

LOCALLY DEVELOPED COURSE OUTLINE

Stewardship of Protected Lands

35-3

Submitted By:
Grande Yellowhead Public School Division
No. 77

Submitted On:
Mar. 4, 2013

Board Motion

Motion Conclusion

Motion Date

Mar. 4, 2013

Motion Number

Motions

Please find attached the signed board motion for Stewardship of Protected Lands 35.

Course Basic Information

Course Name	Stewardship of Protected Lands 35
Credit Number	3
Hours of Instruction	62.50 hrs
Implementation Dates	9/1/2013 - 8/31/2016
Proposal Type	Extension
Development Type	Developed
Designed Grade Level	Grade 12
Course Description	<p>This course was developed by GYPSD#77 in partnership with Parks Canada and covers the five major topics centered around the topic of enduring stewardship; Hazard Awareness and Mitigation, Ecological Integrity, Historical Importance, Skill development of Specialist Technology and/or Equipment, and Appreciation and Value for the Mountain Parks Environment.</p> <p>GYPSD#77 believes in providing students with experiential education to strengthen ties to the surrounding communities and agencies thus increasing student's skills, and providing its students with possible future opportunities within the workforce. In taking this course, students will have the opportunity to examine multiple viewpoints in relation to enduring stewardship and foster collaboration by creating a shared vision, goals and action plans to help preserve the Mountain Park natural resources.</p> <p>The structure of this GYPSD#77 course includes pre and post immersion learning through video conference technology. It will immerse students in experiential education in Alberta's National Parks and provide exposure to role models and experts from diverse perspectives.</p>
Course Prerequisite	Stewardship of Protected Lands 25

Philosophy

The Stewardship of Protected Lands 35 course was built on GYPSD's philosophy that education needs to be focused on the learner and on building student competencies. This course is founded on the principles of experiential education through the integration of knowledge, active learning, and reflection. To achieve this, we take advantage of the expertise, terrain, and resources afforded in the National Parks of Canada. The overarching aim of the Stewardship of Protected Lands program is to provide gateway opportunities for youth; opportunities that stimulate life-long learning and connect students in tangible ways with our landscape, thus invoking an entrepreneurial spirit and sense of responsibility for preserving our natural habitats in mountainous terrain. Our youth will be called upon to think critically and explore creative solutions that adapt to changing conditions where our natural resources are concerned. The Stewardship of Protected Lands courses provide a positive blending of GYPSD's educational goals and objectives with Parks Canada's goals of informing more people about responsible use of the National Park's natural setting to foster ethical citizenship and preservation of protected lands for future generations.

Rationale

The Stewardship of Protected Lands 35 course has been developed in partnership with GYPSD#77 and The Palisades Centre, located in Jasper National Park, within the Grande Yellowhead Public School Division. SPL 35 provides students with the opportunity and background knowledge to safely experience firsthand, the natural recreational areas they have available to them in their own communities. It enables students to experience local terrains and explore new opportunities. The objectives of this course are to continue to build stewardship appreciation and conservation ethic in youth. A growing body of research has demonstrated that connection to the natural world is an essential component of child development both in terms of cognition, knowledge retention, and contributes positively towards numeracy and literacy levels and high school graduation frequency. This course allows students to use their prior knowledge to continue to build stewardship appreciation and conservation ethic. The progressive pedagogy of this course includes physical activity in the natural world as a means to enhance learning. As a result of this program, students will be able to take responsibility for personal well-being and experience healthy lifestyle choices. They will identify various environmental perspectives and adapt creative ideas to suit the varying needs of a changing society.

Learner Outcomes

Stewardship of Protected Lands 35 embodies the principles of place-based education. It has been developed for implementation at the Parks Canada Palisades Stewardship Education Centre in Jasper National Park. Students following this course will be engaged in video-conference team teaching and learning provided by the expertise of the Palisade's Educational Director and his staff as well as their GYPSD teacher. They will be required to participate in and complete instructional material prior to their immersion experience. There will also be post immersion activities and course material to complete. Students will gain a greater understanding of current issues that affect the National Parks and protected lands as well as their role in enduring stewardship. They will collect data that will be analyzed and used to examine possible risks, consequences and alternatives before making decisions that affect others. They will reflect on possible GIS career paths to further enhance their future opportunities.

