

# School of School of Environment and Geomatics Environment and Geomatics Program Policies

#### DATE(S):

1.	Next Policy Review:	2028-01-01
2.	Admissions & Standards Committee Approval:	2023-03-14
3.	Education Council Approval:	2023-04-11
4.	Effective:	2023-08-01
5.	Previous Revision(s):	
CREDENTIAL(S):		Diploma

# PROGRAMS OUTCOMES (previously program objectives)

School of Environment and Geomatics students are accepted into the school, under one of the following diploma/advanced certificate programs:

- Forest Technology (FOR)
- Recreation, Fish and Wildlife Technology (RFW)
- Applied Environmental Science and Planning Technology (AESP)

FOR, RFW, and AESP are two-year diploma programs. There are common courses of study for the first year of each of the diploma programs, followed by specialization into one of the above three areas during the second year.

The Advanced Certificate in Geomatics in the Workplace, Advanced Diploma in Geographical Information Systems (ADGIS), and the Degree in Geographical Information Systems (BGIS) are also programs within the School. See the separate GIS policy for these programs.

#### **Forest Technology**

Upon successful completion of this program, learners will be able to:

- 1. Implement best management practices within the current legal framework to facilitate and communicate ethical, science-based forestry.
- 2. Practice forestry that reflects diverse public values through consultation, collaboration, and communication with a variety of interest groups.
- 3. Use critical thinking, appropriate data collection strategies, and quantitative summaries to focus forestry practices.
- 4. Collect, analyze, and interpret forestry-related data using accepted, industry-relevant technology.
- 5. Access current landscape-level management directives and understand how they influence stand-level management decisions.
- 6. Use geospatial technologies to manage diverse data sources for informing forest practices.
- 7. Interpret ecological disturbance types such as changing climate, wildfire, and others, in ecosystem structure, health, and function as a basis for management prescriptions.
- 8. Apply a personal growth mindset as part of effective teamwork, while respecting workplace diversity, culture, and gender differences.

#### **Environment and Geomatics Programs Policies**

- 9. Apply learned skills and a problem-solving mindset to facilitate successful employment within the profession of forestry.
- 10. Employ safe work practices across the spectrum of forestry work.
- 11. Model a commitment to the United Nations Sustainable Development Goals (SDGs), as they relate to forestry and land management in British Columbia.
- 12. Recognize the diversity of Indigenous Nations' cultures and traditions as distinct knowledge systems that are valid when building respectful engagement, consultation, and collaborative relationships.
- 13. Acknowledging the Calls to Truth and Reconciliation, explore how ecosystem management can include Indigenous perspectives and practices in a reciprocal approach.

## **Applied Environmental Science and Planning Technology**

Upon successful completion of this program, learners will be able to:

- 1. Demonstrate professional ethics and competencies as environmental technologists.
- 2. Integrate ecological knowledge to assess environmental conditions.
- 3. Analyze the hydrology and ecology of the atmosphere, rivers, lakes, watersheds, and groundwater.
- 4. Apply environmental procedures for monitoring air, water, sediment, and biological media.
- 5. Apply environmental assessment, mitigation, remediation, and restoration techniques.
- 6. Collect, evaluate, and summarize ecological and geospatial data.
- 7. Design and implement a planning framework for identifying and addressing land use, environmental and social challenges, and opportunities across a variety of landscapes.
- 8. Engage with a variety of audiences using diverse communication approaches including written, verbal, numeric, and graphic.
- 9. Model strategies to encompass emerging science, technologies, regulatory environments, and societal shifts including climate change and mitigation, green energy, carbon accountability, and the UN Sustainable Development Goals.
- 10. Recognize the diversity of Indigenous Nations' cultures and traditions as distinct knowledge systems that are valid and critical to building meaningful engagement, consultation, and collaborative relationships.
- 11. Acknowledge the calls to Truth and Reconciliation and the United Nations' Declaration on the Rights of Indigenous Peoples as inclusive and informed constructs for Indigenous rights and title in the stewardship of land, air, water, and all living things.

## Recreation, Fish, and Wildlife

Upon successful completion of this program, learners will be able to:

- 1. manage and analyze information that contributes to applied research.
- 2. use critical thinking skills to solve problems.
- 3. communicate technical information effectively in both oral and written forms to a variety of audiences.
- 4. demonstrate capability to use and maintain appropriate equipment.
- 5. identify and collaborate with appropriate stakeholders to aid with project success.
- 6. develop proposals, manage budgets, contracts, and financial information.
- 7. navigate current government structure, industry standards, and legislation, to implement best practices.
- 8. model professionalism by adhering to professional ethics and standards and by committing to life-long learning and a healthy work-life balance.
- 9. apply appropriate techniques to identify, sample, and record biological and physical components of natural systems.
- 10. choose and employ appropriate technology to collect, manage, explore and visualize data.
- 11. develop and apply risk management strategies that incorporate safe travel and best work practices, including OHS requirements to ensure personal, crew, and public safety.
- 12. demonstrate field experience and skill.
- 13. Recognize the diversity of Indigenous Nations' cultures and traditions as distinct knowledge systems that are valid and critical to building respectful engagement, consultation, and collaborative relationships.
- 14. Acknowledge the Calls to Truth and Reconciliation and the United Nations' Declaration on the Rights of Indigenous Peoples as inclusive and informed constructs for Indigenous rights and title in the stewardship of land, water, soil, plants and animals.

