

DIPLOMA

- Two years
- September 2009 start
- Bonavista Campus

COURSES

CODE	TITLE	Hrs/wk		
		Cr	Le	La
Semester 1				
BL1120	Biology I	3	2	3
CM1400	Technical Report Writing I	3	3	0
CS1600	Leadership I Wilderness Travel	4	4	0
GE1120	Geology	3	2	3
MA1100	Mathematics	5	4	2
MC1080	Introduction to Computers	2	2	1

Semester 2				
BL1400	Fish and Wildlife Biology I	4	3	3
CM1401	Technical Report Writing II	3	3	0
CP2310	Electronic Spreadsheet Applications	3	2	2
MA1670	Statistics I	4	4	1
RM1100	Introduction to Natural Resources Management	4	4	0
RM1300	Fish and Wildlife Management Methods I	3	2	2
CS2610	Wilderness Survival	2	1	2

Semester 3 (Intercession)				
RM1200	Natural Resources Management Methods I	3	2	6
EY2110	Basic Ecology	4	6	4
AT1520	Canoeing	2	0	8

Intercession course hours per week are doubled to accommodate the six-week period. Credit value is based on a fifteen-week semester.

Semester 4				
LW2210	Natural Resources Policy and Law	4	4	0
CP2320	Micro Database Applications	2	1	2
FR1230	Forest Fire Management	3	2	3
RM2400	Habitat Management	3	2	2
RM1201	Natural Resources Management Methods II	3	2	3
RM1301	Fish & Wildlife Management Methods II	5	4	2

Semester 5				
BL1401	Fish & Wildlife Biology II	3	3	0
CM2200	Oral Communications	2	2	0
LW2211	Law Enforcement	4	3	2
LW2300	Officer Safety	2	0	4
RM2300	Fish & Wildlife Management Methods III	4	3	3
SE2100	Safety & Maintenance of Field Equipment	2	0	4

Semester 6				
OJ1160	On the Job Training	6	wks	

CERTIFICATIONS

In addition to the formal semester subjects listed in the program of studies, students in the Natural Resources Technician program are required to obtain certification of completion of the following training over the two-year period of studies:

Canadian Firearm Safety Course /Hunter Education
Coastal Navigation
Electro-Fishing Certification
Marine Advanced First Aid
Marine Search & Rescue Seminar
Pleasure Craft Operators Card
Pollution Control (Coast Guard Oil Spill)
Restricted Operators Certificate (Maritime) DSC Endorsement
WHMIS / OHS

Note: Students should be aware that additional fees and expenses apply for some of these certifications and for field camps, tours and On-the-job Training.

This program is currently under review and it is anticipated that changes will occur.

TOURISM & NATURAL RESOURCES

Natural Resources Technician

The Natural Resources Technician program integrates content from the study of both the terrestrial and aquatic environments to produce competent technicians and enforcement officers for various natural resource management agencies. The program reflects the trend towards integrating a wide range of natural resources technology within government departments at Federal and Provincial levels. The requirement for the natural resources industry to consider its management practices within the context of monitoring and managing terrestrial, freshwater and marine resources highlights the need for this program.

OBJECTIVES

1. To provide the knowledge and attitudes that will enable students to identify natural resource challenges and opportunities and to undertake such assessments, preventive measures and treatments as might be associated with resource protection, management and utilization.
2. To provide students with the knowledge and skills that are required to actively participate in the solution of natural resources problems and challenges.
3. To provide knowledge and experience with a wide range of field and office equipment and techniques associated with the assessment and analysis of natural resources data.
4. To provide the foundation for continued learning experiences at the post graduate level.

EMPLOYMENT OPPORTUNITIES

Graduates of the Natural Resources Technician program are qualified for employment with federal and provincial governments as well as the private sector. Examples include Department of Fisheries and Oceans, Parks Canada, Department of Natural Resources, and private companies such as Seawatch who provide offshore observers and river guardians for Department of Fisheries and Oceans.

