

Agriculture, Food, and Natural Resources Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Animal Science *Statewide Program of Study*



The Animal Science program of study focuses on the science, research, and business of animals and other living organisms. It teaches CTE learners how to apply biology and life science to real-world life processes of animals and wildlife, either in laboratories or in the field, which could include a veterinary office, a farm or ranch, or any outdoor area harboring animal life. Students may also research and analyze the growth and destruction of species and research or diagnose diseases and injuries of animals.

Applied Agricultural Engineering *Statewide Program of Study*



The Applied Agricultural Engineering program of study explores the occupations and educational opportunities associated with applying knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing agricultural products. This program of study may also include exploration into diagnosing, repairing, or overhauling farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.

Environmental and Natural Resources *Statewide Program of Study*



The Environmental and Natural Resources program of study explores the occupations and educational opportunities associated with the research, design, and planning of engineering or technical duties in the prevention and control of environmental hazards. This program of study may also include exploration into conducting research for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.

Plant Science *Statewide Program of Study*



The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

Successful completion of the Animal Science, Applied Agricultural Engineering, Environmental and Natural Resources, and Plant Science program of study will fulfill requirements of a Business and Industry endorsement and/ or STEM endorsement if the math and science requirements are met.

Revised – August 2022

Agriculture, Food, and Natural Resources Cluster

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Garland ISD, does not discriminate on the basis of race, color, national origin, sex, or disability in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Title IX Coordinator, Dr. Susanna Russell, Chief Leadership Officer at 501 S. Jupiter Road, Garland, TX 75042 (972) 487-3041 srussell@garlandisd.net , and/or the Section 504 Coordinator, Dr. Wendy Brower, Coordinator, Special Education at 501 S. Jupiter Road, Garland, TX 75042 (972) 487-3364 wlbrower@garlandisd.net.

Garland ISD, no discrimina por motivos de raza, color, origen nacional, sexo, o discapacidad en sus programas o actividades y brinda igualdad de acceso a los Boy Scouts y otros grupos juveniles designados. La siguiente persona ha sido designada para manejar consultas sobre las políticas de no discriminación: Coordinadora del Título IX, Dra. Susanna Russell, Chief Leadership Officer Ejecutiva de Liderazgo en 501 S. Jupiter Road, Garland, TX 75042 (972) 487-3041 srussell@garlandisd.net, y / o la Coordinadora de la Sección 504, Dra. Wendy Brower, Coordinadora, Educación Especial en 501 S. Jupiter Road, Garland, TX 75042 (972) 487-3364 wlbrower@garlandisd.net.



Animal Science

Statewide Program of Study

Secondary Courses for High School Credit

Level 1

8A100 Principles of Agriculture, Food, and Resources

Level 2

8A110S Small Animal Management

8A230S Equine Science

Level 3

8A220 Livestock Production

Level 4

8A410 Advanced Animal Science

8A940 (GRCTC) Veterinary Medical Applications/Lab

8A950 (GRCTC) Veterinary Medical Applications/
Practicum in Agriculture, Food, and Natural Resources

Level 3 and Level 4 classes are Advanced CTE Courses

Postsecondary Opportunities

Associates Degrees

- Food Science and Technology
- Veterinary Studies
- Biotechnology Laboratory Technician
- Biology Technician

Bachelor's Degrees

- Animal Sciences
- Agriculture
- Biology
- Zoology/ Animal Biology

Master's, Doctoral, and Professional Degrees

- Genetics
- Veterinary Medicine
- Biological and Physical Sciences
- Biological and Biomedical Sciences

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities

- Participate in Texas FFA

Work-Based Learning Activities

- Compete in an Agri-Science Fair 4H
- Volunteer at a local farm or with a veterinarian
- Participate in an FFA supervised agricultural experience

Industry-Based Certifications

- Agricultural Biotechnology
- Certified Veterinary Assistant, Level 1
- Elanco Fundamentals of Animal Science Certification
- Elanco Veterinary Medical Applications Certification
- Equine Management & Evaluation Certification
- Small Animal Science and Technology



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Animal Breeders	\$39,139	28	9%
Animal Scientists	\$57,533	22	12%
Medical Scientists	\$63,898	435	27%
Veterinarians	\$93,496	294	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