Students in the Environment and Geomatics Programs are subject to the overall policies affecting all students at Selkirk College, with the following additions. College policies may be viewed on-line at the College website (policies.selkirk.ca).

#### PART I: ADMISSIONS

#### A. ADMISSION REQUIREMENTS

In addition to meeting the general admission requirements to Selkirk College, the applicant must meet the following Environment and Geomatics Programs requirements to be considered fully-qualified:

#### 1. General

 Applicants must submit a completed application form and other required documents (i.e. secondary school and any post-secondary transcripts, application package) to the Registrar's office.

#### 2. Academic

## a) Forest Technology

Applicants to the first year of the Forest Technology program will be considered "fully qualified" and admissible to the program when they possess:

- (i) The completed application file.
- (ii) Graduation from Grade 12 with the following or equivalent courses:
  - (a) Foundations of Mathematics 11 with a minimum of 67% r
  - (b) Any BC Science curriculum (with a lab component) grade 11 or 12 with a minimum of 67% or higher
  - (c) English 12 with a minimum of 67%

**NOTE:** Applicants in Grade 12 at the time of application must show proof of registration or completion of the above courses.

- (iii) One or more of the following or equivalents are recommended but not required for admission:
  - (a) Class 5 Driver's license
  - (b) Occupational First Aid Level 1 with Transportation Endorsement and/or Wilderness First Aid
- (iv) Most learning activities within the program reflect industry norms. Training often occurs in forested and front or back country terrain. Therefore, applicants should be in good health and physical condition. Activities will be taught which require student participation walking and hiking outside for up to 10 hours per day and up to two weeks in duration. Students will be required to hike, snowshoe, etc. for four to eight hours at a time over rough, sometimes hazardous terrain in all weather conditions. Activities in which the student must participate may include but are not limited to the following: hiking and scrambling, orienteering, snowshoeing, and operating power equipment such as chainsaws. Other activities may include touring and observing active industrial operations. Students will be required to observe all standard and required safety practices and procedures at all times.

## b) Recreation. Fish and Wildlife Technology

Applicants to the first year of the Recreation, Fish and Wildlife Technology program will be considered 'Fully Qualified' and admissible to the program when they possess:

- (i) The completed application file.
- (ii) Graduation from Grade 12 with the following or equivalent courses:

**NOTE**: Applicants in Grade 12 at time of application must show proof of registration or completion of the courses below:

- (a) Foundations of Mathematics 11 or Pre-Calculus 11 with a minimum grade of 67%
- (b) Any BC Science curriculum (with a lab component) grade 11 or 12 with a minimum of 67% or higher
- (c) English 12 with a minimum grade of 67% or better
- (iii) One or more of the following certificates or equivalents are <u>recommended</u> but not required for admission:
  - (a) Class 5 Drivers license
  - (b) Occupational First Aid Level 1 with Transportation Endorsement and/or Wilderness First Aid
- (iv) Most learning activities within the program reflect industry norms. Training often occurs in wilderness back or front country terrain. Therefore, applicants should be in good health and physical condition. Activities will be taught which require student participation walking or canoeing outside for up to 10 hours per day and for up to two weeks in duration. Students will be required to hike, ski, mountain bike, snowshoe, etc., for four to eight hours at a time over rough, sometimes hazardous terrain in all weather conditions. Students will be required to maintain a reasonable pace and not hold the class back. Activities in which the student must participate may include but are not limited to the following: hiking and scrambling, orienteering, canoeing, rock climbing and mountaineering, cross-country and back country skiing, mountain biking, camping including snow caving, and operating power equipment such as chainsaws, snowmobiles, and all-terrain vehicles. Students will be required to observe all required and standard safety practices and procedures at all times.

#### c) Applied Environmental Science and Planning Technology (AESP)

Applicants to the first year of the Integrated Environmental Planning Technology program will be considered 'Fully Qualified' and admissible to the program when they possess:

- (i) The completed application file.
- (ii) Graduation from Grade 12 with the following or equivalent courses:

Foundations of Mathematics 11 or Pre-Calculus 11 with a grade of 67% or higher. Any BC Science curriculum (with a lab component) grade 11 or 12 with a minimum of 67% or higher.

(a) English 12 with a grade of 67% or higher

**NOTE**: Applicants in Grade 12 at time of application must show proof of registration or completion of the above courses.

(iii) One or more of the following or equivalent are recommended but not required for admission:

- (a) Class 5 Driver's License
- (b) Occupational First Aid Level 1 with Transportation Endorsement and/or Wilderness First
- (c) Physics 11 and Chemistry 11 and 12
- (iv) Most learning activities within the program reflect industry norms. Training often occurs in front and back country wilderness terrain. Therefore, applicants should be in good health and physical condition. Activities will be taught which require student participation walking outside for up to 10 hours per day and up to two weeks in duration. Students will be required to hike, snowshoe, etc., for four to eight hours at a time over rough, sometimes hazardous terrain in all weather conditions. Other activities may include touring and observing active industrial operations. Students will be required to observe all required and standard safety practices and procedures at all times.

#### **B. APPLICATION PROCESS**

The Application process is complete and admission to first year will be considered with:

- 1. Receipt of the "Application for Admission" form plus the required application fee, and;
- 2. Receipt of official high school and post-secondary education transcript(s) or interim transcript or proof of registration in prerequisite courses (if in Grade 12), and;
- 3. The date when an applicant's file is complete is the date when all the requirements of a) and b) above have been fulfilled.

