

COLLEGE OF AGRICULTURE AND LIFE SCIENCES BACHELOR OF SCIENCE IN ANIMAL AND POULTRY SCIENCES

Major in Animal and Poultry Sciences – Pre-Vet Option For Students Graduating in Calendar Year 2020

	Simplified Similar Birth Simil	
Name:	Last Four of Student ID #	

Course & Number	Title	Credits
MATH 1014, or *1025 or 1026 (Area 5)	Precalculus with Transcendental Functions	3
STAT 2004 (Area 5)	Introductory Statistics	3 —
CHEM 1035, 1036 (Area 4)	General Chemistry	$\frac{3}{3} - \frac{3}{3}$
CHEM 1045, 1046 (Area 4)	General Chemistry Lab	1-1-
ENGL 1105, 1106 or 1204H (Area 1)	First Year Writing or Honors First Year Writing	$\frac{1}{3} - \frac{1}{3} - \frac{1}{3}$
AAEC 1005, 1006 or (Area 3)	Economics of Food & Fiber Systems or	$\frac{3}{3} - \frac{3}{3} - \frac{3}{3}$
ECON 2005, 2006	Prin. of Econ.	
Humanities/Fine Arts (Area 2)	Choose from approved list	3 3
Creative/Aesthetic Exp. (Area 6)	Choose from approved list	1
Critical Issues in Global Context (Area 7)	Choose from approved list ¹	0 or 3
* *	Sub	ototal 33 or 36
Certain Area 7 courses may also count as Are	ea 2 or restricted elective courses. See the Curriculum for Libe	eral Education Guid
for Area 2/Area 7 courses, and the APSC we	ebsite (http://advising.apsc.vt.edu/major.cfm) for Area 7/restric	cted electives.
	MAJOR CORE	
Course & Number	Title	Credits
BIOL 1105, 1106 (Area 4)	Principles of Biology**	3 3
BIOL 1115, 1116	Principles of Biology Lab**	1 1
APSC 1454	Intro. to Animal and Poultry Science	3
APSC 1464	Intro. to Animal and Poultry Science Lab	1
APSC 1504	APSC First Year Experience	1
APSC 2004	Animal and Poultry Sciences Seminar	1
ALS 2304	Comparative Animal Physiology & Anatomy	1 4 3 2
ALS 3104	Animal Breeding and Genetics	3 —
ALS 3204	Animal Nutrition and Feeding	3
ALS 3304	Physiology of Reproduction	2
ALS 3314	Physiology of Reproduction Lab	1
APSC 3254 or BIOL 2604	Animal Products or General Microbiology	3
APSC 4004	Contemporary Issues in Animal Sciences	3 —
APSC 4954	Capstone Experience	<u> </u>
11 50 1751	Choose in consultation with your advisor**	2
Choose one of the following courses:	Choose in constitution with your advisor	-
AAEC 2104, 2434, 3454, or MGT 3304	Personal Fin. Plan, Foundations in Ag. Bus.,	3
	reneurship., or Mgt. Theory & Leadership Practice	-
Small Bus. Mgc. & Entrep	renearship, or wigh Theory & Deadership Fractice	
	Subtotal	38
	Subtotai	20
"These credits will NOT be included in	the calculation of the in-major GPA. Choice must b	e approved by th

Graduation Requirements: In addition to Required Courses listed on the first page, each student must complete courses listed in one of the boxes on pages 3-5 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 IN-MAJOR will include MAJOR CORE listed on page 1 and all courses designated as in-major in all options on pages 3-6.

Some courses in the program requirements listed above may have prerequisites. Be sure to consult the University Catalog or check with your advisor.

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 University, College, and Departmental Requirements and at least 1 handling and 1 production class.

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.

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 University Liberal Education requirements.

*Prerequisites: MATH 1025 is the prerequisite to PHYS 2205.

RESTRICTED AND FREE ELECTIVES

Except for Area 7, courses will not double count.

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

2964, 2974, 2994, 3954, 4964, 4974, and 4984 courses will be approved on a case-by case basis only.