Successful completion of the Animal Science, Applied Agricultural Engineering, Environmental and Natural Resources, and Plant Science program of study will fulfill requirements of a Business and Industry endorsement and/or STEM endorsement if the math and science requirements are met. Revised – August 2022





Animal Science Course Information

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A100 Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-11

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A110S Small Animal Management	13000400 (0.5 credit)	None	10-12
8A230S Equine Science	13000500 (0.5 credit)	None	10-12

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A220 Livestock Production	1300300 (1 credit)	None	10-12

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A950 (GRCTC) Practicum in Agriculture, Food, and Natural Resources - Veterinary Specific	13002500 (2 credits)	Veterinary Medical Applications / Lab	11-12
8A940 (GRCTC) Veterinary Medical Applications/Lab (GRCTC)	13000610 (2 credit)	Equine Science, Small Animal Management, or Livestock Production	11-12
8A410 Advanced Animal Science	13000700 (1 credit)	Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production	11-12

Level 3 and Level 4 classes are advanced CTE courses



Applied Agricultural Engineering - GHS & RHS only

Statewide Program of Study

Secondary Courses for High School Credit

Level 1

8A100 Principles of Agriculture, Food, and Natural Resources

Level 2

8A200 Agricultural Mechanics and Metal Technologies

Level 3

8A360 Agricultural Structures Design and Fabrications
8A210 Agricultural Power Systems/Lab

Level 4

8A307 Agricultural Equipment Design and Fabrication
8A320 Practicum in Agriculture, Food, and Natural Resources

Level 3 and Level 4 classes are Advanced CTE Courses

Postsecondary Opportunities

Associates Degrees

- Heavy Equipment Maintenance Technology/ Technician
- Agricultural Mechanization, General
- Small Engine Mechanics and Repair Technology/ Technician
- Welding Technology/ Welder

Bachelor's Degrees

- Agricultural Engineering
- Agricultural Mechanization, General

Master's, Doctoral, and Professional Degrees

- Agricultural Engineering
- Agricultural Mechanization, General

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Tour a farm products or machinery plant • Participate in Texas FFA 	<ul style="list-style-type: none"> • Earn a welding certification • Intern at a farm products or machinery plant • Participate in an FFA supervised agricultural experience

Industry-Based Certifications

- AWS D9.1 Sheet Metal Welding

- OSHA General 30*

*IBC sunseting 8/31/24

Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Outdoor Power Equipment and Other Small Engine Mechanics	\$32,406	366	16%
Welders	\$41,350	6171	9%
Farm Equipment Mechanics and Service Technicians	\$39,915	304	17%
Mobile Heavy Equipment Mechanics	\$47,299	1627	16%
Agricultural Engineers	\$64,792	9	13%

Successful completion of the Applied Agricultural Engineering program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022





Applied Agricultural Engineering Course Information (GHS and RHS only)

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A100 Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-11

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A200 Agricultural Mechanics and Metal Technologies	13002200 (1 credit)	None	10-12

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A360 Agricultural Structures Design and Fabrications	13002300 (1 credit)	None	11-12
8A210 Agricultural Power Systems/Lab	13002400 (2 credits)	None	10-12

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A307 Agricultural Equipment Design and Fabrication	13002350 (1 credit)	None	11-12
8A320 Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits)	None	11-12

Level 3 and Level 4 classes are advanced CTE courses





Environmental and Natural Resources - SHS only

Statewide Program of Study

Secondary Courses for High School Credit

Level 1

8A100 Principles of Agriculture, Food, and Natural Resources

Level 2

8A120 Wildlife, Fisheries, and Ecology Management

Level 3

8A250 Energy and Natural Resources Technology

Level 4

8A320 Practicum in Agriculture, Food, and Natural Resources

Level 3 and Level 4 classes are Advanced CTE Courses.