# C. ADVANCE OR TRANSFER CREDIT AND PRIOR LEARNING ASSESSMENT

- 1. Students may apply for transfer credit for individual courses taken at other institutions providing a grade of "C" or better was achieved.
- 2. A student who applies for advanced program standing from another resource management program will not necessarily receive block credit transfer for all courses taken previously within that program. Course equivalencies will be considered individually.

#### D. CHANGE OF PROGRAM

There is some limited availability for students to change programs in the first year however, the following conditions must be met:

- 1. Students who want to change programs must apply in writing to the School Chair before January 15th during the first year of their original program.
- 2. Program changes will only be permitted provided there is space as determined by the School Chair.
- 3. Students may need to complete prerequisite courses prior to the beginning of the second year.

# PART II: ASSESSMENT, PROMOTION AND GRADUATION

#### A. ASSESSMENT

#### 1. Grading

Grading will be based on the categories defined in Standard Academic and Career Grading Table with the exception of FOR 200 and 278, AESP 200, 276 and 277, and RFW 255 which will be assigned CRG/NCG grade as defined in the Competency-Based Grading Table. To view the grading tables see *Policy 8612: Grading*.

#### 2. Types of Assessments

#### a) Assignments

The frequency of evaluation will vary with individual courses as specified in the course outlines.

## b) Field and Laboratory Evaluation

Students will be continually evaluated on their performance in field and laboratory situations. These evaluations will focus on skill and attitude competencies including, but not limited to; ability to complete a skill effectively, ability to work effectively with a partner(s), punctuality, honesty, integrity, general safety, efficiency, neatness, quality of work, and ability to follow instructions. The evaluation of these factors will be considered by instructors when grading professionalism.

#### c) Examinations

- 1. In some courses, students must receive a passing grade on specified exams in order to pass the course. The details will be explained in the applicable course outlines.
- 2. Students may be allowed to make alternative exam arrangements, with the appropriate instructor, for valid and verifiable reasons such as medical emergency, family bereavement, or jury duty.
- 3. Any alternate arrangements for final examinations must be approved by the School Chair or designate.
- 4. Tests and exams are the property of the college and normally will be retained by the instructor.

#### d) Supplemental Assessment(s)

Supplemental examinations will only be given for exceptional reasons and with the consent of the Instructor and the SEG School Chair.

#### 3. Non-Academic Skills

Some courses in the School of Environment and Geomatics programs involve rigorous physical activity and/or mechanical skills. If students are unable to meet the physical requirements they will be required to contact their instructor(s) and School Chair to determine a plan of action.

#### B. PROMOTION

#### 1. Promotion to Subsequent Semester

Each semester must be completed with a Grade Point Average of 2.00 ("C" average) or better with no more than two grades below a "C" to continue into the next semester. GPA will be based on all grades for courses scheduled for a given year and semester as per the course calendar. All grades below a "C" grade must be raised to a satisfactory level to graduate.

Students not eligible to continue to the next semester must repeat all courses with grades below a "C" prior to proceeding to the next semester.

#### 2. Admission Requirements - Second Year

Normally all first-year courses must be completed with a grade of "C" or better before a student is admitted to the second year of their program. Students in this situation should contact the School Chair.

#### 3. "C-" Grade

Students receiving a final grade of "C-" in the prerequisite course will be required to withdraw from the subsequent course requiring the prerequisite. Students receiving the "C-" grade must re- register in, and successfully complete the course with a "C" grade or better before going on to the subsequent course.

#### 4. "P" Grade

i. Students receiving a final grade of "P" in a prerequisite course will not be allowed to register in a subsequent course requiring the prerequisite. Students receiving the "P" grade must re- register in, and successfully complete the course with a "C" grade or better before going on to the subsequent course.

#### 5. "F" Grade

i. A grade of "F" requires re-registering in, and repeating, the entire course. Under normal circumstances and due to changing course content, students receiving an "F" in a course(s) will be required to repeat the course within one year to receive credit. If an "F" grade is received twice in a particular course, the student will not be allowed to repeat the course again and will be required to withdraw from the program.

#### C. GRADUATION

#### a. Credentials:

- A cumulative GPA of 2.0 and a final grade of "C" or better in all courses in the Forest Technology, Integrated Environmental Planning Technology Program, Recreation, Fish and Wildlife Technology Program is required for graduation.
- ii. A student will be expected to complete the requirements for a diploma within a maximum of four years from the initial admission.
- iii. No diploma will be awarded without meeting all obligations to the College. This includes returning all equipment signed out and paying all outstanding fees.

# b. Types of Credential Received

Diplomas – Forest Technology; Applied Environmental Science and Planning Technology <sup>1</sup>; Recreation, Fish and Wildlife Technology

- <sup>1</sup> New credential applies to Fall 2023 intake and going forward.
- c. Requirements: (see *Policy 8617: Graduation*)
  - i. **INSTRUCTION:** Graduation requirement table must contain the following elements: course (abbreviation and number), name of course, and number of credits as illustrated below.