NOTE: Enrollment in specific courses included on this page is not guaranteed. Consult with your advisor when choosing restricted electives. Some of these courses may have prerequisites.

Agricultural/Applied Electives

ENGL 31041 HNFE 1004 APSC (including P/F only) **AAEC 2104** HNFE 2XXX & higher AAEC 3XXX & higher BSE 2XXX & higher FIW 2XXX & higher FST 2XXX & higher HORT 2XXX & higher ALCE 3XXX & higher CSES 2XXX & higher PPWS 2XXX & higher ALS 2XXX & higher DASC 2XXX & higher **GEOG 4XXX** ENT 2XXX & higher Cr. Grade Grade Course Cr. Grade Course Course Cr. **Business Electives:** IS 2XXX & higher **AAEC 2104** ECON 2XXX & higher AHRM 2404 LDRS 1016 ENGL 37741 **AAEC 2434** APSC 3764 MGT 3XXX & higher FIN 3XXX & higher; HTM AAEC 3XXX & higher APSC 4554 MKTG 3XXX & higher 2XXX & higher BIT 2XXX & higher ACIS 1504 ACIS 2XXX & higher COMM 2XXX AHRM 2304 Course Grade Course Grade Course Cr. Grade Science Electives: ENSC 3XXX MATH 1015 & higher ALS 2404 BCHM 2XXX & higher NEUR 2025, 2026, 3044, ENT 3XXX ALS 4554 (except 4074) 4044 BIOL 2XXX & higher ENT 4354 ALS 4574 PHYS 2XXX & higher ENGL 37641 APSC 3304 (except 2204 and 3404) (except 2074, 2325, 2326) BMVS 4XXX & higher2 FIW 2314 APSC 4304 PPWS 3XXX FST 3XXX & higher CHEM 2XXX & higher APSC 4224 PSYC 2074 HNFE 3XXX (except 4024) APSC 4054 STAT 3XXX & higher **DASC 4304** APSC 3064 or APSC 4064 UH 4994 **DASC 4374** APSC 4994 (P/F) **DASC 4384** Grade Course Cr. Course Grade Cr. Grade Course Free Electives: Cr. Grade Course Grade Course Cr. Course Grade

² BMVS 4054 will count as free elective if companion/lab animal emphasis.

Only one of the three may be used as Restricted Electives towards an APSC degree.

PRE-VET OPTION			
- Livestock Emphasis -			
Course & No.	Title	Credits	
Required Emphasis Courses			
APSC 2114*,+ Livestock Ma	nagement and Handling	1	
Choose one of the following:		nds	
APSC 4414 ⁺ Beef/Sheep Pr		4	
APSC 4444 ⁺ Swine Produc	tion	or 3	
*APSC 2114 is a prerequisite fo	r APSC 4414 and 4444		
⁺ Credits count in the in-major (
Required Science Courses:**			
CHEM 2535 – 2536	Organic Chemistry	33	
CHEM 2545 – 2546	Organic Chemistry Lab		
PHYS 2205 – 2206	General Physics	11 33	
PHYS 2215 – 2216	General Physics Lab	1 1 1	
	Concepts of Biochemistry, 3_	or 4	
	Biochemistry for Biotechnolog		
	& Life Sciences, or General Bi		
Restricted Electives:	Science Electives		
Acceptable of the second of th	Agricultural/Applied Electives	3	
	Business Electives		
Credits Needed:	Agric./Applied, Business, or		
Circuits i vecteur	Science Electives		
	Total Restricted Electives	38***	
	ion d	mission to the VA/MD	
**NOTE: These courses fu	IIII the requirements for au	nonsible for checking to	
Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools.			
***At least 9 of the 38 credits must be 4XXX			
At least 9 of the 38 credits must be 42222			
Free Electives: Choose free electives to total ≥ 120 credits			
Needed:			
	Total Electives (minimum)	47 or 50	

