

SCIENCE

#IPS – Introduction to Physical Science	2 Trimesters
Grades	9
Prerequisite	Completion of or enrollment in Algebra 1 strongly recommended
Credit Type	Lab Science
<p>This course is designed to give all students a beginning knowledge of the physical sciences and to offer insight into the means by which scientific knowledge is acquired. This course helps students to understand some of the basic principles of physical science and to acquire useful laboratory skills. Students will develop reasoning and realistic problem-solving skills. The course encourages communication by requiring individual students to take part in a co-operative learning process. The theme of this course is the development of evidence for an atomic model of matter.</p>	

General IPS – Introduction to Physical Science	2 Trimesters
Grades	9
Prerequisite	Completion of or enrollment in Algebra 1 strongly recommended
Credit Type	Lab Science
<p>This course is designed to build skills necessary for success in future high school science classes. This course is designed for students struggling in Science and/or Math.</p>	

#Biology	2 Trimesters
Grades	10, 11, 12
Prerequisite	None
Credit Type	Lab Science
<p>This course is the study of life and living things. Topics include cells, biochemistry, genetics, evolution, and ecology, as well as plants, animals, and microorganisms.</p>	

#Chemistry	2 Trimesters
Grade	11, 12
Prerequisites	Geometry and 2 years of Science with a "C" or better
Credit Type	Algebra Based Lab Science
<p>This course is an introduction to the different disciplines of chemistry such as organic, inorganic, and qualitative analysis with class and laboratory work oriented toward college preparation.</p>	

#Climate Science	1 Trimester
Grade	9, 10, 11, 12
Prerequisites	None
Credit Type	Science
<p>This course studies the dynamic systems that shape our planet's climate. Students will learn about the Earth's energy balance and gain understanding of the ways global and regional climates are influenced by the interactions between the sun and the Earth's many systems (its atmosphere, oceans, land masses, and living things, including humans). We will also learn how climate scientists gather evidence and data to support their models and theories.</p>	

#Geology	1 Trimester
Grade	9, 10, 11, 12
Prerequisites	None
Credit Type	Science
<p>This course studies the structure of our planet. Topics include the formation and history of the earth, its internal structure and the basic materials that make it up. We will also look into plate tectonics and the forces that have formed and continue to shape the Earth's surface features. We will learn how geologists gather evidence to support their models and theories, and how the Earth's resources are used and managed. This course will prepare students for the Earth and Space Science portion of the WCAS (Washington Comprehensive Assessment of Science).</p>	

AFNR – Introduction To Agriculture, Food, and Natural Resource	2 Trimesters
Grades	9, 10, 11, 12
Prerequisite	None
Credit Type	Science or Vocational/Occupational Ed/CTE
<p>This course serves as the introductory course within the CASE Program of Study. The major purpose is to introduce students to the world of agriculture, the pathways they may pursue, and the science, mathematics, reading, and writing components they will use throughout the CASE™ curriculum. Students participating in the course will experience hands-on activities and lab-science projects and problems that involve the study of the science of agriculture, plants, animals, natural resources, and agricultural mechanics. The knowledge and skills students develop will be used in future courses within the CASE program. In addition, students will understand specific connections between their lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. This course will prepare students for portions of the state mandated science exam.</p>	

SCIENCE

Advanced Plant Science	2 Trimesters
Grades	10, 11, 12
Prerequisite	AFNR or IPS
Credit Type	Science or Vocational/Occupational Ed/CTE

This course serves as a second year course within the CASE™ sequence. The course is structured to enable all students to have a variety of experiences that will provide an overview of the field of agricultural science with a foundation in plant science so that students may continue through a sequence of courses through high school. Students will work in teams, exploring hands-on projects and activities, to learn the characteristics of plant science and work on major science lab projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers and producers, and plant research specialists face in their respective careers. This course will prepare students for portions of the state mandated science exam. Course may be taken as dual credit through CBC to earn 5 credits of Hort 202 Cultivated Plants.

Advanced Animal Science	2 Trimesters
Grades	10, 11, 12
Prerequisite	AFNR or IPS
Credit Type	Science or Vocational/Occupational Ed/CTE

This course is intended to serve as second year course within the CASE™ sequence. The course is structured to enable all students to have a variety of experiences that will provide an overview of the field of agricultural science with a foundation in animal science so that students may continue through a sequence of courses through high school. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major science lab projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, or industry personnel face in their respective careers. This course will prepare students for portions of the state mandated science exam. Course may be taken as dual credit through CBC to earn 5 credits of Ag 102 Animal Science.

Ag Power and Technology	2 Trimesters
Grade	10, 11, 12
Prerequisites	None
Credit Type	Science or Vocational/Occupational Ed/CTE

The focus of Agricultural Power and Technology (APT) is to expose to students to mechanics, power, technology, and career options in the world of agriculture. Students participating in the APT course will have experiences in various mechanical and engineering concepts with exciting hands-on activities, projects, and problems. Student's experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components. Throughout the course, students will apply the engineering principles to the construction of machines and structures. Students will explore projects and problems similar to those that a mechanic, technician or engineer may face in their respective careers. In addition, students will understand specific connections between science, math, and technical skills that play an important role developing an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. This course will prepare students for portions of the state mandated science exam.