

Life Sciences

AGRICULTURE: Animal Science

POSSIBLE CAREERS:

- AGRICULTURAL/FOOD SCIENCE
- BIOCHEMISTS
- BIOPHYSICISTS
- ENVIRONMENTAL SCIENTISTS
- CONSERVATION SCIENTISTS
- FORESTERS
- EPIDEMIOLOGISTS
- MEDICAL SCIENTISTS



Jay County



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Most agricultural and food scientists work in research universities, private industry, or the federal government. They work in offices, laboratories and in the field. Agricultural and food scientists need at least a bachelor's degree from an accredited postsecondary institution. Most animal scientists earn a Ph.D.

COURSES:

INTRO TO AGRICULTURE, FOOD
& NATURAL RESOURCES
ANIMAL SCIENCE
ADVANCED LIFE SCIENCE: ANIMALS

CTSO: FUTURE FARMERS OF AMERICA (FFA)
Competitions & Leadership Conferences
Scholarship opportunities

DUAL COLLEGE CREDITS
Purdue University

DIPLOMA
Core 40
Core 40 with Technical Honors
Core 40 with Academic Honors



JOB OUTLOOK

Employment of **Agricultural and Food Scientists** is expected to increase by 10 percent from 2010 to 2020, about as fast as the average for all occupations. Agricultural and food scientists should have average job prospects overall.

Source: Bureau of Labor Statistics



CTE Cooperative Serving Adams • Blackford • Huntington • Jay • Wells Counties

For more information:
KEVIN KELLER, AREA 18 DIRECTOR
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See your school guidance counselor for assistance if your school currently does not offer the classes in which you are interested. There are shared programs among the nine high schools in Area 18 Career and Technical Education network.

Indiana College and Career Pathway Plan – State Model	
Cluster: Agriculture	College & Career Pathway: Life Sciences
Concentration: Animal Science	
Core 40 with Honors High School Graduation Plan*	
*This is a SAMPLE plan for schools to use in planning. Course sequences and grade level in which courses are offered may vary according to local policies, practices and resources.	

Students should enroll in Indiana Career Explorer, complete interest inventories, and investigate careers in clusters & pathways prior to or during the time they create their individual Pathway Plans.

SECONDARY	Grade	English/ Language Arts	Math	Science	Health/PE Social Studies	CTE/Career Preparation Courses for this Pathway		Other Elective Courses for this Pathway	
	9	English 9	Algebra I	Biology	Health & Wellness/ Physical Ed	Preparing for College & Careers;	Introduction to Agriculture, Food, & Natural Resources	Digital Citizenship; Personal Financial Responsibility	
	10	English 10	Geometry	Chemistry	Geography/History of the World or World History/Civilization		Animal Science	Norwell South Adams Bellmont	World Language
	11	English 11	Algebra II	3 rd Core 40 Science	US History		**Advanced Life Science: Animals	Jay County South Adams Bellmont	World Language
	12	English 12	Math or Quantitative Reasoning		Government Economics			Fine Arts	World Language
State specified Pathway Assessments: Dual Credit Final									
Industry Recognized Certification: NA									

Postsecondary Courses Aligned for Potential Dual Credit**
**See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives
Purdue University
ANSC 10200 Introduction to Animal Science

Introduction to Agriculture, Food and Natural Resources

is a two semester course that is highly recommended as a prerequisite to and a foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics

to be covered include: animal science, plant and soil science, food science, horticultural science, agricultural business management, landscape management, natural resources, agriculture power, structure, and technology, careers in agriculture, leadership, and supervised agricultural experience. An activity and project based approach is used along with team building to enhance the effectiveness of the student learning activities.

Animal Science

Animal Science is a two semester program that provides students with an overview of the field of animal science. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anat-

my and physiology, genetics, reproduction; nutrition, careers in animal science, common diseases and parasites, social and political issues related to the industry, and management practices for the care and maintenance of animals.

Adv. Life Science: Animals Standards

Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Through laboratory and fieldwork, they recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and issues in animal agriculture.

Career and Tech. Student Org. (CTSO)

a powerful instructional tool when integrated into CTE courses. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students in this course should be encouraged to participate

MELISSA WOLTER Jay County



Into. to Agriculture, Food, Natural Resources
Adv. Life Science: Animals

With an active CTE Agriculture program, Animal Science studies at Jay County High School is a capstone course for Area 18. Melissa Wolters provides all sorts of opportunities for students who like to compete for scholarship money and deepen their understanding of this career field. In 2010 Wolters was named "Indiana's Outstanding Agriculture Teacher" by IAAE. Three students qualified for national FFA competition in 2012.

KEY FACTS

- DOE Code: 5008
- Recommended Grade Level: 9-12
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 1-3 credit(s) per semester, max 2 semesters, max 6 credits
- Fulfills a Life Science or Physical Science requirement for the General Diploma only or counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas



Jay County's FFA organization has 200+ members and conducts activities throughout the year, including contests and competitions.