



## Agriscience 10

### Board Authority/Approved Course

North Okanagan Shuswap	School District 83
Developed By: Erinn Milne	Date Developed: June 2019
School Name: Education Outreach Program	Principal's Name: Mr. Rob MacAulay
Superintendent Approval Date:	Superintendent Signature:
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course: Agriscience	Grade Level of Course: 10
Number of Course Credits: 4	Number of Hours of Instruction: 120

**Board/Authority Prerequisite(s):**

Not Applicable

**Special Training, Facilities, or Equipment Required:**

Computer as it is an on-line course.

**Course Synopsis:**

In this course, students will learn more about the development and maintenance of agriculture, animal systems, natural resources, and other food sources. Students will also examine the relationship between agriculture and natural resources and the environment, health, politics, and world trade.

## **Goals and Rationale:**

### **Goals:**

- Develop an understanding of biology and how to care for agricultural crops.
- Develop an understanding of the use and care of agricultural animals.
- Develop an understanding of how science and technology are being applied to agriculture
- Develop an awareness and understanding of the careers in agriscience.

### **Rationale:**

Providing student choice is a key understanding of the new curriculum in BC. This choice needs to go beyond choosing projects or assignments within a course to include choosing entire courses that interest and intrigue students. Through providing a variety of elective courses, students will be able to explore subjects they are passionate about or just curious about. High school students often aren't sure what they want to do after high school. By offering a wide variety of introductory and exploratory courses, students get the opportunity to safely explore the possibilities before committing to a career plan. This course will allow students who are passionate about plants and animals to follow that passion. At the same time for students who may not know much about agriculture, it provides an introduction to the field of study and career possibilities.

## **Aboriginal Worldviews and Perspectives:**

### **Declaration of First Peoples Principles of Learning:**

- Learning is holistic, reflexive, reflective, experiential, and rational.
- Learning involves recognizing the consequences of one's actions.
- Learning is embedded in memory, history, and story.
- Learning involves patience and time.
- Learning requires exploration of one's identity.

### **Declaration of Aboriginal Worldviews and Perspectives:**

- Agriscience connects the learner and the learning to the community they live in, through the exploration of the impact it can have on the ability of members to sustain themselves and family, the economy and the environment.
- Agriscience embraces students being engaged with the land, nature and outdoors.
- Agriscience provides opportunities for experiential learning.

### BIG IDEAS

Agriculture plays a significant role in the economy, impacting imports and exports at the local, provincial, national and international levels.

Agriculture impacts environment and is impacted by the environment.

Pest-control is an important aspect of agricultural management, which has an impact on all aspects of the agricultural system, including the people.

Technology has always played a critical role in the agriculture industry and continues to do so as biotechnology becomes more prevalent.

### Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <ul style="list-style-type: none"><li>• Defend various points of view regarding the use of animals.</li><li>• Research the laws and regulations around biotechnology.</li><li>• Articulate the importance of ethics in the agriculture industry.</li><li>• Explore issues of global significance and document the impact of agriscience.</li><li>• Analyze the effects of technology on agriculture.</li><li>• Communicate public concerns about technology and agriculture.</li><li>• Identify career opportunities in agriscience and determine what's needed for entry and whether it is a suitable career choice for them personally.</li><li>• Demonstrate entrepreneurship skills and knowledge of self-employment options and innovative ventures.</li></ul> <p><b>Research and Inquiry Application</b></p> <ul style="list-style-type: none"><li>• Demonstrate effective communication skills.</li><li>• Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information.</li><li>• Recognize and use critical-thinking skills.</li></ul>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"><li>• the importance of agriculture in history and the definition of agriscience.</li><li>• the relationship between agriculture and society at the local, state, national, and international levels.<ul style="list-style-type: none"><li>◦ the significance of agriculture in local, provincial and national economies.</li><li>◦ the variables impacting imports and exports.</li><li>◦ procedures for marketing plants and animal products.</li></ul></li><li>• the differences between the cell structure and function of plants, animals, bacteria, and viruses.</li><li>• the major parts of plants and the important functions of each.</li><li>• the relationship between agriscience and the environment.<ul style="list-style-type: none"><li>◦ how natural resources are used in agriculture.</li><li>◦ practices for conserving renewable and non-renewable resources.</li><li>◦ threats to a healthy environment.</li></ul></li><li>• the relationships among air, soil, water, and essential plant nutrients.</li><li>• the different types of soil classification.</li></ul>

<ul style="list-style-type: none"> <li>• Evaluate the reliability of a website and recognize those that are appropriate for use in agriscience.</li> <li>• Demonstrate appropriate professional behavior.</li> <li>• Demonstrate respect for individual and cultural differences and recognize the importance of diversity in the workplace.</li> <li>• Demonstrate health and safety procedures, regulations, and personal-health practices.</li> </ul>	<ul style="list-style-type: none"> <li>• the evolution and roles of domesticated animals in society. <ul style="list-style-type: none"> <li>○ basic animal genetics.</li> <li>○ differentiate between domestication and natural selection.</li> </ul> </li> <li>• the basic nutritional requirements of animals.</li> <li>• animal anatomy and systems.</li> <li>• major pest groups and the importance of effective pest-management programs. <ul style="list-style-type: none"> <li>○ classification and the nature of chemicals used to control pests.</li> </ul> </li> <li>• the efforts made to improve the environment.</li> <li>• management terms and how decisions are made.</li> </ul>
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