

MODULE WLD1080: ANGLING & FISH MANAGEMENT

Level: Introductory

Theme: Management and Conservation

Prerequisite: None

Module Description: Students explain the role of recreational fishing in the management and conservation of fish resources, and demonstrate knowledge of the responsible practices required for fishing or related outdoor activities.

Module Parameters: Access to an outdoor aquatic environment and relevant government agencies.

Teacher must be a registered Alberta Fishing Education Program Instructor (Alberta Environmental Protection, Natural Resources Service).

Instruction on basic first-aid and survival techniques to be provided by person(s) having current certification in Standard Level First Aid.

Note: Alberta Fishing Education Program Student Certificates may be awarded to students who successfully complete this module and receive at least 80% on the Alberta Fishing Education Examination.

See Section C (Planning for Instruction) and Section H (Linkages/ Transitions) of this Guide for further information on instructor training and certification.

Supporting Module: CTR1210 Personal Safety (Management) [Career Transitions Strand]

Because of the practical nature of this module, students must have a general knowledge of basic first-aid and survival techniques relevant to aquatic environments. See Planning for Instruction in Section C for further information on student safety.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none">explain the role of recreational fishing in the management of fish resources, and social and legal standards of conduct for game fishing	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none">identifying and explaining:<ul style="list-style-type: none">principles of fisheries management and the role of recreational fishing in managing fish resourcesethical and legal responsibilities of individuals involved in game fishing. <p><i>Assessment Tool</i> <i>Knowledge/Application Assessment: Principles of Fisheries Management, WLD1080-1</i></p> <p><i>Standard</i> <i>Respond to a standard of 1 on the rating scale</i></p>	30

MODULE WLD1080: ANGLING & FISH MANAGEMENT (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> • identify and describe the distinguishing characteristics and habitats of Alberta’s game fish • describe basic fishing equipment and safe practices for fishing 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> • given a current issue regarding fishing ethics: <ul style="list-style-type: none"> – negotiating and debating the issue while assuming the role of one or more stakeholder groups – preparing and presenting a position paper that outlines an ethical plan of action. <p><i>Assessment Tool</i> <i>Negotiation and Debate: Introductory Level, WLDNEG-1</i> <i>Position Paper: Fishing Ethics, WLD1080-2</i></p> <p><i>Standard</i> <i>Address criteria in negotiation/debate and the position paper to a standard of 1 on the rating scale</i></p> <ul style="list-style-type: none"> • given pictures, videos and/or slides of major game fish species in Alberta, identifying selected species by: <ul style="list-style-type: none"> – common name – physical characteristics – habitat and range – spawning and feeding habits. <p><i>Assessment Tool</i> <i>Guide to Fish Identification, WLD1080-3</i> <i>Alberta Fishing Education Manual, Natural Resources Service (Alberta Fish and Wildlife)</i></p> <p><i>Standard</i> <i>Identify 10 species of salmonids, three species of percids and four other species of game fish</i></p> <ul style="list-style-type: none"> • demonstrating practical techniques for the safe handling and use of fishing equipment. <p><i>Assessment Tool</i> <i>Task Checklist: Fishing Equipment and Techniques, WLD1080-4</i> <i>Lab Assessment: Outdoor Experiences, WLDLAB</i></p> <p><i>Standard</i> <i>Achieve a performance rating of 2 in each area on the task checklist and a performance rating of 1 in lab assessment</i></p>	<p>40</p> <p>30</p>

MODULE WLD1080: ANGLING & FISH MANAGEMENT (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> a summative theory test for the module in which the student demonstrates knowledge of fisheries management, game fish identification, fishing equipment/techniques, fish handling/cooking and safety considerations. <p><i>Assessment Tool</i> <i>Sample Test Items: Alberta Fishing Education Program, Natural Resources Service (Alberta Fish and Wildlife)</i></p> <p><i>Standard</i> <i>Response indicating 80% mastery</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tools</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>Integrated throughout</p>