Course & No. Title Credits Required Emphasis Courses: APSC 2104** Poultry Lab 1 1 APSC 4404* Commercial Poultry Enterprise Management 4 4 *ALS 2304 is a co-requisite of APSC 2104; APSC 2104 is a prerequisite for APSC 4404 *Credits count in the in-major GPA Required Science Courses:** CHEM 2535 – 2536 Organic Chemistry 3 3	PRE-VET OPTION - Poultry Emphasis -				
APSC 2104** Poultry Lab APSC 4404* Commercial Poultry Enterprise Management *ALS 2304 is a co-requisite of APSC 2104; APSC 2104 is a prerequisite for APSC 4404 * Credits count in the in-major GPA *Required Science Courses:** CHEM 2535 − 2536 Organic Chemistry 3	Course & No.	Ti		Credits	
APSC 4404* Commercial Poultry Enterprise Management 4 *ALS 2304 is a co-requisite of APSC 2104; APSC 2104 is a prerequisite for APSC 4404 * Credits count in the in-major GPA *Required Science Courses:** CHEM 2535 – 2536 Organic Chemistry 3 3 CHEM 2545 – 2546 Organic Chemistry Lab 1 1 PHYS 2205 – 2206 General Physics 3 3 Or 4 Biochemistry for Biochemistry, 3 or 4 Biochemistry for Biochemistry, 3 or 4 Biochemistry for Biochemistry **Restricted Electives: **Restricted Electives: **Credits Needed: **Credits Needed: **Agric./Applied, Business, or Science Electives **Total Restricted Electives **Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX **Pree Electives: Choose free electives to total ≥ 120 credits	Required Emph	asis Courses:			
*ALS 2304 is a co-requisite of APSC 2104; APSC 2104 is a prerequisite for APSC 4404 * Credits count in the in-major GPA *Required Science Courses:** CHEM 2535 - 2536 Organic Chemistry 3	APSC 2104*,+			1	
for APSC 4404 † Credits count in the in-major GPA Required Science Courses:** CHEM 2535 - 2536 Organic Chemistry 3 3 3 CHEM 2545 - 2546 Organic Chemistry Lab 1 1 PHYS 2205 - 2206 General Physics 3 3 PHYS 2215 - 2216 General Physics Lab 1 1 BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Science Electives 38*** **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits 120 credits	APSC 4404 ⁺	Commercial I	Poultry Enterprise Management	4	
Required Science Courses:** CHEM 2535 – 2536 Organic Chemistry 3	*ALS 2304 is a c	o-requisite of	APSC 2104; APSC 2104 is a pro-	erequisite	
Required Science Courses:** CHEM 2535 – 2536 Organic Chemistry 3 3	for APSC 4404				
CHEM 2535 – 2536 CHEM 2545 – 2546 Organic Chemistry CHEM 2545 – 2546 Organic Chemistry Lab PHYS 2205 – 2206 General Physics PHYS 2215 – 2216 General Physics Lab BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives 38*** **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	⁺ Credits count in	the in-major (GPA		
CHEM 2545 – 2546 Organic Chemistry Lab 11 PHYS 2205 – 2206 General Physics 33 PHYS 2215 – 2216 General Physics Lab 11 BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry **Restricted Electives: Credits Needed: **Agricultural/Applied Electives Business Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	Required Science	ce Courses:**		2007	
PHYS 2215 – 2216 BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	CHEM 2535 -	2536	-	33	
PHYS 2215 – 2216 BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	CHEM 2545 -	2546	Organic Chemistry Lab	11	
BCHM 2024, 3114, OR 4115 Concepts of Biochemistry, 3 or 4 Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	PHYS 2205 - 2	2206		33	
Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	PHYS 2215 - 2	2216	General Physics Lab		
Biochemistry for Biotechnology & Life Sciences, or General Biochemistry Restricted Electives: Science Electives Agricultural/Applied Electives Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	BCHM 2024, 3	3114, OR 4115	Concepts of Biochemistry, 3	or 4	
Restricted Electives: Science Electives	Secretary and the Control of the Con		Biochemistry for Biotechnolo	gy	
Agricultural/Applied Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits			& Life Sciences, or General E	Biochemistry	
Business Electives Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	Restricted Elect	tives:		<u> </u>	
Credits Needed: Agric./Applied, Business, or Science Electives Total Restricted Electives **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits				S	
Science Electives Total Restricted Electives 38*** **NOTE: These courses fulfill the requirements for admission to the VA/MD Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits			Business Electives		
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Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits			Total Restricted Electives	38***	
Regional College of Veterinary Medicine. Students are responsible for checking to be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	**NOTE: The	asa courses fi	ulfill the requirements for ac	lmission to the	VA/MD
be sure they meet the requirements for admission to other veterinary schools. ***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	Pagional College	te of Veterina	ry Medicine. Students are res	sponsible for che	cking to
***At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits	be sure they n	neet the reau	virements for admission to o	ther veterinary	schools.
Free Electives: Choose free electives to total ≥ 120 credits Needed:	***At least 9 o	f the 38 credit	ts must be 4XXX		
Needed:	D. Di d'esse	Changa fran	alactives to total > 120 credits		
Necutu.	Free Electives:	Choose nee	Nondad.		
Total Electives (minimum) 47 or 50				47 or 50	

