ANIMAL SCIENCE

What can I do with this major?

AREAS

PRODUCTION AND MANAGEMENT

Livestock Production:

Dairy cattle (Farm Manager, Dairy Cattle Classifier, Milker)

Beef cattle (Herdsman, Feedlot Management, Ranch Operator)

Swine (Sow Manager, Pork Production Technician, Swine Nursery Worker)

Equine (Stable Owner, Foaling Attendant, Stallion Manager)

Small ruminants/Sheep and goats (Herd Manager, Farm Worker)

Poultry (Hatchery Manager, Poultry Hand, Broiler Processing Plant Manager)

Livestock Feed:

Production/Development (Health and Nutrition Scientist, Product Development and Nutrition Scientist)

Quality control (Food Safety Inspector, Quality Assurance Manager, Microbiologist)

Distribution/Marketing (Technical Sales Manager)

Meat and Dairy Foods:

Production, development, quality control (Food Safety Inspector, Livestock Grader, Quality Control Manager)

Distribution/Marketing

Other Specialty Areas:

Reproduction (Sire Analyst, Artificial Insemination Technician, Embryologists, Equine Pedigree Analyst, Breeding Manager)

Nutrition (Cattle Feeder, Ruminant Nutritionist, Feed Mill Manager, Livestock Production Specialist, Nutritionist)

Genetics (Animal Geneticist)

EMPLOYERS

Cow/calf operations

Stocker or grower programs

Feedlots

Grower/finisher operations

Farrowing operations

Farrow to finish operations

Farriers

Broiler production operations

Egg production operations

Wool companies

Breeding firms

Feed companies

Feed processing plants

Meat, poultry, dairy processors

Extension services

Zoos

Inspection services

Government:

Animal and Plant Health Inspection Service

Food Safety and Inspection Service

Department of Agriculture

Department of Health and Human Services

Food and Drug Administration

STRATEGIES

Develop physical stamina, comfort being outdoors and in close proximity with large and small animals and expect to work irregular hours at times.

Seek work experience in animal production or related animal industry through internships, summer jobs, or part-time positions.

Pursue a minor in business if interested in management or self-employment.

Participate in related campus organizations and competition teams such as dairy, poultry and live-stock judging, and/or academic quadrathalon.

Become familiar with federal job application procedures for government work.

AREAS

EMPLOYERS

STRATEGIES

AGRIBUSINESS AND COMMUNICATION

Sales:

Livestock

Feed

Pharmaceuticals

Agriculture chemicals

Livestock supplies

Equipment: Farm and feedlot

Agriculture real estate

Customer service management (Tack Shop Owner,

Dog Boutique Owner, Creamery Operator)

Promotion/Marketing (Product Marketing, Marketing Specialist)

Public Relations (Public Relations Group Leader, Media Liaison)

Agricultural Journalism (Web Editor, Science Publication Writer)

Other Areas (Bloodstock Agent, Carcass Merchandiser, Loan Manager)

Agribusinesses: livestock and feed

Pharmaceutical companies

Equipment and supply companies

Food and meat processing companies

Food distributors

Animal health companies

Breed organizations

Financial institutions

Livestock publications

Professional associations (e.g., National Cattlemen's Beef Association)

Obtain a part-time job or internship in sales to gain experience, as these positions are often stepping stones to higher-level positions.

Consider earning a business minor to obtain knowledge of fundamental business principles.

Develop excellent communication, organization, and problem solving skills along with initiative.

Take additional courses in interpersonal communication, public speaking and journalism, if relevant.

Prepare to work independently during irregular and/ or long hours.

Learn to work well under pressure and to be comfortable in a competitive environment.

Demonstrate motivation to reach sales quotas while maintaining a commitment to customer satisfaction.

Seek extensive knowledge of merchandise for sale. Join related student organizations and competition teams and seek leadership roles.

EDUCATION

K-12

Non-classroom education (Adult Agricultural Education Instructor, Ag Literacy Coordinator, Young Farmer Instructor)

Extension (4-H Extension Agent, Extension Specialist)

Animal Rescue and Rehabilitation (Conservation Education, Education and Outreach)

Aquarium/Zoo conservation education, outreach, coordination (Education Technician, Education Program Coordinator, Internship Coordinator)

Schools (secondary and post-secondary)

Extension services

Agricultural agencies

Agricultural communications and media firms

Agribusinesses

Animal rescue and rehabilitation facilities

Aquariums/Zoos

Government:

Animal and Plant Health Inspection Service Food Safety and Inspection Service

Department of Agriculture

Department of Health and Human Services

Food and Drug Administration National Science Foundation

Develop excellent communication skills including verbal, written, and interpersonal.

Obtain teacher certification, which varies by state, for public school opportunities.

Secure master's degree for teaching at community or two-year institutions; a doctoral degree is necessary for college and university teaching.

Gain related experience through volunteer positions. summer jobs, or internships with age group of interest.

Seek leadership roles in student organizations.

Be prepared to live in rural communities for extension positions.

AREAS

EMPLOYERS

STRATEGIES

VETERINARY MEDICINE

Areas of specialization:

Small animal care

Large animal care

Equine medicine

Food safety, inspection, security

Preventative medicine

Surgery

Public health

Laboratory animal medicine

Research

Group or private practice Government:

Animal and Plant Health Inspection Service

Food Safety and Inspection Service

Department of Agriculture

Department of Health and Human Services

Food and Drug Administration

Centers for Disease Control and Prevention

State and local government

Colleges of veterinarian medicine

Medical schools

Research laboratories

Animal food companies

Inspection services

Pharmaceutical companies

Zoos

Wildlife sanctuaries

Research veterinary programs, take pre-vet courses to meet veterinary school requirements and prepare for application process.