PROGRAM TRANSFERABILITY

Students who have graduated from the Natural Resources Technician program can apply for entry with advanced standing at a number of Bachelor of Science, Bachelor of Environmental Science and post-diploma programs in Canada. Please refer to the Transfer Guide of the NL Council on Higher Education (www.edu.gov.nl.ca/council), or contact your intended university or college.

ENTRANCE REQUIREMENTS

Comprehensive Arts and Science Certificate (College Transition program) with the following courses:

1. Math Fundamentals I and II
 2. 2 Science courses chosen from one of the following three combinations:
 - a. Introductory Biology I and II
 - b. Introductory Chemistry I and II
 - c. Introductory Physics I and II
- Note:** It is strongly recommended that all CAS students who intend to enroll in the Resources Technician program complete both of the Introductory Biology courses.

OR

High School Graduation Certificate with a 60% overall average in the following:

1. Language (1 credit) (minimum 60%) chosen from: 3101, 3102, 3103, 3112, 3172, 3192, 4121
OR
English (2 credits) chosen from: 3201, 3211, 3202, 3212, 3231, 3232, 3281, 3282, 3291, 3292
2. Mathematics (2 credits) chosen from: Advanced: 3201, 3211, 3221, 3231, 3271, 3281, 3291, 4225 (50%) minimum
Academic: 3203, 3200, 3210, 3230, 3270, 3280, 3290

(60%) minimum

OR

Mathematics (4 credits) chosen from:

Advanced: 2205, 3205 (50% minimum in each course)
Academic: 2204 (50% minimum), 3204 (60% minimum)

3. Science (4 credits) two of which must be selected from:

Biology: 3201, 3211, 3231, 3271, 3281, 3291, 4221

Physics: 3204, 3214, 3274, 3284, 3294, 4224

Chemistry: 3202, 3212, 3230, 3272, 3282, 3292, 4222

Environmental Science: 3205

Geology: 3203, 3213, 3223, 3273, 3283, 3293

Earth Systems: 3213, 3209

Note: The remaining 2 Science credits to be chosen from the highest Science mark in level 1, 2 or 3.

OR

Persons 19 years of age or older, who have been out of school for at least one year and do not meet the educational prerequisite for this program, may be considered on an individual basis under the Mature Student Clause.

OR

Grade XI Public Examination pass with a 60% average including a 60% pass in language, 60% in Matriculation Mathematics or 50% in Honours Mathematics, and one Science course,

OR

An Adult Basic Education (Level III) Graduation Certificate indicating completion of the academic stream including the following courses:

1. Communications IC3211 & IC3112 plus one of IC3116 or IC3215 or IC3321 or IC3222
2. Mathematics from one of the following sections:
 - a. Mathematics IM3212, IM3213 and IM3216
 - b. Mathematics IM3219
3. Science from one of the following sections:
 - a. Biology IB3113, IB3214, IB3115, IB3316
 - b. Chemistry IH3215, IH3116, IH3117, IH3118
 - c. Physics IP3111, IP3112, IP3215, IP3216
 - d. Earth Science IS3212, IS3213, IS3214.

OR

Adult Basic Education (Level III) Graduation with Degree and Technical Profile including the following courses:

1. English 3101A, 3101B, 3101C or 3102A, 3102B, 3102C
2. Mathematics 1104A, 1104B, 1104C, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C
3. Science from one of the following sections:
 - a. Biology 1101, 2101A, 2101B, 2101C, 3101A, 3101B, 3101C
 - b. Chemistry 1102, 2102A, 2102B, 2102C, 3102A, 3102B, 3102C
 - c. Physics 1104, 2104A, 2104B, 2104C, 3104A, 3104B, 3104C

Applicants with Adult Basic Education (Level III) Graduation with a different Profile may be eligible for admission to the program provided the appropriate selection of courses including those outlined above have been completed.

SPECIAL REQUIREMENTS

Because of the extensive field exposure incorporated in this program, students will be required to obtain quality outdoor clothing and equipment, including navigation compass, snowshoes, quality safety boots, rainwear, and other clothing appropriate for outdoor work.