During the Immersion component of this course, to encourage a culture of teamwork, empathy, and ethical citizenship, youth will share meals and communal living spaces. They will be expected to work collaboratively in an effort to build caring, cooperative and respectful relationships that value diversity. They will initiate discussions that lead to genuine interaction and encourage innovative ideas that demonstrate diverse perspectives.

The pre, immersion and post elements of this course are delivered in partnership with GYPSD#77, The Palisades Centre staff from Parks Canada, as well as other community organizations.

General Outcomes

- 1 Students will demonstrate understanding of potential hazard awareness and mitigation in mountain recreation activities.**
- 2 Students will understand and communicate ecological integrity as it relates to the long term functioning of protected lands.**
- 3 Students will recognize the historical importance for Alberta and Canada of the Rocky Mountain natural region.**
- 4 Students will apply a variety of specialist technology and/or equipment to understand, collaborate, communicate, and enhance skill development.**
- 5 Students will develop an understanding that demonstrates an appreciation and value for the mountain parks environment.**

Specific Learner Outcomes

1 Students will demonstrate understanding of potential hazard awareness and mitigation in mountain recreation activities.	25-3 35-3
1.1 Critically evaluate the impact of recreational activities on protected lands.	X
1.2 Justify personal perspectives regarding protected lands.	X
1.3 Analyze and interpret demographic trends regarding protected lands.	X
1.4 Draw inferences from data collected regarding protected lands.	X
1.5 Consider the effectiveness of recreational assessments.	X

2 Students will understand and communicate ecological integrity as it relates to the long term functioning of protected lands.	25-3 35-3
2.1 Understand and communicate the concept of ecological integrity as it relates to the functioning of the National Parks of Canada.	X X
2.2 Identify challenges to ecological integrity	X X
2.3 Analyze and explore innovative and creative ways of mitigating threats to ecological integrity.	X X
2.4 Evaluate the costs and benefits to ecological integrity of human use along the Columbia Ice Fields Parkway.	X
2.5 Explore and analyse best practices in commercial mountain recreation enterprises. e.g. ski areas	X
2.6 Create an action research project by designing and collecting data concerning human use of protected lands to suggest future trends.	X
2.7 Compare and contrast national and provincial conservation legislation in Alberta.	X
2.8 Understand environmental aspects of interconnections; quality and sustainability of ecosystems.	X

3 Students will recognize the historical importance for Alberta and Canada of the Rocky Mountain natural region.	25-3 35-3
3.1 Understand the geography, ecology and significance of the Rocky Mountains.	X X
3.2 Understand and explain divergent viewpoints such as advocacy groups, First Nations and Non-Governmental Organizations.	X
3.3 Understand the historical and political aspects of interconnections and issues regarding decision making institutions, groups and communities involved.	X

4 Students will apply a variety of specialist technology and/or equipment to understand, collaborate, communicate, and enhance skill development.	25-3 35-3
4.1 Demonstrate a thorough understanding of mapping methods. (Analysis, processes, overlays)	X
4.2 Display appropriate selection and handling of quantitative and qualitative data sets using GIS technology.	X
4.3 Demonstrate the application of GIS as a Stewardship tool.	X
4.4 Build enhanced competency and independence in travel in the outdoors.	X
4.5 Demonstrate peer leadership skill development.	X
4.6 Demonstrate effective trip planning skills.	X
4.7 Demonstrate the proper use of safety equipment.	X
4.8 Develop digital and technological fluency in the application of digital mapping and GPS technology	X
4.9 Analyze field observations to draw conclusions based on personal experience and applied technology.	X
4.10 Complete activities that display understanding of mapping concepts, including longitude, latitude, GPS trajectories (NAD, WAP)	X
4.11 Demonstrate basic polygon mapping, inserting images to GIS, tabular data.	X

