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# **Agricultural Business and Production Technology (ABPT)**

# Courses

# ABPT 1102 Farm Records and Analysis: 3 semester hours.

Introduction to the principles of agri-business management. Identifies a practical system of farm record keeping with analysis of these records. F

# ABPT 1103 Introduction to Precision Agriculture for Farm Management: 3 semester hours.

Introduction to precision agriculture application on the farm using industry specific software. Entering records, creating databases and developing field maps will be included as well as gathering and inputting yield and soils data. F

#### ABPT 1105 Weed Identification and Biology: 3 semester hours.

An introduction to weed science providing an understanding of the principles and methods of controlling weeds, use and development of herbicides, methods of application and rate calculation, sprayer components and calibration, and practical knowledge of plant and seed samples of weeds common to specific regions. F

ABPT 1110 Introduction to Livestock Production: 3 semester hours. Introduction to the livestock industry and its importance to the U.S. economy. S

#### ABPT 1112 Irrigation Principles: 3 semester hours.

Overview of the elements of irrigation and its industry. Topics include irrigation methods, efficiencies, equipment, and their relationships to soils and plants. F

# ABPT 1113 Cultivated Plants: 3 semester hours.

Provides a practical understanding of plant anatomy, morphology, and growth of agriculture crops. F

#### ABPT 1114 Plant Physiology: 4 semester hours.

Provides a practical understanding of plant structure, function and physiological processes involved in growth and development. D

# ABPT 1120 Agricultural Chemistry: 3 semester hours.

Fundamental course in chemistry which overviews the basics of inorganic, organic, and biochemistry with applications to agriculture and other applied science fields. S

# ABPT 1139 Agriculture Safety: 2 semester hours.

This course is a synopsis of safety practices and worker protections in the agricultural workplace. Topics will include safety in and around shops, on farm vehicles, using farm equipment, and safe practices around rotational and directional moving equipment. Personal protection equipment, pesticide standards, and MSDS sheets will be included. Safety plans will be analyzed and evaluated for completeness. F

#### ABPT 2201 Soil Science: 4 semester hours.

Provides an understanding of soil structure and composition as related to temperature, water, and other environmental controls. Lab work required. F

# ABPT 2202 Soils Fertility and Management: 3 semester hours.

Study of macro- and micronutrient uptake and utilization by plants and the fertilizer products used to supply different nutrients. PREREQ: ABPT 2201 or instructor permission. D

# ABPT 2212 Advanced Irrigation: 3 semester hours.

This course expands on the ABPT 1112 course. In depth study of drip irrigation concepts, methods, and components, and drip design concepts. This course also takes a deeper dive into pumps and explores pump types, including positive and non-positive displacement pumps. Interpreting and applying pump and system curves and how to evaluate, interpret and apply Net Positive Suction Head characteristics to an end suction centrifugal pump will be covered. D

#### ABPT 2215 Field Crop Production: 3 semester hours.

Production and management of field crops designed to provide the most current information in the production and management of agronomic crops important to the economy of the intermountain Northwest. S

# ABPT 2221 Introduction to Food and Agricultural Markets: 3 semester hours. Overview of the marketing system for agricultural commodities. D

#### ABPT 2222 Agricultural and Water Policy: 3 semester hours.

This course covers goals, methods, and results of government programs and policies in the agriculture and natural resource industries. This includes the study of international trade policies, domestic farm policies, food safety and quality issues, resource issues and how these affect agribusiness, locally, nationally and internationally. The course will also cover western water policy with an emphasis on Washington State water policy, water rights and how these policies affect natural resources and agribusiness. S

# ABPT 2230 Integrated Pest Management: 3 semester hours.

Introduction to the identification, life cycles, and control of insects and diseases common to agricultural crops in intermountain northwest. S