

## Course Outline: Intro to BSAA

<b>CD: Biological Science Applications in Agriculture</b>			
<b>Lesson Number and Title</b>		<b>Content Section &amp; Standard(s)</b>	<b>Workplace Readiness Standards</b>
<b>UNIT A. PLANT SCIENCE</b>			
<b>Problem Area 2. Cellular Biology and Agriculture</b>			
LC: A2-1	Processes Within the Plant Cell	SCI:5.5	
LC: A2-2	Biotechnology	SCI:5.5	
<b>Problem Area 5. Initiating Plant Growth</b>			
LC: A5-1	Conducting the Warm Germination Test and TZ Test for Seed Viability	SCI:5.5	
LC: A5-2	The Role of the Embryo in Germination	SCI:5.5	
LC: A5-3	Environmental Factors Affecting Seed Germination	SCI:5.5	
LC: A5-4	Salinity and Seed Germination	SCI:5.10	
LC: A5-5	Osmotic Turgescence: The Forces of Plant Growth	SCI:5.5	
<b>UNIT B. ANIMAL SCIENCE</b>			
<b>Problem Area 1. Animal Genetics and Biotechnology</b>			
LC: B1-1	Animal Genetics and Probability	SCI:5.5	
LC: B1-2	DNA Extraction	SCI:5.6	
LC: B1-3	Biotechnology	SCI:5.6	
<b>UNIT C. FOOD SCIENCE</b>			
<b>Problem Area 3. Agricultural Processing Systems</b>			
LC: C3-1	Viscosity: Fluid Food Rheology	SCI:5.7	
LC: C3-2	Solid Food Rheology: Tomatoes	SCI:5.7	
LC: C3-3	Rapid Chilling of Meat Products	SCI:5.6	
LC: C3-4	Algin Worms	SCI:5.6	
LC: C3-5	Chemistry of Popcorn	SCI:5.6	
LC: C3-6	Testing for Vitamin C in Foods	SCI:5.6	
LC: C3-7	Pressure and Boiling Point	SCI:5.6	
LC: C3-8	Making Cheese	SCI:5.6	
LC: C3-9	Making Ice Cream	SCI:5.6	

### Content Section & Standards Lookup Table:

Content Section Code	Content Section	Content Standard Code	Content Standard
SCI	SCIENCE	5.10	All students will develop an understanding of the environment as a system of interdependent components affected by human activity and natural phenomena.
SCI	SCIENCE	5.5	All students will gain an understanding of the structure, characteristics, and basic needs of organisms and will investigate the diversity of life.
SCI	SCIENCE	5.6	ALL STUDENTS WILL GAIN AN UNDERSTANDING OF THE STRUCTURE AND BEHAVIOR OF MATTER.
SCI	SCIENCE	5.7	All students will gain an understanding of natural laws as they apply to motion, forces, and energy transformations.