Postsecondary Opportunities

Associates Degrees

- Environmental Science
- Environmental Studies
- Wildlife, Fish, and Woodlands Science and Management
- Environmental Engineering Technology/ Environmental Technology

Bachelor's Degrees

- Environmental Science
- Environmental/ Environmental Health Engineering
- Wildlife, Fish, and Woodlands Science and Management
- Natural Resources Law Enforcement and Protective Services

Master's, Doctoral, and Professional Degree

- Environmental Science
- Environmental/ Environmental Health Engineering
- Wildlife, Fish, and Woodlands Science and Management
- Fishing and Fisheries Science and Management

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Attend summer leadership events • Participate in Texas FFA 	<ul style="list-style-type: none"> • Intern at a waste treatment plant • Participate in an FFA supervised agricultural experience

Industry-Based Certifications

- Natural Resources Systems
- Ducks Unlimited Ecology
- Hunter's Education
- Boater's Education



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Environmental Engineering Technicians	\$53,352	101	32%
Environmental Engineers	\$86,757	288	25%
Environmental Science and Protection Technicians, Including Health	\$40,268	508	17%
Environmental Scientists and Specialists, Including Health	\$77,896	644	24%
Zoologists and Wildlife Biologists	\$67,309	45	32%

Successful completion of the Environmental and Natural Resources program of study will fulfill requirements of the Business and Industry endorsement. Revised – August 2022





Environmental and Natural Resources Course Information (SHS only)

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A100 Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-11

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A120 Wildlife, Fisheries, and Ecology Management	13001500 (1 credit)	None	9-12

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A250 Energy and Natural Resources Technology	13001100 (1 credit)	None	10-12

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A320 Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits)	None	11-12

Level 3 and Level 4 classes are advanced CTE courses





Plant Science - NFHS only

Statewide Program of Study

Secondary Courses for High School Credit

Level 1

8A100 Principles of Agriculture, Food, and Natural Resources

Level 2

8A130 Landscape Design and Management
8A140 Turf Grass Management
8A270 Greenhouse Operation and Production

Level 3

8A170 Horticulture Science
8A160 Floral Design

Level 4

8A240 Advanced Floral Design
8A320 Practicum in Agriculture, Food, and Natural Resources
8A418 Adv Plant and Soil Science

Level 3 and Level 4 classes are Advanced CTE Courses.

Postsecondary Opportunities

Associates Degrees

- Applied Horticulture/ Horticulture Operations, General
- Ornamental Horticulture
- Agricultural Business and Management, General
- Turf and Turfgrass Management

Bachelor's Degrees

- Applied Horticulture/ Horticulture Operations, General
- Agronomy and Crop Science
- Landscape Construction
- Turf and Turfgrass Management

Master's, Doctoral, and Professional Degrees

- Applied Horticulture/ Horticulture Operations, General
- Pathology
- Agricultural Business and Management, General
- Genetics

Work-Based Learning and Expanded Learning Opportunities

Exploration Activities	Work-Based Learning Activities
<ul style="list-style-type: none"> • Participate in Texas FFA • Partnerships with local greenhouses and Horticulture industry 	<ul style="list-style-type: none"> • Work at a florist or landscaper business • Participate in an FFA supervised agricultural experience • Maintain a commercial landscape • Operation of production greenhouse

Industry-Based Certifications

- Texas State Florist's Association Knowledge Based Floral Certification
- Texas Certified Landscape Associate (TCA)
- Texas Certified Nursery Professional
- Texas State Florist's Association Level I Floral Certification
- Texas State Florist's Association Level II Floral Certification



Aligned Occupations

Occupations	Median Wage	Annual Openings	% Growth
Soil and Plant Scientists	\$54,662	116	21%
Tree Trimmers and Pruners	\$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	\$36,733	196	22%
Landscaping Supervisors	\$44,408	807	19%
Biological Technicians	\$42,931	452	17%

Successful completion of the Plant Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised – August 2022



Plant Science Course information (NFHS only)

Level 1

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A100 Principles of Agriculture, Food, and Natural Resources	13000200 (1 credit)	None	9-11

Level 2

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A130S Landscape Design and Management	13001900 (.5 credit)	None	10-12
8A140S Turf Grass Management	13001950 (.5 credit)	None	10-12
8A270 Greenhouse Operation and Production	13002050 (1 credit)	None	10-12

Level 3

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A170 Horticulture Science	13002000 (1 credit)	None	10-12
8A160 Floral Design	13001800 (1 credit)	None	9-12

