circumstances school-based activities / instruction can be expected.
- Safety policies and procedures will follow current accepted industry standards, Kootenay Lake School District's Administrative Procedure 2300 - Student Field Trips, and Youth Safe Outdoors procedures and recommendations as they relate to the course.
- Due to the nature of this course some, units will occur simultaneously. (I.E. GSAR and safe travel skills and navigation)
- It is strongly recommended that this course operate with no more than 15 students for safety/hazard management. Any changes to this would need to be in agreement with the principal and teacher.