Diploma - Forest Technology; Applied Environmental Science and Planning Technology; Recreation, Fish and Wildlife Technology Program's common first year:

Semester 1			Semester 2		
Code	Course	Credit	Code	Course	Credit
ENVR 150	Hydrology I	3	ENVR 154	Maps and Navigation	2
ENVR 160	Surveying and Field Measurements	3	ENVR 158	Introduction to Geomatics	2
ENVR 162	Applied Botany and Ecosystem classification	3	ENVR 163	Terrestrial Ecology and Biology	4
ENVR 164	Soil and Earth Sciences	3	ENVR 170	Fish and Wildlife Ecology	3
ENVR 190	Computer Applications I	1	Math 190	Resource Statistics	3
Math 160	Technical Math Review	3	TWC 151	Introduction to Technical Writing and Communications II	3
TWC 150	Introduction to Technical Writing and Communications I	3	FOR 278, AESP 276 & AESP 277, or RFW 255	Field school	2
	Total Semester Credits	19		Total Semester Credits	19
				Total Year Credits	38
				Total Program Credits	

	Diploma - Forest Technology – Year 2						
	Semester 3			Semester 4			
Course	Name	Cr	Course	Name	Cr		
FOR 250	Silviculture I	4	FOR 200	Field trip study	1		
FOR 260	Applied Forest Hydrology and Engineering	4	ENVR 250	Indigenous Rights and Environmental Management	3		
FOR 265	Forest Measurements	3	ENVR 291	Computer Applications in Resource Management	2		
FOR 271	Applied Ecology and Range Management	3	FOR 251	Silviculture II	4		
FOR 274	Forest Health	4	FOR 253	Forest Policy and Resource management	2		
FOR 280	Applied Research Project	1	FOR 261	Forest Harvesting	3		
	Total Semester Credits	19		Total Semester Credits	15		
				Total Year Credits	34		
				Total Program Credits	72		

Diploma Applied Environmental Science and Planning Technology Program – Year 2						
Semester 3			Semester 4			
Course	Name	Cr	Course	Name	Cr	
AESP 200	Field trip study	1	AESP 251	Environmental Planning Applications II	3	
AESP 250	Environmental Planning Applications I	3	AESP 255	Hydrology II	2	
AESP 260	Systems Ecology	3	AESP 266	Applied Microbiology	3	
AESP 270	GIS Applications I	2	AESP 271	GIS Applications II	2	
AESP 280	Environmental chemistry	4	AESP 281	Water and Air Pollution Chem	4	
AESP 290	Environmental Sustainability and Legislation	3	AESP 291	Applied Research	1	
Math 291	Resource Statistics II	2	ENVR 250	Indigenous Rights and Environmental Management	3	
	Total Semester Credits	18		Total Semester Credits	18	
		•		Total Year Credits	36	
				Total Program Credits	74	

Diploma - Recreation, Fish and Wildlife Technology – Year 2						
Semester 3			Semester 4			
Course	Name	Cr	Course	Name	Cr	
ENVR 290	Computer Applications in Resource Management	2	ENVR 250	Indigenous Rights and Environmental Management	3	
RFW 200	Field trip study	1	RFW 251	Environmental Legislation and Policy	2	
RFW 256	Backcountry Risk Analysis and Mitigation I	2	RFW 257	Backcountry Risk Analysis and Mitigation II	3	
RFW 262	Ecosystem-based Management	3	RFW 265	Commercial Recreation Management	3	
RFW 263	Outdoor Recreation Operations and Mgt.	3	RFW 271	Applied Research project	1	
RFW 272	Techniques in Wildlife Sciences I	3	RFW 273	Techniques in Wildlife Sciences II	3	
RFW 280	Techniques in Aquatics and Fisheries I	3	RFW 281	Techniques in Aquatics and Fisheries II	3	
	Total Semester Credits	17		Total Semester Credits	s 18	
		•	•	Total Year Credits	s 35	
				Total Program Credits	s 73	

Certificates: All students require a valid OFA level 1 first aid certificate at the time of graduation. RFW students require one additional certificate of their choice from the list of acceptable credentials published yearly by the School.

## PART III STUDENT CONDUCT (See also College Policy 3400: Student Code of Conduct)

#### A. ATTENDANCE

- 1. Scheduled class and Laboratory Periods
  - a) Attendance at all classes is mandatory. Absences from laboratory periods will result in lost marks and cannot be repeated. Students absent from classes or laboratories will be responsible for completing the work missed. Upon the recommendation of the course instructor to the School Chair, students who have been absent from either two labs and/or four lectures, without a prior and/or confirmed acceptable excuse, may be required to withdraw from the course.

#### B. EVALUATIVE EVENTS

1. Students must attend evaluation events (quizzes, examinations, skills evaluation, etc.) at the time these events are scheduled. Supplemental evaluations may be allowed for absences due to unplanned circumstances beyond the control of the student such as illness, compassionate reasons, court appearances, etc. Students are required to inform the instructor in writing of planned absences prior to an evaluation event taking place and must have the written permission of the instructor to be absent. Where an instructor is unable to redo an event, the student will be informed.

#### C. PROBATION

The School will follow the probationary terms in Policy 8619: Student Probation.

#### D. PHYSICAL HEALTH AND SAFETY

1. Students will be provided with information about safety issues prior to specific activities and must provide informed consent prior to attendance. It is the student's responsibility, when admitted, to inform the School Chair of any health-related conditions (e.g., diabetes, epilepsy, allergies), or required prescription drugs, which could lead to problems in isolated or field situations. This information is for safety reasons only. Students should also inform the School Chair of any physical problems that may create difficulties for them in the program such as colour blindness or lack of stereo vision. For all school field activities refer to the School of Environment and Geomatics Risk Management Policy (see also Policy 3400).

