

AGRICULTURE COURSE SUMMARIES

INTRODUCTORY

AGR1010: INTRODUCTION TO AGRICULTURE

Students explore and gain an understanding of the diversity and significance of agriculture.

Prerequisite: None

AGR1040: INTRODUCTION TO ANIMAL BASICS

Students learn to identify and demonstrate the basic steps involved in raising and caring for a domestic animal. Students gain an understanding of general care to ensure animal health.

Prerequisite: None

AGR1050: PLANT PROPAGATION

Students are introduced to plant structures and propagation techniques for growing healthy plants. Cultural requirements for plant production and technological and chemical influences on plant production are also explored.

Prerequisite: None

AGR1055: GARDENING

Students learn about basic gardening and the need to consider regional climates, water availability and exposure to sunlight. Students have the opportunity to plan and design a garden that may thrive in Alberta.

Prerequisite: AGR1050: Plant Propagation

AGR1070: LANDSCAPING 1

Students learn about the techniques used to perform basic landscape services, focusing attention on plant identification, equipment and supplies, and basic maintenance tasks.

Prerequisite: None

AGR1080: FLORAL DESIGN – MECHANICS

Students learn about the basic sanitary practices and mechanics involved in the initial stages of designing a simple floral arrangement.

Prerequisite: None

AGR1085: FLORAL DESIGN 1

Students learn how to care for and handle fresh cut flowers and foliage while constructing simple floral arrangements.

Prerequisite: AGR1080: Floral Design – Mechanics

AGR1100: AGRICULTURE TECHNOLOGY

Students describe applications of science and technology within the agriculture or horticulture industry.

Prerequisite: None

AGR1150: GREENHOUSE/NURSERY CROPS 1

Students apply concepts and processes related to growing a greenhouse crop, including plant anatomy and identification, growth requirements, physical structures and equipment, and production tasks.

Prerequisite: None

AGR1910: AGR PROJECT A

Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

Prerequisite: None

INTERMEDIATE

AGR2010: DIVERSITY IN AGRICULTURE

Students analyze a range of issues relevant to agriculture and food production and develop strategies for dealing with agriculture issues within a local and global context.

Prerequisite: None

AGR2020: ANIMAL HUSBANDRY/WELFARE

Students apply the principles of animal science and health technology in providing care for a domestic animal.

Prerequisite: AGR1040: *Introduction to Animal Basics*
AGR3000: *Agriculture Safety*

AGR2030: FIELD CROPS 1

Students explore different field crop species in Alberta. Using basic equipment, students demonstrate practical skills in planting, growing and harvesting crops.

Prerequisite: AGR3000: *Agriculture Safety*

AGR2040: LIVESTOCK/POULTRY 1

Students explore different breeds of livestock, poultry or other animal commodities. Focusing on basic anatomy and physiology and the requirements for growing and finishing practices, students will consider the welfare of the animals and the technology available.

Prerequisite: AGR3000: *Agriculture Safety*

AGR2045: COMPANION ANIMALS

Students explore the history, physiology, behavior, health and welfare, care, and husbandry of a variety of companion animal species.

Prerequisite: None

AGR2050: AGRIFOODS 1

Students learn about the processes and practices related to producing an agrifood product or providing a related service, focusing on industry inputs and processing technologies and practices.

Prerequisite: None

AGR2060: LANDSCAPING 2

Students demonstrate basic landscape practices, focusing attention on plant identification, weed/pest control and equipment maintenance.

Prerequisite: AGR1070: *Landscaping 1*

AGR2070: EQUINE 1

Students develop practical skills, based on approved practices, for providing the daily care of a horse, focusing on the origin and history of horses, anatomy and conformation, types and breeds, handling and feeding practices, and basic health care.

Prerequisite: AGR3000: *Agriculture Safety*

AGR2085: FLORAL DESIGN 2

Students study the handling requirements of flowers and foliage and the practices involved in providing floral design. Student attention will focus on plant and flower identification, elements and principles of design, and floral projects and marketing practices.

Prerequisite: AGR1085: *Floral Design 1*

AGR2095: INDOOR PLANTS

Students study the practices involved in interiorscaping, focusing attention on plant identification and the care required for maintaining the health of indoor plants.

Prerequisite: AGR1050: *Plant Propagation*

AGR2100: PROTECTIVE ENCLOSURES

Students identify essential components of a growing/living environment and demonstrate the techniques used to manage the growing/living environment within a protective enclosure.

Prerequisite: None

AGR2120: SOILS MANAGEMENT 1

Students examine soil structure, conduct tests to determine the physical and chemical properties of soils, and develop an understanding of the impact of soil properties on productivity.