Level 4

COURSE NAME	SERVICE ID	PREREQUISITES	GRADE
8A320 Practicum in Agriculture, Food, and Natural Resources	13002500 (2 credits)	None	11-12
8A240 Advanced Floral Design	N1300270 (1 credit)	Floral Design	11-12
8A418 Advanced Plant and Soil Science	13002100 (1 credit)	None	11-12

Level 3 and Level 4 classes are advanced CTE courses





Agriculture, Food, and Natural Resources

Advanced Animal Science 8A410

TSDS PEIMS Code: 13000700 (ADVANSCI)

Grade Placement: 11–12, Credit: 1

Prerequisites: Biology and Chemistry or Integrated Physics and Chemistry (IPC); Algebra I and Geometry; and either Small Animal Management, Equine Science, or Livestock Production.

Advanced Animal Science examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

Note: This course satisfies a science credit requirement for students on the Foundation High School Program.

Advanced Floral Design 8A240 (NFHS)

TSDS PEIMS Code: N1300270 (ADVFLDS)

Grade Placement: 11–12, Credit: 1

Prerequisite: Floral Design.

In this course, students build on the knowledge from the Floral Design course and are introduced to more advanced floral design concepts, with an emphasis on specialty designs and specific occasion planning. This course focuses on building skills in advanced floral design and providing students with a thorough understanding of the design elements and planning techniques used to produce unique specialty floral designs that support the goals and objectives of a specific occasion or event. Through the analysis and evaluation of various occasion and event types, students explore the design needs and expectations of clients and propose and evaluate appropriate creations. From conception to evaluation, students are challenged to create and design appropriate specialty floral designs that meet the needs of the client. Furthermore, an emphasis on budgetary adherence and entrepreneurship equips students with many of the necessary skills needed for success in floral enterprises.

Advanced Plant and Soil Science 8A418 (NFHS)

TSDS PEIMS Code: 13002100 (ADVPPSCI)

Grade Placement: 11–12, Credit: 1

Prerequisite: None.

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. To prepare for careers in plant and soil science, students must attain academic skills and knowledge, acquire technical knowledge and skills related to plant and soil science and the workplace.

Note: This course satisfies a science credit requirement for students on the Foundation High School Program.



Agriculture, Food, and Natural Resources

Agricultural Equipment Design and Fabrication 8A307 (GHS and RHS)

TSDS PEIMS Code: 13002350 (AGEQDF)

Grade Placement: 11–12, Credit: 1

Prerequisite: None.

In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment.

Agricultural Mechanics and Metal Technologies 8A200 (GHS and RHS)

TSDS PEIMS Code: 13002200 (AGMECHMT)

Grade Placement: 10–12, Credit: 1

Prerequisite: None.

Agricultural Mechanics and Metal Technologies is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metalworking techniques. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the industry; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

Agricultural Power Systems 8A210 (GHS and RHS)

TSDS PEIMS Code: 13002400 (AGPOWSYS)

Grade Placement: 10–12, Credit: 2

Prerequisite: None.

Agricultural Power Systems is designed to develop an understanding of power and control systems as related to energy sources, small and large power systems, and agricultural machinery. To prepare for careers in agricultural power, structural, and technical systems, students must attain academic skills and knowledge; acquire technical knowledge and skills related to power, structural, and technical agricultural systems and the workplace; and develop knowledge and skills regarding career opportunities, entry requirements, industry certifications, and industry expectations.

Agricultural Structures Design and Fabrication 8A360 (GHS and RHS)

TSDS PEIMS Code: 13002300 (AGSDF)

Grade Placement: 11–12, Credit: 1

Prerequisite: None.

In Agricultural Structures Design and Fabrication, students will explore career opportunities, entry requirements, and industry expectations. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural structures design and fabrication.



Agriculture, Food, and Natural Resources

Energy and Natural Resource Technology 8A250 (SHS)

TSDS PEIMS Code: 1300110 (ENGNRT)

Grade Placement: 10-12, Credit: 1

Prerequisite: None.

Energy and Natural Resource Technology examines the interrelatedness of environmental issues and production agriculture. Students will evaluate the environmental benefits provided by sustainable resources and green technologies. Instruction is designed to allow for the application of science and technology to measure environmental impacts resulting from production agriculture through field and laboratory experiences.

