# COLLEGE OF AGRICULTURE AND LIFE SCIENCES BACHELOR OF SCIENCE IN ANIMAL AND POULTRY SCIENCES Major in Animal and Poultry Sciences For Students Graduating in Calendar Year 2019 Student ID #

Name:

## **CURRICULUM FOR LIBERAL EDUCATION**

Title	Credits
Precalculus with Transcendental Functions	3
Introductory Statistics	3
General Chemistry	3 3
General Chemistry Lab	1 1
First Year Writing or Honors First Year Writing	3 3 3
Economics of Food & Fiber Systems or	3 3 3
Prin. of Econ.	
Choose from approved list	3 3
Choose from approved list	1
Choose from approved list <sup>1</sup>	0 or 3
	Subtotal 33 $\overline{\text{or } 36^1}$
a 2 or restricted elective courses. See the Curriculum for	Liberal Education Guide
	Precalculus with Transcendental Functions Introductory Statistics General Chemistry General Chemistry Lab First Year Writing <b>or</b> Honors First Year Writing Economics of Food & Fiber Systems <b>or</b> Prin. of Econ. Choose from approved list Choose from approved list Choose from approved list

for Area 2/Area 7 courses, and the APSC website (http://advising.apsc.vt.edu/major.cfm) for Area 7/restricted 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	$\begin{array}{c} 4 \\ 3 \\ 3 \\ 2 \\ 1 \\ 3 \\ 2 \end{array}$	
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	2	
APSC 4954	Capstone Experience		
	Choose in consultation with your advisor**	2	
Choose one of the following courses:			
AAEC 2104, 2434, 3454, or MGT 3304	Personal Fin. Plan, Foundations in Ag. Bus.,	3	
Small Bus. Mgt. & Entrepreneurship., or Mgt. Theory & Leadership Practice			
	Subtotal	37	
** These credits will NOT be included in the calculation of the in-major GPA. Choice must be approved by the			

### **APSC Capstone Committee.**

**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 <u>do not</u> 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. <u>Some of these courses may have prerequisites.</u>

			<u>Agricultural/</u>	Applied I	Electives		
AAEC 2104 AAEC 3XXX & high ALCE 3XXX & high ALS 2XXX & higher	ner	BSE 2XX CSES 2X DASC 2X	icluding P/F only) XX & higher XX & higher XXX & higher XX & higher	FIW 2 FST 2	, 3104 <sup>1</sup> XXX & higher XXX & higher G 4XXX	HORT	1004 2XXX & higher 2XXX & higher 2XXX & higher
Course	Cr.	<u>Grade</u>	<u>Course</u>	Cr.	Grade 	Course	<u>Cr. Grade</u>
AAEC 2104 AAEC 2434		AHRM APSC 3	2404		 es: ON 2XXX & higher GL 3774 <sup>1</sup>		XXX & higher S 1016
AAEC 3XXX & high ACIS 1504 ACIS 2XXX & high AHRM 2304		APSC 4 BIT 2X2 COMM	XX & higher	FIN	3XXX & higher; HT XX & higher		F 3XXX & higher FG 3XXX & higher
Course	Cr.	<u>Grade</u>	Course	Cr.	Grade ——	Course	<u>Cr. Grade</u>
			Science	e Elective	<u></u> 		
ALS 2404 ALS 4554 ALS 4574 APSC 3304 APSC 4304 APSC 4054 APSC 3064 or APSC APSC 4994 (P/F)	2 4064	(excep BIOL 22 (excep BMVS 4 CHEM 2	374	ENT ENT ENC FIW FST	C 3XXX 3XXX 4354 5L 3764 <sup>1</sup> 2314 45XX & higher FE 3XXX	NEU 40- PHY (ex PPW PSY-	S 2XXX & higher ccept 2074, 2325, 2326) /S 3XXX C 2074 T 3XXX & higher
<u>    Course</u>	Cr.	Grade	Course	Cr.	<u>Grade</u>	Course	Cr. Grade
<u> </u>	Cr.	<u>Grade</u>	<u>Free</u> <u>Course</u>	Electives: Cr.	<u>Grade</u> 	Course	<u>Cr. Grade</u>

<sup>1</sup> Only one of the three may be used as Restricted Electives towards an APSC degree.