#### Part IV COLLEGE POLICIES RELEVANT TO ACADEMIC AND STUDENT AFFAIRS:

Policy 3400: Student Code of Conduct

Policy 6550: Protection of Privacy

Policy 8400: Student Appeals

Policy 8600: Pre-Admissions Basic Skills Assessment

Policy 8611: Admission

Policy 8612: Grading

Policy 8613: Evaluation of Student Learning

Policy 8614: Advanced Standing - Course Challenge, PLA, Transfer Credit

Policy 8615: Standards of Academic Progress

Policy 8616: Student Withdrawals and Refunds

Policy 8617: Credentials and Graduation

Policy 8618: Cheating and Plagiarism Policy 8619: Student Probation

Policy 8620: Interdisciplinary Studies

#### PART V: EQUIPMENT TO BE SUPPLIED

Forest Technology, Applied Environmental Science and Planning Technology, and Recreation, Fish and Wildlife, and Renewable Energy Students

#### A. TEXTS AND SUPPLIES

Texts and supplies required for individual courses will be specified by the instructor.

#### B. FIELD EQUIPMENT

Students will be provided with a program specific equipment list. Students are responsible to ensure that their equipment is available at the College at all times for field work.

Other course specific equipment may be required as specified in each course outline.

#### PART VI: CONTRACT WORK WITH REMUNERATION

The College frequently enters into contracts with outside agencies for work projects which are designed to provide training and experience for students as part of their course work. Participation in these projects is mandatory to fulfill course objectives. These contracts result in some monetary return to the College over and above expenses. The College assumes all risks involved in carrying out the contracts, covers all incidental expenses, provides supervision and transportation, and provides required WorkSafe BC insurance and liability insurance.

Surplus funds from the projects, after all project expenses have been covered, will be retained by the College in special accounts, to be used for future program needs such as support of student field trip expenses, graduation, and other situations where the money is of direct benefit to students.

#### PART VII: LABORATORY AND EQUIPMENT POLICIES

On the Castlegar campus the Faculty Assistant and the Equipment Room Attendant have the authority to ensure the orderly use and maintenance of the rooms in their area, and of departmental equipment. Student policies for specific laboratories and equipment are appended to this document. Special policies covering use of certain equipment will be issued to students using this equipment.

#### A. PRIORITIES FOR EQUIPMENT USE

- 1. The following priorities will be used to resolve conflicts over use of equipment:
  - a) Laboratory, classroom, or field use in a course given by the School.
  - b) Preparation, by a School member, of a laboratory, field, or classroom lesson for a School course.
  - c) Collection of data or materials to enhance School course but not central to the lesson.
  - d) Use by other departments.
  - e) School faculty projects: projects peripheral to the teaching assignments of School faculty.

#### B. RESPONSIBILITIES AND LIABILITY OF EQUIPMENT USERS

#### 1. Student Responsibility

a) Students are responsible for the equipment used in the laboratory, in the field, and for equipment used for individual assignments or projects.

#### 2. Liability for Repair and Replacement Costs

a) Equipment users will be liable for the full cost of repairing or replacing damaged, broken, or lost equipment. Extenuating circumstances and condition of the equipment when borrowed may be taken into consideration in a decision whether to charge the student the whole amount. In the case of non-payment of the assessed cost, final grades, transcripts and credentials will be withheld.

## 3. Proper use of Equipment

- a) Students shall demonstrate adequate knowledge or skill in the proper handling of the equipment, including knowledge of the safety procedures.
- b) All equipment shall be used only for its intended purpose according to the established procedures for its use.
- c) Safety procedures will be adhered to in full at all times when the equipment is in the borrower's care. (See appropriate appendices for specific types of equipment.)

#### C. EQUIPMENT SIGN-OUT

- 1. Equipment can be signed out by individuals from the Environment and Geomatics Equipment Room during normal operating hours as posted. Equipment is sometimes signed out during lab periods from the instructor in charge. Regardless of how equipment is signed out all equipment must be returned by 8:00 a.m. the following morning to the Environment and Geomatics Equipment Room. Students not returning equipment promptly will lose borrowing privileges. It should be noted that some items have special policies concerning sign out and others cannot be removed from the lab areas.
  - a) Equipment returned must be cleaned and in working order. If a borrower suspects something is damaged or not working properly lab personnel are to be informed so that repairs can be made.
  - b) College equipment is not available for personal use and will not be signed out for that purpose.

#### D. PRIORITIES FOR USE OF COLLEGE TRANSPORTATION

- 1. The following factors are used to prioritize van requests:
  - a) Vehicle repairs and inspections will take priority over any and all bookings.
  - b) Environment and Geomatics School have first priority over other requests.
  - c) Longer trips have higher priority.
  - d) Field trips where parking on the highway is a necessity.

NOTE: \*See also Appendix B.

#### PART VIII: FIELD TRIPS

Field trips are an integral part of almost all courses in the department - and a vital component of the program.

#### A. RESPONSIBILITY OF STUDENTS

#### GENERAL POLICY

a) Policy 8350 (Educational Field Trips) will be in effect at all times.

