

College of Agriculture and Life Sciences
Bachelor of Science
Major in Animal and Poultry Sciences
For student date of entry under UG Catalog 2023-2024

Pathways General Education		47 Credits
Course & Number	Title	Credits
<u>Concept 1: Discourse (9 credits)</u>		
1F: ENGL 1105-1106	First-Year Writing	3 _____ 3 _____
1A: APSC 4004 ^{#+}	Contemporary Issues in the Animal Sciences	3 _____
<u>Concept 2: Critical Thinking in the Humanities (6 credits)</u>		
Approved Courses	Select from Timetable _____	3 _____ 3 _____
<u>Concept 3: Reasoning in the Social Sciences (6 credits)</u>		
AAEC 1005 or ECON 2005	Economics of the Food and Fiber Systems Principles of Economics	3 _____
and an Approved Course	Select from Timetable _____	3 _____
<u>Concept 4: Reasoning in the Natural Sciences (8 credits)</u>		
BIOL 1105, 1106	Principles of Biology	3 _____ 3 _____
BIOL 1115, 1116	Principles of Biology Lab	1 _____ 1 _____
<u>Concept 5: Quantitative and Computational Thinking (9 credits)</u>		
5F: MATH 1014 or MATH 1025 [#]	Precalculus with Transcendental Functions Elementary Calculus (this course is a prereq for PHYS 2205)	3 _____
5F: STAT 2004 [#] or STAT 3005 [#]	Introductory Statistics or Statistical Methods	3 _____
5A: ALS 3104 ^{#+}	Animal Breeding and Genetics	3 _____
<u>Concept 6: Critique and Practice in Arts and Design (6 credits)</u>		
Approved Courses	Select from Timetable 3 design and 3 arts OR 6 integrated design and arts _____	3 _____ 3 _____
<u>Concept 7: Critical Analysis of Identity and Equity in the United States (3 credits)</u>		
Approved Course	Select from the Timetable _____	3 _____
Degree Core		21 credits
Course & Number	Title	Credits
CHEM 1035-1036 [#] , 1045-1046 [#]	General Chemistry, and General Chemistry Lab <i>(These credits are not included in the in-major GPA)</i>	3 _____ 3 _____ 1 _____ 1 _____
APSC 1454 ⁺	Introduction to Animal and Poultry Science <i>(a grade of C or better is required)</i>	3 _____
APSC 1464 [#]	Animal and Poultry Science Lab	1 _____
APSC 1504 ⁺	APSC First Year Experience	1 _____
APSC 2004 [#]	Animal and Poultry Science Seminar	1 _____
ALS 2304 [#]	Comparative Animal Physiology and Anatomy	4 _____
ALS 3204 [#]	Animal Nutrition and Feeding	3 _____

⁺These courses are included in the in-major GPA calculation;

[#]These courses have prerequisites and/or corequisites; please consult the University Course Catalog or check with your advisor.

Courses used for **Pathways 1-7** or **Degree Core** cannot be used for **Major Requirements, Approved Restricted Electives, or Free Electives**. Cannot double count courses used in section C and D under Major Requirements.

At least 6 credits from section C and/or section D must be 4XXX.

Major Requirements (variable number of credits)		
Course & Number	Title	Credits
A. Economics Requirement (Select 1 course; 3 credits)		
AAEC 1006 or 2104 or 2434 [#]	Economics of the Food and Fiber Systems Personal Financial Planning or Foundation of Agribusiness	3 _____
B. Experiential Learning Requirement (at least 1 credit)		
APSC 4954 [#] or 3954 or 4964 or 4974 or 4994	Capstone Experience in Animal and Poultry Sciences Study Abroad or Field Study or Independent Study or Undergrad Research	1 _____
C. Species Requirement (select 1 course; 3 or 4 credits) ALL courses in this section^{#+}		
APSC 3504	Poultry Health and Science	3 _____
APSC 3064	Companion and Laboratory Animal Science	3 _____
APSC 4404	Commercial Poultry Enterprise Management	4 _____
APSC 4414	Beef and Sheep Production and Industry	4 _____
APSC 4424	Horse Production and Management	4 _____
APSC 4444	Swine Production	3 _____
APSC 4464	Companion and Laboratory Animal Health and Management	4 _____
D. Animal Science/Management Requirement (select 4 courses; at least 12 credits) ALL courses in this section^{#+}		
ALS 3304	Physiology of Reproduction	3 _____
ALS 4554	Neurochemical Regulation	3 _____
ALS 4574	Social Behavior of Birds and Mammals	3 _____
APSC 3134	Animal Agriculture and the Environment	3 _____
APSC 3214	Principles of Meat Science	3 _____
APSC 3254	Animal Products	3 _____
APSC 3304	Embryology	3 _____
APSC 3334	Animal Welfare and Bioethics	3 _____
APSC 3434	Host Microbe Interactions	3 _____
APSC 3504	Poultry Health and Science	3 _____
APSC 3064	Companion and Laboratory Animal Science	3 _____
APSC 4054	Genomics	3 _____
APSC 4124	Equine Health and Disease	4 _____
APSC 4204	Advanced Equine Nutrition and Feeding	3 _____
APSC 4324	Equine Reproduction and Neonatal Care	4 _____
APSC 4404	Commercial Poultry Enterprise Management	4 _____
APSC 4414	Beef and Sheep Production and Industry	4 _____
APSC 4424	Horse Production and Management	4 _____
APSC 4444	Swine Production	3 _____
APSC 4464	Companion and Laboratory Animal Health and Management	4 _____
APSC 4514	Animal Growth and Development	3 _____
APSC 4554	Advanced Livestock Enterprise Management	3 _____
DASC 3274	Applied Dairy Cattle Nutrition	3 _____
DASC 3474	Dairy Information Systems	3 _____
DASC 4174	Applied Dairy Cattle Genetics	3 _____
DASC 4374	Physiology of Lactation	3 _____
DASC 4384	Mammary Immunology	3 _____
DASC 4475	Dairy Enterprise Management I	3 _____
DASC 4476	Dairy Enterprise Management II	4 _____