4.12 Display their technological fluency through the consolidation of multiple data sources.	X
4.13 Build competency and confidence in travel in the outdoors.	X
4.14 Demonstrate personal responsibility of trip planning, and proper use of safety gear while on field visits to case study locations.	X

5 Students will develop an understanding that demonstrates an appreciation and value for the mountain parks environment.	25-3 35-3
5.1 Demonstrate an understanding of balancing stakeholder needs in protected lands.	X X
5.2 Understand sustainability issues related to recreational activities.	X X
5.3 Develop a life-long appreciation of mountain recreation.	X X
5.4 Demonstrate an understanding of using the mountain parks environment as a tool to enhance personal well-being.	X X
5.5 Develop and demonstrate collaboration and leadership skills through outdoor activities.	X X
5.6 Understand the role of democracy in governing national parks and other protected areas for mountain recreational use.	X X
5.7 Explore and interpret management planning strategies for protected areas.	X
5.8 Compare and contrast land rights in different parts of Canada.	X
5.9 Demonstrate an understanding of Aboriginal perspectives for land stewardship.	X
5.10 Examine and interpret legislation that governs other protected lands. (Alberta and World Heritage Site).	X
5.11 Critically evaluate the impact of recreational activities on protected lands.	X
5.12 Justify personal perspectives regarding environmental stewardship.	X X
5.13 Reflect on GIS career paths and their relative personal and professional merits.	X

5.14 Communicate an understanding of the multiple values of conservation to Alberta and Canada.	X
5.15 Articulate the importance of sustainable development.	X
5.16 Develop an awareness of the significance of participatory democracy as an essential element of ecological integrity.	X
5.17 Understand social and cultural aspects of interconnections regarding rights and freedoms of diverse groups.	X
5.18 Demonstrate critical thinking when analyzing the impact of recreational activities on protected lands.	X

Facilities or Equipment

Facility

This course had been designed to take place at the Parks Canada Palisades Stewardship Education Centre in Jasper National Park. It is a component of a multi-agency program and its successful implementation has required a significant investment in staff, facilities and equipment. The Parks Canada Palisades Stewardship Education Centre is a unique facility that affords this opportunity for Alberta youth.

Equipment

Specialist equipment required for this course includes a residential facility and outdoor equipment, such as canoes, PFDs, paddles, rain gear, GPS units, GIS software and computers, etc.

Learning Resources

Parks Canada Palisades Stewardship Education Centre

A major portion of this course has been designed to be delivered at the Palis Stewardship Education Centre in Jasper National Park. The Palisades has a multitude of resources that will be used, from maps to field guides to canoes paddles in an immersive multi-day experiential education setting. In addition available to assist with the delivery of this course on site during the Immersic component, the experts at the Palisades will be available to assist with the video-conference teaching and learning.

See

<http://www.thepalisadescentre.ca/index.php/2012-03-14-21-45-32/documentew/17-course-info-for-teachers/26-stewardshipprotectedlands>

Texts & Multimedia

The Big Picture (2009), by David Suzuki

ESRI and other GIS software will be used, along with GPS units and a variety of student handouts and other resources.

Various websites and videos will be used during the course.

Others

Identification of Controversial or Sensitive Course Content

As with all GYPSD field trips, the program is covered under divisional insurance and field studies policy AP260 guidelines are adhered to. Beyond GYPSD policy, the field components are operated inside Jasper National Park. We are therefore bound to meet or exceed custodial group regulations; this course meets or exceeds the highest standards of care. There are no identified sensitive or controversial issues. See Administrative Procedure 205-Controversial Issues for more information.

Identification of Safety Components

As with all GYPSD field trips, the program is covered under divisional insurance and field studies policy AP260 guidelines are adhered to. Beyond GYPSD policy, the field components are operated through the Palisades Stewardship Education Centre inside Jasper National Park. We are therefore bound to meet or exceed custodial group regulations; this course meets or exceeds the highest standards of care.

For specific information about the Risk Management Protocols for the Palisades Centre, see <http://www.thepalisadescentre.ca>.

There is significant public interest in reconnecting youth to nature and custodial youth groups in outdoor environments. We believe that this program will contribute to the public dissemination and development of best practices in the risk-managed context of certified guides, public safety response systems and predetermined terrain.