2. It is the responsibility of all students to make themselves aware of the field trip requirements and logistics. This includes pre-reading handouts, preparation of equipment and personal field gear, asking questions, and communicating with instructors.

#### 3. Attendance

- a) As with laboratory periods, attendance at field trips is mandatory. If a trip is (to be) missed, it is the student's responsibility to:
  - (i) notify the instructor beforehand if possible.
  - (ii) demonstrate to the instructor that the reason for missing was justified and beyond the student's control. Pressing demands of other courses or tardiness in arriving at the departure site will not constitute a valid excuse.

#### 4. Consequences of Absence

- At the discretion of the instructor, a student who misses a field trip for any reason may be advised:
  - (i) to complete alternative work to demonstrate the learning objectives.
  - (ii) that it is not possible to duplicate the activity and that the student will not receive credit for that portion of the course.
  - (iii) that no direct penalty will be imposed, but that material presented and/or skills practiced on the field trip will be subject to examination.

#### 5. <u>Departure Times</u>

a) Students will be expected to be present at the scheduled time of departure. The class will not wait for those not present. Students will be expected to make their own way to or from the work area, if the area is known and safe, if they miss the bus. Otherwise, students will miss the lab and Part D of policy will apply as well as course outline policy.

# 6. Personal Equipment

a) Students are expected to arrive at the departure location with appropriate clothing, protective equipment and materials required to conduct the activity of the field trip. Failure to comply will normally result in the student being asked to miss the trip. Generally students are required to have personal protective equipment (Vest, hardhat, rain gear, work boots), and other gear when requested, at all field labs.

# 7. <u>Pets</u>

a) No dogs or other pets are permitted on field trips or labs.

#### B. PERSONAL VEHICLES USED ON FIELD TRIPS

- 1. College transportation will normally be used for long distance trips which require highway or dirt road travel.
- 2. When College vans are used, all students are expected to use them. Persons who bring their own vehicles in spite of this may be advised that they are not eligible to participate in the exercise. It is imperative then, that a student wishing to bring their own vehicle when College vehicles are used should first receive approval of the instructor.
- 3. The College does not guarantee access to College vans for all field trips. Students may be required to use their vehicles where requested by faculty. If this is required, the mustering point for the trip will be designated by the instructor. Students being transported as passengers in vehicles do so at their own risk.

#### C. RESPONSIBILITIES OF INSTRUCTORS LEADING FIELD TRIPS

#### 1. General Preparation Requirements

- a) On overnight trips, the instructor must provide the School Chair with a detailed itinerary and contact information for the group leader(s). Instructors and students are responsible for adhering to the directives set out in the Safety and Emergency Management System Protocol (see Appendix E).
- b) On day trips, instructors will adhere to directions in the safety and emergency handbook.

## 2. Student Information Regarding Field Trips

The instructor will inform all students prior to departure:

- a) what protective clothing, equipment, and materials will be required on the trip.
- b) of any out-of-pocket expenses to be incurred.
- c) of an outline of planned activities.
- d) of the time and place of departure and return.
- e) of the consequences to students of participating in illegal or hazardous activities in their free time.
- f) Document any safety concerns

#### 3. <u>Instructor Responsibility</u>

Instructors also are highly visible representatives of the College and as such are reminded to conduct themselves in accordance with College policies.

#### D. RESPONSIBILITIES OF THE SCHOOL CHAIR

- 1. The School Chair is responsible to:
  - a) verify that student/instructor ratios are appropriate.
  - b) verify that the instructor has the appropriate technical practical experience to ensure the safety of participants.
  - c) act as a contact at the College for those on the field trip and to inform the proper authorities of any problems communicated.
  - d) in the event of mishaps or delays in the trip initiate a review of policies and procedures for future trips.
  - e) Inform the Dean and other relevant College employees of any safety concerns.

#### APPENDICES

# **Environment and Geomatics Programs Policies**

- A. Operation of College Vans
- B. Operation of College Boats and Canoes
- C. Workplace Hazardous Materials Information System WHMIS
- D. Safety and Emergency Management Protocol
- E. Selkirk College Risk Assessment Forms

# **APPENDIX A**

# **OPERATION OF COLLEGE VANS**

- 1. All drivers must have a valid B.C. Class 4 Driver's License and must have had a familiarization session with College vehicles to ensure they are capable of properly and safely operating large vehicles, under highway and off-road conditions.
- 2. Drivers must be P.P.W.C. Union members except in case of emergency or if no union driver available. Only drivers approved in writing by the College may operate College vehicles.
- 3. A Trip Inspection Form must be completed prior to driving the vehicle. This is required by law. This form must be turned in to the equipment room with the log book at the end of the trip.
- 4. Drivers are responsible for accurately recording the mileage and driving time in the vehicle log book.
- 5. Drivers will adhere to all laws. Drivers will pay due attention to safety when driving under adverse conditions (snow, fog, ice, off-road, etc). Failure to do so will result in the driver losing driving privileges.
- 6. Seat belts must be worn by driver and all passengers where provided.
- 7. The driver is prohibited from eating while driving.
- 8. No smoking is allowed inside the vans at any time.
- 9. Vehicles must have fuel tanks at least 1/2 full when returned to Selkirk College.
- 10. Vehicle interiors are to be thoroughly cleaned by the driver upon completion of each trip.
- 11. Vehicle problems or damage are to be reported to Equipment Room staff on the forms provided in the log book
- 12. Vehicle log books, keys, and receipts for fuel are to be returned to the Equipment Room immediately upon trip completion. (Mail slot in G-wing if Equipment Room is closed.)
- 13. Drivers are responsible for reporting accidents to the proper authorities within the required time limits. Accidents must be recorded in the vehicle log book.
- 14. No passengers will be permitted in the vehicles while refueling.
- 15. No pets are permitted in College vehicles.
- 16. No transportation or drinking of alcoholic beverages will be permitted in college vans.
- 17. It is the responsibility of all passengers and the driver to report behaviour that is considered unsafe to the Faculty Assistant, Equipment Room Attendant, Staff member, or School Chair.

