



Career Cluster Agriculture, Food & Natural Resources

District Name Anchorage School District

Date September 2009

Career Cluster Description: The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources. **Pathways include Food Products & Processing Systems, Plant Systems, Power Structural & Technical Systems, Natural Resources Systems, Environmental Service Systems, and Agribusiness Systems.**

Major Options: Bioinformatics Specialists • Plant Breeders and Geneticists • Biotechnology Lab Technician • Soil & Water Specialists • Crop Farm Managers • Agricultural Educators • Plant Pathologists • Aquaculturalists • Sales Representatives • Botanists • Tree Surgeons • Education & Extension Specialists • Agricultural Journalists • Commodity Marketing Specialists • Grain Operations Superintendents • Custom Hay/Silage Operators • Forest Geneticists • Golf Course Superintendents • Greenhouse Managers • Growers • Food Scientists • Meat Processors-Toxicologists • Biochemists-Nutritionists-Dieticians • Food Brokers-Food Inspectors

Middle School Option: • Applied Technology 7, 8 • Computers 8 • Family Consumer Science 7,8

RECOMMENDED SECONDARY CAREER DEVELOPMENT SCHEDULE *Scheduling of classes may vary according to each school's course offerings and student needs.*

9 th Grade		10 th Grade		11 th Grade		12 th Grade	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
English 9-1	English 9-2	English 10-1	English 10-2	Composition	LA Elective	Technical Writing in the 21 st Century	LA Elective
Algebra I	Algebra I	Geometry	Geometry	Algebra II	Algebra II		
Integrated Science 9	Integrated Science 9	Biology 1	Biology 2	Geology	Earth Science		
World History	World History	US History	US History	Alaska Studies	Economics	US Government	Environmental Studies
Physical Ed	Physical Ed	Physical Ed	Health	<ul style="list-style-type: none"> *KCC Horticulture 1, 2 *KCC Horticulture OJT *KCC Natural Resources 1, 2 *KCC Natural Resources OJT Food Science Nutrition & Food Preparation Note: KCC course are 1.5 credits per semester			
<ul style="list-style-type: none"> *Computer Keyboarding 1, 2 *Computer Business Applications 1, 2 		<ul style="list-style-type: none"> CAD 1, 2 *Material Science & Construction 1 Introduction to Small Engine Repair Introduction to Welding Introduction to Marketing Business Principles & Management 1 					



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Work-Based Learning Opportunities		Career-Technical Student Organizations (CTSO)	Certifications
<ul style="list-style-type: none"> • Apprenticeship • Cooperative Education • Job Shadowing 	<ul style="list-style-type: none"> • Paid/Unpaid Internship • School-Based Enterprise • Service Learning 	<ul style="list-style-type: none"> • FFA • FCCLA 	Naturalist Interpreter Career Readiness Certificate (WorkKeys)

POSTSECONDARY OPTIONS

Two-Year College or Proprietary Programs	Adult Registered Apprenticeships	Four-Year College and University Programs	Post-Secondary Certificates	Licenses, On The Job Training, Training Certificates, etc.
<ul style="list-style-type: none"> • Environmental Technology • Renewable Resources (F) • Environmental Technology (S) • Fisheries Technology (S) • Food Technology 	<ul style="list-style-type: none"> • Landscape Technician • Forestry Technician 	<ul style="list-style-type: none"> • Natural Sciences • Botany • Environmental Science (S) • Fisheries (F) • Geological-Environmental Studies (F) • Geology (F) • Geological Sciences (A) • Natural Resources & Agricultural Science (F) • Natural Resource Management (F) • Wildlife Biology • Food Science • Dietetics 	<ul style="list-style-type: none"> • Wastewater Operations (S) • Water Operations (S) • Mining Application & Technology (F) 	<ul style="list-style-type: none"> • Registered Dietician • Dietetic Technician
Major Academic Unit Codes: (A) = University of Alaska Anchorage, (F) = University of Alaska Fairbanks, (S) = University of Alaska Southeast				