Concept	Specific Learner Expectations	Notes
<p>Role of Recreational Fishing</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> describe the goals of fisheries management and agencies responsible for managing Alberta's fish populations distinguish among recreational, commercial and game fishing describe components and techniques of a fisheries management program; e.g.: <ul style="list-style-type: none"> fishing regulations fish stocking and monitoring aquatic habitat development and improvement law enforcement public information programs 	<p>See <i>Alberta Fishing Education Program Manual</i>.</p> <p>Contact any district Natural Resources Service (Fish and Wildlife) Office for information regarding instructor workshops.</p> <p>Subscribe to <i>The Alberta Game Warden</i>.</p> <p>Contact Alberta Environmental Protection for student copies of <i>Alberta Guide to Sportfishing</i>.</p>

MODULE WLD1080: ANGLING & FISH MANAGEMENT (continued)

Concept	Specific Learner Expectations	Notes
<p>Role of Recreational Fishing (continued)</p>	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain the role of recreational fishing in the management and conservation of fish resources • identify ethical considerations that provide a social standard of conduct for game fishing; e.g.: <ul style="list-style-type: none"> – fisherman–landholder relations – regard for other people – respect for self – respect for wildlife – catch-and-release fishing – respect for laws • describe fishing regulations and associated legislation that provide a legal standard of conduct for game fishing; e.g.: <ul style="list-style-type: none"> – laws to protect and conserve fish – laws to govern conduct of fishermen – small vessel legislation – Criminal Code – <i>Litter Act</i>. 	<p>Investigate monitoring techniques:</p> <ul style="list-style-type: none"> • electrofishing • sampling, tagging and netting. <p>Panel discussions and student debates.</p> <p>Investigate local fishing seasons and quotas.</p> <p>Discuss catch-and-release fishing as a philosophy as well as a technique. Why are some persons more inclined to keep fish from stocked lakes than when caught in the wild?</p> <p>Invite a resource person from a legal profession to explain the legal process and law enforcement.</p> <p>Cite examples of relevant career opportunities:</p> <ul style="list-style-type: none"> • research/conservation • law enforcement • tourism/guiding.
<p>Fish Identification</p>	<ul style="list-style-type: none"> • describe common ways of classifying fish; e.g.: <ul style="list-style-type: none"> – by species relationship: <ul style="list-style-type: none"> • salmonids • percids • minnows – by water temperature preference: <ul style="list-style-type: none"> • cold water • warm water – by feeding habits: <ul style="list-style-type: none"> • fish eaters • insect eaters • plant eaters 	<p>Individual/small group research.</p> <p>Another way of classifying fish may be by habitat; e.g.:</p> <ul style="list-style-type: none"> • lake dwellers • river dwellers.

MODULE WLD1080: ANGLING & FISH MANAGEMENT (continued)

Concept	Specific Learner Expectations	Notes
Fish Identification (continued)	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • relate the relative abundance of fish species to their position in a food chain • describe water characteristics that influence the distribution and abundance of fish; e.g.: <ul style="list-style-type: none"> – temperature – dissolved oxygen – water depth – alkalinity (acidity) • identify and describe the distinguishing characteristics of major game fish species in Alberta; e.g.: <ul style="list-style-type: none"> – physical features – habitat – spawning habits – feeding habits – angling techniques. 	<p>Draw food chains.</p> <p>Displays and presentations.</p>
Equipment and Safe Practices	<ul style="list-style-type: none"> • describe the characteristics, use and care of common fishing equipment; e.g.: <ul style="list-style-type: none"> – fishing rods and reels – lines and knots – hooks and artificial lures – swivels and wire leaders – sinkers, down riggers and floats – netting • describe the nature and purpose of different angling techniques • demonstrate techniques for the care of table fish and trophy fish • demonstrate techniques for handling and cooking table fish 	<p>Emphasis on field experiences.</p> <p>Spin and bait casting, trolling, fly fishing, ice fishing, bow fishing.</p> <p>Cleaning, dressing, scaling, filleting, skinning, freezing and cooking.</p>

MODULE WLD1080: ANGLING & FISH MANAGEMENT (continued)

Concept	Specific Learner Expectations	Notes
Equipment and Safe Practices (continued)	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • explain safe practices for fishing and engaging in related outdoor activities; e.g.: <ul style="list-style-type: none"> – boat safety – ice safety – hook removal – bear safety • describe emergency first-aid and survival techniques, and items to be included in first-aid and survival kits. 	Potential linkages exist with the “First Aid in the Wilderness” certificate course (see Section H: Linkages/Transitions).