## APPENDIX B

#### **OPERATION OF COLLEGE BOATS AND CANOES**

- 1. Boats and canoes are not available for use by group or individuals outside the College.
- 2. Power boat operators must have a Pleasure Craft Operators Card.
- Operators must adhere to all government regulations that apply concerning canoe, motor boat and trailer operations.
- 4. Boats and Canoes can be signed out from the Equipment Room. The person/department signing out the boats or canoes shall ensure that a responsible person does all the operating and is in charge of loading and proper usage.
- 5. Safety procedures will be observed at all times while operating the boats and canoes. These include:
  - observing load limits with respect to people and cargo.
  - checking that the necessary safety equipment is on board before launching.
  - ensuring that all occupants are properly seated and wearing life jackets.
- 6. The boats will be used for legitimate College and course purposes only.
- 7. The person borrowing the boats or canoes will ensure that the towing vehicle is equipped with a proper and adequate hitch for pulling the trailer, with the required electrical connections for operating the trailer running lights and brake lights. The electrical wiring or connector on the trailer will not be modified or replaced.
- 8. The person borrowing the boat is responsible for doing a safety check on the trailer to ensure that: the boat is securely "tied down" to the trailer; the tires are in good shape, the hitch and electrical connectors are properly attached to the towing vehicle and that all running lights and brake lights are functional. The safety chain will be locked to the towing vehicle using the lock provided and will remain locked to the vehicle at the launching place.
- 9. The boat motor may normally be left in the operating position while being trailered on the highway, but the driver of the towing vehicle will make the necessary allowances for decreased ground clearance. The boat should not be pulled over extremely rough roads where there is a chance of damage to the boat, motor, or trailer.
- 10. When the boat is returned to the College, the person signing it out will ensure that it is properly parked and locked, with all equipment and trash removed from the interior. The gas tanks are to be returned to the fuel storage shed and the life jackets returned to the Equipment Room. The tarpaulin should be attached in place.
- 11. The log book will be completed and returned with the padlock key to the Equipment Room.
- 12. The person signing out the boat and trailer will be held responsible for damage to it, or loss, as outlined in the Equipment Usage Policies.
- 13. A record of all maintenance performed on the boat or trailer will be entered in the log book.
- 14. Accident reports are to be completed for any accident involving canoes, the College boats, or trailer.

# **APPENDIX C**

# **WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS**

Under the current WHMIS regulations, the utilization of controlled products (e.g. chemicals, solvents, compressed gases etc.) requires that certain safety procedures be followed, Fundamental to this process is the information system consisting of an approved label on the container and a Material Safety Data Sheet (MSDS) for that product on file, where it is available to any user.

## The following procedures will be adhered to:

- 1. All controlled substances in original containers will have the approved supplier's label.
- 2. All controlled substances that are not in the original container will be given a workplace label. The minimum information to be displayed is:
  - product identifier (usually name)
  - hazard rating
  - reference to MSDS for the product
- 3. Controlled substances in containers too small for hazard rating will only require the product name and reference to the MSDS for that product.
- 4. The Instructor or Instructional Assistant will evaluate the potential hazards of controlled substances and advise students of the appropriate safety procedures to be used in handling them.
- Disposal of any controlled substances will be under the supervision of the Instructional Assistant.
- 6. Examples of controlled substances that are commonly used in and around the Lab area include:
  - WD 40
  - · various soil and water testing chemicals
  - fire extinguisher
  - glue
  - paint
- 7. Material safety data sheets for all controlled substances in use by the School of Environment and Geomatics will be stored in the top drawer of the Faculty Assistant's (G17A) file cabinet under the letter M.

# **APPENDIX D**

#### SAFETY AND EMERGENCY MANAGEMENT PROTOCOL

#### **BRIEF**

This protocol is a system for both the prevention and management of incident and accident situations which may arise during the course of instruction and field work in both front and backcountry environments. A backcountry environment is one which is further than 30 minutes from the vehicle on foot, skis or snowshoes. This system will be used by both instructors and students who enter the field on course related studies.

## THE SYSTEM COMPONENTS

Safety and Emergency Management Protocol will follow current Occupational Health and Safety Regulations.

The system is divided into two components; one for use by staff and the second for use by students.

# Safety and Emergency Management Plan for Staff

The staff component is comprised of the following:

- The protocol brief
- Pre-trip report
- Accident assessment form
- Accident report form
- Post-trip report

# Safety and Emergency Management Plan for Students

- The student component is comprised of the following:
- The protocol brief
- Pre-trip report
- Accident assessment form
- Accident report form

# **First Aid Qualifications**

One Occupational First Aid Level 1 Attendant will be present on all field labs. Instructors teaching outdoor skills in backcountry locations must have current Wilderness First Aid Advanced for Leaders.