Maintain an excellent grade point average, particularly in the sciences, and build relationships with faculty. Strong recommendations from professors are needed for professional school.

Pursue extensive laboratory and research experience for research positions.

Gain experience in animal health settings, zoos, wildlife sanctuaries, etc. through volunteer positions, part-time jobs or summer work. Consider working as a veterinary technician.

Develop physical stamina; and confidence working with both small and large animals and in various weather conditions.

Plan to work evenings, weekends, or on-call for some positions.

Exercise close attention to detail and the ability to respond effectively in emergency situations.

Practice strong interpersonal skills for dealing with animal owners who may be upset.

Consider taking courses in business and communications or pursuing joint MBA/DVM programs, as self-employed veterinarians must effectively promote and manage their own businesses.

Seek active roles in pre-vet and other related clubs. Prepare to take the Graduate Record Examination (GRE) and/or Medical College Admission Test (MCAT). Vet schools can require either test.

Coordinator)

AREAS

BIOSCIENCE (biotechnology-driven fields)

Research (Lab Animal Technician, Laboratory Supervisor, Research Assistant, Research Farm Operations Manager) Biomedical animal models Product and process development Animal genetic engineering and animal breeding Animal nutrition, health, disease control Product and process development (Microbiology Analyst, Product Development Scientist) Compliance/Regulation (Animal Care and Use

EMPLOYERS

Government laboratories
Corporate laboratories
Colleges and universities
Livestock producers
Breeding firms
Pharmaceutical companies
Animal health companies
Zoos
Wildlife sanctuaries

STRATEGIES

Advanced degrees are often required for these positions. Discuss graduate school options with your adviser on a regular basis; prepare material for application process.

Pursue extensive laboratory and research experience by working in faculty laboratories through special problems courses, as a student employee or through other departmental programs.

Develop strong attention to detail, analytical skills, and the ability to persevere through specialized research projects.

Supplement curriculum with additional science courses in relevant areas (genetics, animal behavior, microbiology).

Seek experience in area of interest through internships, co-ops, or part-time work.

Plan to work outdoors and closely with small and large animals for some positions.

Research post-graduate certification options through the American Association for Laboratory Animal Science (AALAS).

Learn federal job application procedures.

ANIMAL CARE, HEALTH, AND SERVICE

Behavior/Training (Animal Behavior Specialist, Racehorse Trainer, Animal Trainer, Riding Instructor)

Caretaking/Grooming (Animal Care Attendant, Groomer/Stylist, Hoof Trimmer, Farrier, Equine Dental Technician, Massage Therapist)

Breeding

Animal assisted therapy (Therapeutic Riding Instructor)

Shelter/Rescue (Shelter Supervisor, Intake Specialist, Client Care Coordinator)

Other Areas:

Wildlife Management/Exotic Animals (Wildlife Rehabilitator, Animal Care Specialist)

Aquariums/Zoos (Zoo Reproduction Research Assistant, Zookeeper, Senior Biologist)

Government (Animal Control Officer)

Self-employed

Shelters

Kennels

Boarding facilities

Training facilities

Grooming facilities

Rescue organizations

Humane societies

City/county animal control organizations

Breed organizations

Veterinary practices

Stables

Zoos

Research facilities

Most people employed in the companion animal industry learn through on the job training.

Seek volunteer or paid positions in community facilities such as grooming, rescue, boarding.

Consider training and certifications through organizations such as International Boarding and Pet Services Association and National Dog Groomer's Association of America. Inc.

Expect to work evenings, weekends, holidays and for shifts of 24 hours at a time.

Develop physical stamina, patience and problemsolving skills, particularly for training roles.

Animal assisted therapy opportunities are typically volunteer. Seek trainer/pet handling courses through organizations such as Delta Society.

Research post-graduate certification via the American Association for Laboratory Animal Science (AALAS) for laboratory animal care positions.

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GENERAL INFORMATION AND STRATEGIES

- As an undergraduate, seek laboratory experiences such as research projects, volunteering with professors, summer jobs, or internships.
- Participate in research programs and internships sponsored by government organizations and private corporations.
- Consider a veterinary technician or technologist program accredited by the American Veterinary medical Association (AVMA) or a specialized master's program to qualify for research technician positions.
- Earn master's degree for greater variety and autonomy on the job. Earn a Ph.D. to work on high-level research projects, to direct research programs, to enter high levels of administration, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required.
- · Learn to work independently and as part of a team.
- Combine an undergraduate degree with a degree in law, business, education, communication and information science, or other discipline to expand career opportunities.
- Consider earning an MBA after gaining work experience to reach the highest levels of agribusiness management.
- The animal sciences are good preparation for a career in healthcare such as medicine, dentistry, pharmacology, and veterinary science, but professional degrees and licenses are also necessary to practice in these fields. Become familiar with the specific entrance exams for graduate or professional schools in your area of interest.
- Join professional associations and community organizations and read related journals to stay abreast of current issues in the field and to develop networking contacts
- Actively participate in student organizations, competition teams, and other related activities.
- Secure strong relationships and personal recommendations from professors and/or employers.
- Learn federal, state, and local government job application processes. The federal government is the largest employer of scientists.
- Gain experience with grant writing and fundraising techniques. Often research must be funded in this manner.