

# AGRICULTURE (AGRI)

This is a list of the Agriculture courses available at KPU.

## **AGRI 1150 CR-3**

### **Sustainable Agriculture for the 21st Century**

Students will study, through the lens of human enterprise sustainability, the aspects and ramifications of dominant and alternate agri-food system paradigms. They will examine agri-food systems from perspectives, such as environmental stewardship, food self-reliance, ethics, health, and nutrition. Students will compare, contrast, evaluate, and critique key concepts, elements, and outcomes of diverse agri-food system dimensions.

*Not Transferable*

## **AGRI 1299 CR-1**

### **Food System Field Analysis**

Students will (in this week long, intensive, field based course) visit and observe agri-food system farm processing and distribution enterprises in British Columbia. They will assess the function and operation of these enterprises and identify challenges and opportunities for advancing agri-food system sustainability. Students will explore ways to define, assess, and interpret factors that contribute to agri-food system sustainability. They will learn how factors interact and learn to weigh these factors in holistic agri-food system sustainability assessments, decision making, and planning processes.

*Prerequisites: Admission to the Bachelor of Applied Science, Sustainable Agriculture degree.*

*Not Transferable*

## **AGRI 2190 CR-3**

### **Plant Science**

Students will study basic fruit and vegetable crop plant anatomy, morphology, physiology, plant growth and development, reproduction, genetics and improvement methods. They will also study environmental (biotic and abiotic) and agroecosystem management interactions and their effects on crop growth, yield and quality.

*Prerequisites: BIOL 1210*

*Not Transferable*

## **AGRI 2220 CR-4**

### **Soil Stewardship and Management**

Students will study the main characteristics of agricultural soils, their ecology and management with emphasis on understanding soil as a living system, in the context of the agro-ecosystem and as a precious natural resource. They will study soil formation and maturation processes, soil classification, physical and chemical characteristics of soils and how these influence suitability for and management in agriculture, soil water management, soil biology and ecology and soil conservation. Students will also study composting methods and compost use.

*Not Transferable*

## **AGRI 2230 CR-3**

### **Sustainable Human Economy**

Students will learn about economic principles within the context of environmental, economic and social sustainability. They will study key principles and concepts of ecological and sustainable economics in comparison to classical and neo-classical economics.

*Not Transferable*

## **AGRI 2240 CR-3**

### **Ecologically Based Pest Management**

Students will study common plant, insect, mite, bacterial, fungal, viral and vertebrate pests, and associated injury and or disease caused to common fruit and vegetable crop plants cultivated in the Pacific Northwest. They will study the agro-ecological basis for plant pest occurrence and plant response to infestation/infection. Students will study cultural, behavioral, biological, physical and chemical pest management methods and tools based on maintaining or enhancing agro-ecosystem integrity, function and sustainability. They will learn to identify/ diagnose arthropod, plant and microbial pests/ disease and develop appropriate integrated pest management strategies and action plans. They will also learn to distinguish between pathogenic and non-pathogenic plant disease.

*Prerequisites: AGRI 2190, BIOL 2322*

## **AGRI 2250 CR-3**

### **Agriculture and Food Systems**

Students will study the history of agriculture. They will examine and compare different systems of food production such as traditional, industrial, organic, biodynamic, swidden, permaculture and garden agriculture in their historical, environmental, social and economic contexts.

*Not Transferable*

## **AGRI 3591 CR-3**

### **Special Topics in Food Systems I**

Students will engage in intensive study of a specific topic, as determined by the student and supervising faculty, and approved by the department. Students will study under the supervision and mentorship of a faculty member with requisite expertise in the area of study. Students will delineate learning objectives, develop a detailed study plan, conduct studies and submit a report(s).

Note: Students may repeat this course, to study different topics, for up to 6 credits total.

*Prerequisites: 60 credits (1100 or higher)*

*Not Transferable*

## **AGRI 3599 CR-3**

### **Directed Studies I**

Students will carry out the study of a specific subject in sustainable agriculture under the direct supervision of a faculty member who will delineate learning objectives. The student will develop a detailed study plan, conduct studies and submit a report(s) or satisfactorily complete other means of evaluation which will include exams.

Note: Students may repeat this course, to study different subjects, for up to 9 credits total.

*Prerequisites: 60 credits (1100 or higher) and Permission of Instructor*

*Not Transferable*

**AGRI 4591 CR-3****Special Topics in Food Systems II**

Students will engage in intensive study of a specific topic, as determined by the student and supervising faculty, and approved by the department. Students will study under the supervision and mentorship of a faculty member with requisite expertise in the area of study. Students will delineate learning objectives, develop a detailed study plan, conduct studies and submit a report(s).

Note: Students may repeat this course, to study different topics, for up to 6 credits total.

*Prerequisites: 75 credits (1100 or higher) and Permission of Instructor  
Not Transferable*

**AGRI 4599 CR-3****Directed Studies II**

Students will carry out the study of a specific subject in sustainable agriculture under the direct supervision of a faculty member who will delineate learning objectives. The student will develop a detailed study plan, conduct studies and submit a report(s) and/or satisfactorily complete other means of evaluation which will include exams.

Note: Students may repeat this course, to study different subjects, for up to 9 credits total.

*Prerequisites: 90 credits (1100 or higher) and Permission of Instructor  
Not Transferable*