

**Cluster - Agriculture, Food and Natural Resources**  
**Pathway – Plant Systems**  
**Program of Study –Plant Science (Biological)**

**Sample Plan of Study**

	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>Smart Core</b>	English I or Pre-AP	English II or Pre-AP	English III or AP	English IV or AP
	Algebra I or Geometry	Geometry or Algebra II	Algebra II or Trigonometry Pre- AP Calculus	AP Calculus College Algebra AP Statistics
	Physical Science	Biology Pre-AP Chemistry Applied Biology/Chemistry	Chemistry Physics Principles of Technology	AP Biology AP Chemistry AP Physics Earth & Space Science
	Civics	World History	US History	Economics
<b>Foundation Courses</b> Career Orientation Computer Technology Keyboarding  <b>Graduation Requirements</b> English 4 units Math 4 units Science 3 units Social Studies 3 units Fine Arts ½ unit Health and Safety ½ unit Oral Communication ½ unit Physical Education ½ unit Career Focus 6 units  <b>Arkansas Challenge</b> Foreign Language 2 units	<b>Program of Study Support Courses</b> EAST/Workforce Technology Internship Workplace Readiness  <b>Support Courses</b> Foreign Language Word Processing or Computer Business Applications (CBA)  <b>Extended Learning Opportunities</b> Future Farmers of America Supervised Ag Experience Jobs for Ark Grads (JAG) Job Shadowing	<b>Biological Plant Science Core Courses</b> Ag Science and Technology or Ag Science Plant Science Biological Plant Science  <b>Biological Plant Science Electives Suggested:</b> Aquaculture Floriculture Greenhouse Management Intro to Hort. Sciences Nursery/Landscape Turf Grass Management Ag Apprenticeship/Work Based Learning *Any other Agriculture Course Offering  <b>Biological Plant Industry Certifications</b> Arkansas Career Readiness Certificate (CRC)  <b>Related Programs of Study</b> Agribusiness Systems Animal Systems Plant Systems (Horticulture) Power, Structural and Technical Systems Natural Resource Systems/Environmental Service Systems		
<b>Postsecondary Opportunities</b>				
<b>Major</b>	<b>Postsecondary School</b>		<b>Certificate/Degree Program</b>	
Botany	ASU Jonesboro, UA Fayetteville UA Fayetteville UA Fayetteville		Bachelor's Master's Doctoral	
Horticulture Operations	PCC UA Helena		Certificate	
Horticulture	UA Fayetteville		Minor/Concentration	
Plant Science	ASU Jonesboro		Bachelor's	
Plant Pathology	UA Fayetteville		Master's	
Plant Science	UA Fayetteville		Doctoral	
Crop Soil & Environmental Sci	UA Fayetteville		Master's	

Horticulture, Landscape	UA Fayetteville	Bachelor's
Soil Science	UA Fayetteville	Bachelor's