PRE-VET OPTION		
	- Equine Emphasis -	G 314
Course & No.	Title	Credits
Required Emphasis Cou		
	Management and Handling Lab	3
	action to Equine Industry	3
APSC 4424 ⁺ Horse	Production and Management	4
* APSC 2124 and 2424 ar	e prerequisites for APSC 4424	
⁺ Credits count in the in-n	najor GPA	
Required Science Cours		
CHEM 2535 - 2536	Organic Chemistry	33
CHEM 2545 - 2546	Organic Chemistry Lab	11
PHYS 2205 - 2206	General Physics	11 33 11
PHYS 2215 - 2216	General Physics Lab	11
BCHM 2024, 3114, OR	4115 Concepts of Biochemistry, 3 _	or 4
	Biochemistry for Biotechnolog	
	Life Sciences, or General Bioc	hemistry
Restricted Electives:	Science Electives Agricultural/Applied Electives Business Electives	
Credits Needed:	Agric./Applied, Business, or Science Electives	
	Total Restricted Electives	38***
Regional College of Vet	es fulfill the requirements for admiss serinary Medicine. Students are respequirements for admission to other veredits must be 4XXX	onsible for checking to
Free Electives: Choose	e free electives to total ≥ 120 credits Needed:	
	Total Electives (minimum)	47 or 50

PRE-VET OPTION - Companion and Laboratory Animal Emphasis -		
Courses & No. Tit		Credits
Required Emphasis Courses		
APSC 2164*,+ Comp/Lab Anim. C		1
APSC 3064* Companion/Lab An		1 3 4
APSC 4464 ⁺ - Companion/Lab An	imal Health and Management	4
* APSC 2164 and 3064 are prerec	uisite for APSC 4464	
+ Credits count in the in-major Gl		
Required Science Courses:**		
CHEM 2535 – 2536	Organic Chemistry	3 3
CHEM 2545 - 2546	Organic Chemistry Lab	1 1
PHYS 2205 - 2206	General Physics	11 3
PHYS 2215 - 2216	General Physics Lab	1 1
BCHM 2024, 3114, OR 4115	Concepts of Biochemistry, 3	or 4
	Biochemistry for Biotechnolo	ogy
	& Life Sciences, or General F	Biochemistry
Restricted Electives:	Science Electives	
	Agricultural/Applied Elective	es
	Business Electives	
Credits Needed:	Agric./Applied, Business, or	
	Science Electives	
	Total Restricted Electives	38***
**NOTE. These services C.10	Il the magninements for a design	ssion to the VA/MD
**NOTE: These courses fulfi Regional College of Veterinar		
be sure they meet the require		
***At least 9 of the 38 credits		vetermary sensors.
The ready of the book ended		
Free Electives: Choose free e	lectives to total ≥ 120 credits	
The Literatures. Choose need	Needed:	
	Total Electives (minimum	a) 47 or 50