Equine Science 8A230S

TSDS PEIMS Code: 13000500 (EQUINSCI)

Grade Placement: 10–12, Credit: .5

Prerequisite: None.

In Equine Science, students will acquire knowledge and skills related to equine animal systems and the equine industry. Equine Science may address topics related to horses, donkeys, and mules.

Floral Design 8A160 (NFHS)

TSDS PEIMS Code: 13001800 (FLORAL)

Grade Placement: 9–12, Credit: 1

Prerequisite: None.

Floral Design is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students will develop respect for the traditions and contributions of diverse cultures. Students will respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

Note: This course satisfies a fine arts credit requirement for students on the Foundation High School Program.

Greenhouse Operation and Production 8A270 (NFHS)

TSDS PEIMS Code: 13002050 (GREOP)

Grade Placement: 10–12, Credit: 1

Prerequisite: None.

Greenhouse Operation and Production is designed to develop an understanding of greenhouse production techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.



Agriculture, Food, and Natural Resources

Horticulture Science 8A170 (NFHS)

TSDS PEIMS Code: 13002000 (HORTISCI)

Grade Placement: 10–12, Credit: 1

Prerequisite: None.

Horticultural Science is designed to develop an understanding of common horticultural management practices as they relate to food and ornamental plant production.

Landscape Design and Management 8A130S (NFHS)

TSDS PEIMS Code: 13001900 (LNDMGT)

Grade Placement: 10–12, Credit: .5

Prerequisite: None.

Landscape Design and Management is designed to develop an understanding of landscape design and management techniques and practices. To prepare for careers in horticultural systems, students must attain academic skills and knowledge, acquire technical knowledge and skills related to horticultural systems and the workplace, and develop knowledge and skills regarding career opportunities, entry requirements, and industry expectations.

Livestock Production 8A220

TSDS PEIMS Code: 13000300 (LIVEPROD)

Grade Placement: 10–12, Credit: 1

Prerequisite: None.

In Livestock Production, students will acquire knowledge and skills related to livestock and the livestock production industry. Livestock Production may address topics related to beef cattle, dairy cattle, swine, sheep, goats, and poultry.

Practicum in Agriculture, Food, and Natural Resources 8A320, 8A950 (GRCTC)

TSDS PEIMS Code: 13002500 (PRACAFNR1)

Grade Placement: 11–12, Credit: 2

Prerequisite: Two courses within the program of study; Veterinary Medical Applications/Lab for 8A950.

Practicum in Agriculture, Food, and Natural Resources is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources Career Cluster.



Agriculture, Food, and Natural Resources

Principles of Agriculture, Food, and Natural Resources 8A100

TSDS PEIMS Code: 13000200 (PRINAFNR)

Grade Placement: 9–11, Credit: 1

Prerequisite: None.

Principles of Agriculture, Food, and Natural Resources will allow students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations.

Small Animal Management 8A110S

TSDS PEIMS Code: 13000400 (SMANIMGT)

Grade Placement: 10–12, Credit: .5

Prerequisite: None.

In Small Animal Management, students will acquire knowledge and skills related to small animals and the small animal management industry. Small Animal Management may address topics related to small mammals such as dogs and cats, amphibians, reptiles, and birds.

Turf Grass Management 8A140S (NFHS)

TSDS PEIMS Code: 13001950 (TGMGT)

Grade Placement: 10–12, Credit: .5

Prerequisite: None.

Turf Grass Management is designed to develop an understanding of turf grass management techniques and practices.

Veterinary Medical Applications/Lab 8A940 (GRCTC)

TSDS PEIMS Code: 13000610 (VETMEDLAB)

Grade Placement: 11–12, Credit: 2

Prerequisites: Equine Science, Small Animal Management, or Livestock Production.

Veterinary Medical Applications covers topics relating to veterinary practices, including practices for large and small animal species.

Wildlife Fish Ecology Management 8A120 (SHS)

TSDS PEIMS Code 13001500 (WFECGT)

Grade Placement 10-12, Credit: 1

Prerequisite: None.

Wildlife, Fisheries, and Ecology Management examines the management of game and nongame wildlife species, fish, and aqua crops and their ecological needs as related to current agricultural practices. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.