Prerequisite: AGR1050: *Plant Propagation*

AGR2130: INTEGRATED PEST MANAGEMENT

Students identify pests and apply knowledge of pest management within the agricultural industry.

Prerequisite: None

AGR2150: GREENHOUSE/NURSERY CROPS 2

Students identify suitable greenhouse crops, demonstrate understanding of growth requirements and necessary physical structures and equipment, and engage in practical production tasks.

Prerequisite: AGR1150: Greenhouse/Nursery Crops 1

AGR2910: AGR PROJECT B

Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

Prerequisite: None

AGR2920: AGR PROJECT C

Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

Prerequisite: None

AGR2950: AGR INTERMEDIATE PRACTICUM

Students apply prior learning and demonstrate the attitudes, skills and knowledge required by an external organization to achieve a credential/credentials or an articulation.

Prerequisite: None

ADVANCED**AGR3000: AGRICULTURE SAFETY**

Students recognize and assess the hazards and manage the risks of working in agriculture.

Prerequisite: None

AGR3030: FIELD CROPS 2

Students demonstrate the techniques used to produce a field crop, focusing attention on industry trends, crop selection, genetics and reproduction, and production skills. Potential areas of specialization include the production of cereals, forage, oil seeds, pulse crops, mushrooms, spices/herbs, vegetables, fruits, medicinal plants and exotic plants.

Prerequisite: AGR2030: Field Crops 1

AGR3040: LIVESTOCK/POULTRY 2

Students demonstrate the techniques used to manage production livestock, poultry or other animal commodities. Areas of focus include industry trends and opportunities, genetics and reproduction, rations and feeding, housing, animal handling and restraint, animal health and welfare, breeding operations and care for the young. Potential areas of specialization include the production of cattle (beef or dairy), poultry, swine, sheep and diversified livestock (elk, bison and deer).

Prerequisite: AGR2040: Livestock/Poultry 1

AGR3050: AGRIFOODS 2

Students are introduced to the management and development of an agrifood product or related service, focusing attention on government regulation and control, economic principles, product quality and safety, environmental impact and industry trends. Potential areas of investigation include cattle (beef or dairy), poultry, cereals, oil seeds, sugar beets, wine, fruit/vegetables and honey.

Prerequisite: AGR2050: Agrifoods 1

AGR3060: LANDSCAPING 3

Students demonstrate basic landscape practices, focusing attention on plant identification, effective maintenance practices, diagnosis and problems and installation of specialty items. Potential areas of specialization include residential landscapes, institutional/industrial grounds and recreational/roadside landscapes.

Prerequisite: AGR2060: Landscaping 2
AGR3000: Agriculture Safety

AGR3070: EQUINE 2

Students develop practical skills, based on approved practices, for providing the daily care of a horse. Attention will focus on the use of physical facilities, procedures for stall cleaning and bedding a horse, guidelines for turnout and shelter, reproductive fundamentals and techniques, and basic horsemanship.

Prerequisite: AGR2070: *Equine 1*

AGR3085: FLORAL DESIGN 3

Students study the requirements and practices involved in providing creative floral design services, focusing on plant and flower identification, advanced design techniques, and floral services for special occasions.

Prerequisite: AGR2085: *Floral Design 2*

AGR3095: DISPLAY DESIGN

Students build on floral design practices and create a promotional floral display, focusing on products and services in the floral industry.

Prerequisite: AGR3085: *Floral Design 3*

AGR3100: BIOTECHNOLOGY

Students present the results of research on applications of biotechnology in agriculture and food production.

Prerequisite: None

AGR3120: SOILS MANAGEMENT 2

Students study appropriate soil testing and amending techniques and learn to interpret soil survey maps and reports.

Prerequisite: AGR2120: *Soils Management 1*

AGR3150: GREENHOUSE/NURSERY CROPS 3

Students apply knowledge of materials and processes in identifying, selecting, growing and maintaining a greenhouse crop, focusing on a marketable crop.

Prerequisite: AGR2150: *Greenhouse/Nursery Crops 2*

AGR3160: TURF MANAGEMENT

Students demonstrate the techniques used to provide turf maintenance services, focusing on plant identification, equipment maintenance, effective practices, cost analysis and pricing.

Prerequisite: AGR1070: *Landscaping 1*

AGR3910: AGR PROJECT D

Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

Prerequisite: None

AGR3920: AGR PROJECT E

Students develop project design and management skills to extend and enhance competencies and skills in other CTS courses through contexts that are personally relevant.

Prerequisite: None

AGR3950: AGR ADVANCED PRACTICUM

Students apply prior learning and demonstrate the attitudes, skills and knowledge required by an external organization to achieve a credential/credentials or an articulation.

Prerequisite: None