# **Department Safety Equipment**

College vehicles must carry a First Aid kit and safety equipment as specified by the WorkSafe BC. Instructors in backcountry locations will carry the WorkSafe BC Basic First Aid Kit.

Safety equipment (e.g., climbing ropes) is not to be signed out for unsupervised student use. A list of this equipment is posted in the Equipment Room.

# **INSTRUCTIONS FOR STAFF USE**

# Single day field trips in front country locations

The instructor must have at all times, a first aid kit, including the safety and emergency management protocol brief, incident/accident assessment and report forms.

# Single day field trips in backcountry locations and multi-day trips

The instructor must file the pre-trip report with the School Chair and include a copy to the School Faculty Assistant. A first aid kit must be carried at all times including the safety and emergency management protocol brief and the incident/accident assessment and report forms. The post-trip report must be filed with the School Chair within two days of completing the trip.

# All field trips

The School Chair or the designated contact person must be notified immediately upon return; either by phone or in person.

#### INSTRUCTIONS FOR STUDENT USE

\* When students, without the supervision of an instructor, enter the field on course related studies.

## Single day field trips in front country locations

Two students are the minimum number per group on front country outings. The students must have a first aid kit, including the safety and emergency management protocol brief and the incident/accident assessment and report forms. Check in procedures must be established by the students and approved by the instructor before departing on the trip.

#### Single day trips in backcountry locations and multi-day trips

Four students are the minimum number per group on backcountry outings. The students must file the pre-trip report with the class instructor prior to departure. A first aid kit including the safety and emergency management protocol, incident/accident assessment and report forms are to be carried at all times. These forms will be available in the Equipment Room. Check in procedures must be established by the students and approved by the instructor before departing on the trip.

The instructor or designated contact person must be notified immediately upon return; either by phone or in person.

# SAFETY AND EMERGENCY MANAGEMENT PROTOCOL FOR ENVIRONMENT AND GEOMATICS SCHOOL STAFF

#### **TERMINOLOGY**

#### Incident

\* Any close call where no injuries occurred but where an emergency situation was potential.

OR

\* Where a person requires first aid but is able to continue the trip.

#### Accident

\* When a person receives an injury requiring more than basic first aid management and is unable to continue the trip due to this injury.

#### **ON-SITE MANAGEMENT**

- 1. Protect the class from further hazards. This may mean directing the uninjured persons of the class to a safe location while you manage the situation at the initial site.
- 2. Assess the injuries.
- 3. Apply first aid within the limits of your training and record information on the incident/accident report form.
- 4. Transport the injured person. Consider transportation to another location if it will increase the safety and comfort of the injured person and/or the rest of the class.

**NOTE**: Due to on-site hazards it may be necessary to transport the injured person to a safe site prior to secondary assessment, splinting and bandaging.

#### CONSIDERATIONS FOR ACCESSING OUTSIDE ASSISTANCE

Outside assistance is to be obtained only when you cannot manage the situation with the resources available to you.

\* Do not take unusual or extraordinary risks when accessing outside assistance.

# Consider the requirements of additional help:

- Weather conditions and time of day.
- Time required mobilizing a rescue team.
- Hazards to the rescue team.
- Recommended travel plan to rescue location.
- Recommended rescue plan and needs (e.g., helicopter, search dog, vehicles, equipment).
- Shelter/camping for rescue personnel.

# When outside assistance is required:

• Unless there are extenuating circumstances, the instructor will send the assistant instructor and one student for assistance: with appropriate equipment, clear travel instructions, and a written rescue plan.

<sup>\*</sup> Use the accident assessment form to assist in your organization and information recording.

# PROTOCOL FOR SERIOUS ACCIDENTS

- 1. Make a note of anyone refusing first aid or assistance of any kind.
- 2. In the case of a fatality, do not move the body without prior approval from the R.C.M.P.

# **ASSISTANCE TO ANOTHER GROUP**

If assistance is requested from another group you must first consider the safety of your group members. If you and/or your group members give assistance, you must remain responsible for your group throughout the assistance.

# **INCIDENT REPORTING**

All incidents have a high educational value and must be recorded for future program safety planning. A brief summary, analysis, critique and recommendation must be submitted to the Class Instructor within two days of trip/occurrence culmination.

#### **CONTACT NUMBERS**

# \* In order to contact:

Selkirk College	250-365-7292 or 1-888-953-1133
School Chair	250-365-1393
R.C.M.P	911
Poison Control Centre	

# **APPENDIX E**

#### SELKIRK COLLEGE RISK ASSESSMENT FORMS

All forms can be found at the following local system drive at Selkirk College:

S:\School of Environment and Geomatics\Administration Information\School Policies\Risk Management Forms

FORM 1:	Risk Assessment
FORM 2:	Instructor Lab/Field Trip Route Plan and Itinerary
FORM 3:	General Consent Form
FORM 4:	Waiver for High Risk, Backcountry Field Trips
FORM 5:	Student Laboratory Safety Information Disclosure and Confirmation of Safety Training
FORM 6:	Instructor Lab/Field Trip Summary Report for Back Country Trips
FORM 7:	Student Route Plan and Itinerary for Backcountry Projects and Field Trips
FORM 8:	Accident Assessment Report
FORM 9:	Incident/Accident Report Form