⁺These courses are included in the in-major GPA calculation;

[#]These courses have prerequisites and/or corequisites; please consult the University Course Catalog or check with your advisor.

Choose courses from the list of approved restricted electives to equal at least 21 credits. Any courses used to satisfy Pathways 1-7, the Degree Core, or Major Requirements cannot also be used as Approved Restricted Electives.

All restricted electives must be taken on an A-F basis unless offered P/F only.

**2964, 2974, 2984, 2994, 3954, 3964, 3984, 4964, 4974, 4984 and 4994 courses
will be considered on a case-by-case basis**

Enrollment in specific courses listed below is not guaranteed. Consult with your advisor when choosing restricted electives.

At least 6 credits of Approved Restricted Electives must be 4XXX.

Approved Restricted Electives[#] 21 Credits

Course & Number	Title	Credits
AAEC 2104	Personal Financial Planning	3 ____
AAEC 2434	Foundations of Agribusiness	3 ____
AAEC 3XXX & higher		
ACIS 1504	Intro to Bus Analytics & BI	3 ____
ACIS 2XXX & higher		
AHRM 2404	Consumer Rights	3 ____
ALCE 3XXX & higher		
ALS 2XXX & higher		
APSC 2XXX & higher		
BCHM 2XXX & higher		
BIOL 2XXX & higher (except 3404)		
BIT 2XXX & higher		
BMVS 4XXX (except 4054, 4064)		
BSE 2XXX & higher		
CHEM 2XXX & higher		
COMM 2XXX & higher		
CONS 2304	Consumer & Family Finances	3 ____
CSES 2XXX & higher		
DASC 2XXX & higher		
ECON 2XXX & higher		
ENGL 2844 OR 3774 OR 3764 (choose one)		

ENSC 3XXX		
ENT 2XXX & higher		
FIN 3XXX & higher		
FIW 2XXX & higher		
FST 2XXX & higher		
GEOG 4XXX		
HNFE 1004	Foods, Nutrition & Exercise	3 ____
HNFE 2XXX & higher		
HORT 2XXX & higher		
HTM 2XXX & higher		
IS 2XXX & higher		
LDRS 1016	Exploring Citizen Leadership	3 ____
MATH 1025 and higher		
MGT 3XXX & higher		
MKTG 3XXX & higher		
NEUR 2XXX & higher		
PHS 4XXX		
PHYS 2XXX & higher (except 2074, 2325, 2326)		
PPWS 2XXX & higher		
PSYC 2074	Animal Behavior	3 ____
STAT 3XXX & higher		

[#]Some of these courses may have pre-requisites or co-requisites. Consult the course catalog.

List Specific Courses from the Above List		
Course & Number	Title	Credit

List Specific Courses From the Above List		
Course & Number	Title	Credit

Any courses not used to satisfy one of the requirements above will be free electives.

Free Electives (variable, to total at least 120 credits for the degree)		
Course & Number	Title	Credits

⁺These courses are included in the in-major GPA calculation;

[#]These courses have prerequisites and/or corequisites; please consult the University Course Catalog or check with your advisor.

Graduation Requirements: In addition to Required Courses listed on the first page, each student must complete Major Requirements, Restricted Electives, and Free Electives listed on pages 2 and 3 to equal at least 120 credits, with a minimum overall GPA of 2.0000 and a minimum in-major GPA of 2.0000.

For purposes of GPA computation, courses included **IN-MAJOR** are:

Degree Core courses on page 1, except for CHEM 1035-1036 and CHEM 1045-1046

APSC 4004 and ALS 3104 in the Pathways General Education on page 1

Courses in sections C and D under Major Requirements on page 2

An APSC degree may be earned in combination with the first year of work in an accredited medical, dental, or veterinary school, provided that the following requirements are met: at least two of the three years of pre-professional work, including the third year, are in residence at VT; and a minimum of 90 semester credits of undergraduate work that include all the courses listed above as Pathway to General Education and Degree Core, and at least 1 course from section C under Major Requirements.

Progress Towards Degree Policy: Upon the completion of 72 credits, APSC students must have completed CHEM 1036 and 1046, APSC 1454 and 1464, and 6 credits from ALS 2304, 3104, or 3204; have a minimum overall GPA of 2.0; and have completed at least 24 credits that apply to the Pathway to General Education requirements.

Foreign Language Requirement: Two semesters of a single foreign language are required unless 2 units of a single foreign language are completed in high school. These credits do not count toward graduation requirements.

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[#]These courses have prerequisites and/or corequisites; please consult the University Course Catalog or check with your advisor.