

Course Parameters for Forestry

Facilities

Some courses in the Forestry scope and sequence can be delivered in a typical classroom setting. Refer to Attachment 4: CTS without Labs in this appendix. Others require access to more specialized in-school and off-campus facilities, such as:

- woodlots and/or demonstration forests
- science, design, construction, fabrication and mechanics laboratories
- observation and training sites sponsored by relevant industry, government and/or post-secondary agencies
- resource centres equipped with computer hardware/software and audio-visual material.

Also desirable, though not essential, are instructional facilities that have:

- water and sinks
- display and storage areas for specimens and artifacts
- whiteboards/bulletin boards
- fresh air and fume extraction
- lighting capabilities conducive to horticulture
- an exterior exit
- telephone service.

Courses that require access to facilities in addition to those present in a typical classroom setting are identified in the Course Parameters. For more information, see the corresponding course in Sections D, E and F of the *Guide to Standards and Implementation*.

Equipment

An equipment list is provided in the Course Parameters chart. Though not exhaustive, the list identifies recommended and optional equipment for meeting the course outcomes.

Equipment for courses in Forestry can be obtained through a combination of purchasing, borrowing, renting improvising and constructing. When choosing a suitable option for obtaining equipment, give consideration to:

- adequacy of budgets for purchase
- capabilities regarding in-school maintenance and storage
- the logistics and cost of renting
- potential for loan from industry, government or post-secondary agencies
- joint purchases with other organizations in the community
- opportunities for improvising or constructing.

Teachers may find it desirable to develop a list of additional materials and supplies required for specific learning activities planned within each course.

Safety Considerations

Facilities used to support a Forestry program must ensure a safe learning/working environment. Students must be aware of federal, provincial and local regulations governing the tasks they perform, and adhere to appropriate personal and environmental health and safety procedures in courses that involve:

- the use of specialized hand/power equipment
- the handling and storage of hazardous materials
- outdoor trips and field-based investigations.

Students must understand immediate and potential hazards associated with the tasks they perform, and the possible impact of these hazards on self, others and the environment.

Instructional Qualifications

Courses in Forestry can be implemented by Alberta Certified Teachers who have an interest in providing instruction in classroom, laboratory and/or outdoor environments. A background in science and/or forest industry is an asset to those who provide instruction in Forestry courses, particularly at the intermediate and advanced levels. Teachers may find it desirable to access sources of instructional support available from forest industry, professional forestry associations and consultants, and relevant government agencies; e.g., Alberta Environmental Protection.

To ensure compliance with safety and industrial standards, some courses require that components of instruction be provided by a person(s) having additional credentials granted by business, industry, government or community organizations. Forestry courses requiring additional instructor credentials are identified in the Course Parameters chart. For more information, see the corresponding course in Sections D, E and F of the *Guide to Standards and Implementation*.

Credentiaing Opportunities

Some courses within the Forestry strand provide opportunities for students to earn credentials recognized by business, industry and/or post-secondary institutions. Courses that link with credentiaing opportunities relevant to the forestry sector are identified in the course parameters chart. For more information regarding the credential, requirement/qualification and credentiaing agency, see the corresponding course in Sections D, E and F of the *Guide to Standards and Implementation*.

Course Parameters

FORESTRY

LEVEL

- 1 – Introductory
- 2 – Intermediate
- 3 – Advanced

THEME

- A. Social and Cultural Perspectives
- B. Technology and Applications
- C. Management and Conservation

EQUIPMENT

- ✓ Recommended in order to meet course outcomes
- Optional in providing access to supportive learning environments

LEVEL	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3
THEME	A	A	A	B	B	C	C	A	A	A	B	B	C	C	A	B	B	B	C	C	C	C
INSTRUCTIONAL QUALIFICATIONS			*							*												
INSTRUCTIONAL FACILITIES			*	*	*	*				*	*								*	*		
CREDENTIALLING OPPORTUNITIES			*							*												
EQUIPMENT	Why Forestry?	Forest Regions of Canada	Woods Survival 1	Mapping & Aerial Photos	Measuring the Forest 1	Forest Ecology 1	Forests Forever 1	Making a Difference	Managing Alberta Forests	Woods Survival 2	Measuring the Forest 2	Harvest Practices	Forests Forever 2	Users in the Forest	Issues in Forestry	Measuring the Forest 3	The Forest Marketplace	Forest Technology Applications	Forest Ecology 2	Silviculture	Integrated Resource Management	
	1010	1020	1040	1050	1060	1090	1100	2010	2030	2040	2060	2070	2100	2120	3010	3060	3070	3080	3090	3110	3120	
Binoculars			○		○					○	○											
Calculator				✓	✓	○		○		○	✓			○		✓			○			✓
Camcorder							○	○				○						○	○			
Camera			○		○		○	○		○	○	○						○	○			
Camping gear (1)			✓							✓												
Canoe			○							○												
Chainsaw										○		○										
Clinometer					✓						✓									○		
Compass			✓	✓	✓					✓						○			○			
Computers and software							○	○								○						
Container trays																					✓	
Douglas protractor				✓										○		○						○
First aid supplies			✓		✓	✓				✓	✓							○	✓			

(1) Camping gear includes tent, campstove, sleeping bag, cooking utensils, lantern, knife, sanitary supplies, personal grooming items.

* Refer to specific 1-credit courses listed in Sections D, E and F of the corresponding *Guide to Standards and Implementation* for additional information.

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Increment borer					✓																	
Kit, soil testing																				✓		
Maps, forestry (2)		○	✓	✓						✓				✓		✓				○		
Outdoor gear (3)		✓	✓		✓					✓								○	✓	✓		
Personal safety equipment (4)		✓	✓	✓	✓	✓				✓	✓	✓						○	✓	✓		
Photos, aerial			✓	✓						✓				○		✓				○		
Planting bags/pails tools (5)											✓										✓	
Polychord chain					✓															○		

(2) Maps include forest cover, forest stand, topographic, forest regions, administrative boundaries, green and white areas.

(3) Outdoor gear includes bush clothing, backpack, outdoor boots and rain gear, as required.

(4) Personal safety items include hard hat, safety glasses, ear protectors, pressure and triangular bandages, as required.

(5) Planting tools include mattock and planting shovel.

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Pruning tools																					✓
Riker (permanent display) mounts		○		✓		✓	○						✓						○		
Saw			✓							✓											
Seedlings, bare root and container grown																					✓
Shovel																			✓	✓	
Slides/specimens, tree (6)		✓		✓			○						✓						✓		
Snowshoes			○							○											
Stereoscope				✓										○		○					
Table, drafting				○												○					
Tape, 30m					✓						✓									✓	
diameter					✓						✓										
flagging					✓														✓		
Cross-country skis			○							○											

(6) Specimens may include forest disease, forest insect, wood products, cones, seeds and other tree parts.

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