Risks (Accidents, injury, forms of loss)

Physical injury could occur as a result of students engaging in outdoor activities. Students could experience emotional difficulties as a result of being away from home.

Factors (vulnerability, dangers, hazards)

People

Youth may have limited personal exposure to outdoor mountain environments.

Equipment

Equipment malfunctions could result in students exposed to danger from the elements.

Environment

Extreme weather conditions could lead to personal injury (such as hypothermia).

Normal conditions strategy

People

Participants will be lead by expert, professionals with qualifications and experience in leading recreation activities.

Students will be emotionally support by GYPSD and PC staff.

Equipment

Careful maintenance and replacement of all specialist equipment will be practiced.

Environment

Daily whether check will be made, with alternate activities planned as necessitated by inclement conditions.

Emergency conditions strategy

People

Qualified first aid staff will be on site at all times. If necessary EMS will be summoned by telephone or VHF radio.

Equipment

Reserve back up equipment will be on hand, with trained professionals on site for recreation activities.

If necessary EMS will be summoned by telephone or VHF radio.

Environment

If needed the program will be suspended or rescheduled with students returned to the school.

If necessary EMS will be summoned by telephone or VHF radio.

Standards

Policies / Guidelines

GYPSD filed trip policy AP260 will be followed.

Parks Canada Custodial group framework will be followed.

Parents and students will be briefed.

Industry standards

Parks Canada custodial groups standards will be followed, certified personnel will be provided by Parks Canada as required.

Skills required by leaders / guides

GYPSD staff will assume a 'loco parentis' role with all specialist leaders and guides provided by Parks Canada.

Final Decision on implementing activity

Accept or reject?

Accept

Comments

This program carries with it an element of risk. Experts manage those risks in a professional manner. GYPSD does not consider the risks inherent in this program to be above or beyond the accepted norm for high school field trips.

GYPSD reserve the right to postpone or cancel parts of the program due to inclement weather or other factors at the discretion of the principal.

Significant Overlap with Provincial Curriculum

There are no significant overlaps. In the Science area, at the superficial level, there may appear to be some overlap. However, this course is distinct in its learning context and is delivered through the extensive use of outside expertise and practical application in real world settings. Further, it is the conceptual pluralism model of applied science and recreation that sets this program apart.

Mapping concepts in the social studies program could be confused with some of the general outcomes of this program. However we believe that the targeted specific learning objectives of this course provide a discrete focus, much as the single sciences (Biology, Physics, Chemistry) are quite different when compared to the general Science 10 course. The digital mapping components of this course cover GIS topics in much greater depth than those in the social studies program.

Assessment

A variety of assessment tools will be used to measure student achievement in this course. Students will conduct interviews with stakeholders and record responses, they will work as individuals and in small groups, form a personal responses and reflection, create skits, videos, slide shows, photo journals and artwork.

A variety of assessment tools will be used to measure student achievement in this course.

- Pre-Immersion Assignments & Engagement: 30% of final mark
 - Immersion Assignments & Engagement: 60% of final mark
(attendance & participation in activities mandatory)
 - Post-Immersion Assignments & Engagement: 10% of final mark
- The attached rubrics will be used to assess student performance.

Course Evaluation and Monitoring

Implementation for assessment of this course will be administered through the Education Director, Palisades Stewardship Education Centre under the direction and guidance of the Assistant Superintendent for GYPSD#77.

Appendix I

- 1 PSEC RM Protocols March 2013 2.pdf

- 2 SPL 35 final criteria.doc

Appendix II

Table of Contents

Board Motion	2
Course Basic Information	3
Philosophy	4
Rationale	4
Learner Outcomes	5
General Outcomes	5
Specific Learner Outcor	6
Facilities or Equipment	9
Facility	9
Equipment	9
Learning Resources	10
Others	10
Identification of Controversial or Sensitive Course Components	10
Identification of Safety Components	11
Significant Overlap with Provincial Curriculum	14
Assessment	14
Appendix I	14
Appendix II	15