7. STATE STANDARDS CORRELATION

Alaska State Science Standards Correlation for Grades 9-11

Standard A1 - Science as Inquiry and Process

Standard SA **Students develop an understanding of the processes and applications of scientific inquiry**	**Correlating Grade Level Expectations**	**Correlating Invasive Plant Curriculum Activity**
SA1: Students develop and understanding of the processes of science used to investigate problems, design and conduct repeatable scientific investigations, and defend scientific arguments.	SA1.1 [9-11] SA1.2 [9-11]	• Callin' the Shots • Lab Activities
SA2: Students develop an understanding that the processes of science require integrity, logical reasoning, skepticism, openness, communication and peer review.	SA2.1 [9-11]	• Callin' the shots • Lab Activities
SA3: Students develop an understanding that culture, local knowledge, history, and interaction with the environment contribute to the development of scientific knowledge, and that local applications provide opportunity for understanding scientific concepts and global issues.	SA3.1 [11]	• Callin' the shots • Just the Facts!

Standard C1 - Concepts of Life Science

Standard SC **Students develop an understanding of the concepts, models, theories, facts, evidence, systems and processes of life science**	**Correlating Grade Level Expectations**	**Correlating Invasive Plant Curriculum Activity**
SC1: Students develop an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution.	SC1.2 [10-11]	• Lecture notes/presentation • Lab Activities • Molecular Tools
SC2: Students develop an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms.	SC2.1 [9]	• Just the Facts!
SC3: Students develop an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy.	SC3.2 [10-11] SC3.3 [9]	•Lecture notes/presentation •Lab activities •Callin' the shots

Standard E1 – Science and Technology

Standard SE **Students develop and understanding of the relationships among science, technology, and society**	**Correlating Grade Level Expectations**	**Correlating Invasive Plant Curriculum Activity**
SE1: Students develop an understanding of how scientific knowledge and technology are used in making decisions about issues, innovations and responses to problems and everyday events.	SE1.1 [9-11]	•Callin' the shots •Just the Facts! •Molecular Tools
SE2: Students develop an understanding that solving problems involves different ways of thinking, perspectives, and curiosity that lead to the exploration of multiple paths that are analyzed using scientific, technological and social merits.	SE2.1 [9-11]	•Callin' the shots •Just the Facts!
SE3: Students develop an understanding of how scientific discoveries and technological innovations are affected by our lives and cultures.	SE3.1 [9-11]	•Lecture notes/presentation •Callin' the shots •Molecular Tools

Standard F1 – Cultural, Social, Personal Perspectives and Science

Standard SF **Students develop an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives**	**Correlating Grade Level Expectations**	**Correlating Invasive Plant Curriculum Activity**
SF1: Students develop an understanding of the interrelationships among individuals, cultures, societies, science and technology.	SF1.1 [9-11]	•Lecture notes/presentation •Callin' the shots
SF2: Students develop an understanding that some individuals, cultures, and societies use other beliefs and methods in addition to scientific methods to describe and understand the world.	SF2.1 [9-11]	•Lecture notes/presentation •Callin' the shots
SF3: Students develop an understanding of the importance of recording and validating cultural knowledge.	SF3.1 [9-11]	•Callin' the shots •Inquiry activity

Standard G1 – History and Nature of Science

Standard SG **Students develop an understanding of the history and nature of science**	**Correlating Grade Level Expectations**	**Invasive Plant Curriculum Activity**
SG1: Students develop an understanding that historical perspectives of scientific explanations demonstrate that scientific knowledge changes over time, building on prior knowledge.	SG1.1 [9-10]	•Lecture notes/presentation •Callin' the shots •Just the Facts! •Molecular Tools
SG3: Students develop an understanding that scientific knowledge is ongoing and subject to change as new evidence becomes available through experimental and/or observational confirmation(s).	SG3.1 [10]	•Lecture notes/presentation •Just the Facts! •Lab activities •Molecular Tools