MODULE AGR1030: PRODUCTION BASICS

Level: Introductory

Theme: Technology and Applications

Prerequisite: None

Module Description: Students demonstrate the basic steps involved in planting, growing and harvesting a plant commodity; or in raising, growing and finishing an animal commodity, and they identify related career opportunities.

Module Parameters: Access to plant or animal production facilities.

Off-campus learning can support the development of practical skills in plant/animal production; consultation with a work site supervisor ensures that relevant safety considerations are addressed and that student learning meets or exceeds the learner expectations in this module.

See the *Off-campus Education Guide for Administrators, Counsellors and Teachers* (Alberta Education, 1995) for further information regarding off-campus learning.

Note: Opportunities may exist for the completion of practical components of this module through projects undertaken with local youth groups; e.g., 4-H Clubs.

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

Because of the practical nature of this module, students need a general knowledge of accepted practices and potential hazards when performing tasks related to plant or animal production. 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
The student will: • identify and demonstrate the basic steps and procedures involved in producing a plant or animal commodity	*Assessment of student achievement should be based on:* • preparing a flow chart that illustrates basic stages and steps involved in planting, growing and harvesting a plant commodity, or raising, growing and finishing an animal commodity. *Assessment Tool* *Assessment Criteria: Flow Charts, AGRFLO* *Sample Flow Chart: Production Basics, AGR1030–1* *Standard* *Complete flow chart of plant/animal production tasks to a standard of 1 on the rating scale*	25

MODULE AGR1030: PRODUCTION BASICS (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:* • performing practical tasks relevant to plant or animal production. Practical tasks to involve monitoring and maintaining <u>one</u> or more of the following: – physical growth requirements – plant/animal health – buildings/structures and equipment. *Assessment Tool* *Lab Assessment, AGRLAB–PLT or AGRLAB–ANM* *Standard* *Achieve a minimum performance rating of 1 in applicable areas of task assessment* • maintaining an anecdotal record of production tasks performed. *Assessment Tool* *Log/Record of Production Tasks, AGRLOG–PLT or AGRLOG–ANM* *Standard* *Complete all sections of the log/record for each task performed over a negotiated/contracted period of time*	25
• describe technological systems used within a plant or animal production enterprise	• constructing a drawing/model of a technological system designed to address one or more needs relevant to plant or animal production. *Assessment Tool* *Project Assessment: Technology Design, AGRTEC* *Assessment Criteria: Diagrams and Technical Drawings, AGRDRA* *Standard* *Complete the drawing/model to a standard of 1 on the rating scale*	25

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • identify career opportunities relevant to plant or animal production	*Assessment of student achievement should be based on:* • given access to current information on career opportunities in agriculture production and related service industries, completing a research project on one or more careers in plant or animal production. *Assessment Tool* *Career Search: Introductory Level, AGRCAR–1* *Sample Concept Map/Web: Careers in Agriculture Production, AGR1030–2* *Standard* *Complete research to a standard of 1 on the rating scale*	25
• demonstrate basic competencies.	• observations of individual effort and interpersonal interaction during the learning process. *Assessment Tools* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Production Practices	*The student should:* • identify physical requirements for the production of a commodity; e.g.: – water requirements – light intensity and duration – type of soil – climate and temperature – air – space variables – nutrient requirements	ACTIVITIES WILL VARY ACCORDING TO THE NATURE OF THE PRODUCTION ENTERPRISE; e.g.: • investigate requirements for germination • compare the nutritional value of different feed sources for livestock • grow container crops (e.g., tomatoes, beans, cucumbers) • monitor soil moisture and temperature • gather and compare soil samples • research the functions and components of fertilizers.

Concept	Specific Learner Expectations	Notes
Production Practices (continued)	*The student should:* • describe a strategy for protecting the health of a chosen commodity; e.g.: – identification of diseases, deficiencies and ailments – treatment, control and prevention – ethical concerns • relate concepts of breeding and selection to production practices; e.g.: – systems of breeding – selection criteria – genetic engineering • describe buildings/structures and equipment appropriate to production; e.g.: – design features – operation and maintenance – safety – economics/cost.	Identify common pests/ diseases. Discuss chemical and non-chemical methods of pest and disease control. Identify common breeds/varieties. Design/build a hydroponic garden. Research factors in animal health.
Career Opportunities	• research career opportunities and occupations relevant to agriculture or horticulture production; e.g.: – science/production management – support services – resource management • describe current employment statistics for one or more career opportunities; e.g.: – types of occupations – number of workers – employment trends • predict career opportunities and trends from employment statistics • describe information regarding agriculture or horticulture production industries in the future, and resulting career opportunities.	Plan for individual/group research and presentations. Arrange/facilitate information interviews and job shadowing. See the National Occupational Profiles (NOC) in Section H: Linkages/Transitions. Contact the "Career Hotline" (telephone: 1–800–661–3753).