<sup>2</sup> BMVS 4054 will count as free elective if companion/lab animal emphasis

<b>PRODUCTION - BUSINESS OPTION</b>			
- Li	- Livestock Emphasis -		
Courses & No.	Title	Credits	
<b>Required Emphasis</b>			
APSC 2114 <sup>*,+</sup> Livest	tock Mgt. & Handling	1	
APSC/FST 3214 Me	eat Science	4	
Choose one of the fo	ollowing:		
APSC 4414 <sup>+</sup> Beef/S	heep Production, or	4	
APSC 4444 <sup>+</sup> Swine	Production	3	
* APSC 2114 is a p	rerequisite for APSC 4	414 and 4444	
<sup>+</sup> Credits count in the	he in-major GPA		
<b>Restricted Electives</b>	<u>S</u>		
Business E	lectives (Min. 6 cr.)		
CSES Elec	tives (Min. 3 cr.)		
Other: Agri./Apj	L		
Science E	Electives		
<u>Credits Ne</u>			
Bus. Elec			
CSES Ele	ectives		
Agric./Ap	opl., Bus, or Science		
Total Res	stricted Electives	38**	
**NOTE: At least 9	of the 38 credits mus	st be 4XXX	
Free Electives: C	Choose free electives to		
total	$\geq$ 120 credits Needed	•	
Tota	l Electives (minimum	) 47 or 50	

PRODUCTION - BUSINESS OPTION - Poultry Emphasis -		
Courses & No.	Title	Credits
<b>Required Courses</b>		
APSC 2104 <sup>*,+</sup> Poult	ry Lab	1
BMVS 4024 Disea	ses of Poultry	2
APSC 4404 <sup>+</sup> Comm	nercial Poultry Ent. Mgt.	4
	-requisite for APSC 2104	
APSC 2104 is a p	rerequisite for APSC 440	4
<sup>+</sup> Credits count in t	he in-major GPA	
Restricted Electives         Business Electives (Min. 6 cr.)         Other:         Agric./Appl. Electives         Science Electives         Credits Needed:		
Business		
	ppl., Bus., or Science	
	ricted Electives	38**
	9 of the 38 credits must	be 4XXX
Free Electives: (	Choose free electives	
total	$\geq$ 120 credits Needed:	
Total Electives (minimum) 47 or 50		

- Livestock Emphasis -         Courses & No.       Title       Credits         Required Emphasis Courses       APSC 2114*+ Livestock Mgt. & Handling       1         APSC 2114*+ Livestock Mgt. & Handling       1	SCIENCE OPTION			
Required Emphasis Courses         APSC 2114*+ Livestock Mgt. & Handling       1         Choose one of the following:       APSC 4414* Beef/Sheep Production, or       4         APSC 4414* Beef/Sheep Production       3       *         APSC 2114 is a prerequisite for APSC 4414 and 4444       *       *         Credits count in the in-major GPA       *       *         Restricted Electives       Science Electives (Min. 15 cr.)	- Livestock Emphasis -			
APSC 2114*,+Livestock Mgt. & Handling1Choose one of the following:APSC 4414+Beef/Sheep Production, or4APSC 4414+Beef/Sheep Production3 $$ * APSC 2114 is a prerequisite for APSC 4414 and 4444+Credits count in the in-major GPA* Restricted ElectivesScience Electives (Min. 15 cr.) $$ Other:Agri./Appl. Electives $$ Business Electives $$ Science Elect.Agri./Appl. Electives $$ $$ Total Restricted Electives $$ $$ **NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total $\geq$ 120 creditsNeeded:	Courses & No.	Title	Credits	
Choose one of the following:APSC 4414 <sup>+</sup> Beef/Sheep Production, or4APSC 4414 <sup>+</sup> Swine Production3* APSC 2114 is a prerequisite for APSC 4414 and 4444+ Credits count in the in-major GPARestricted ElectivesScience Electives (Min. 15 cr.)Other:Agri./Appl. ElectivesBusiness ElectivesCredits Needed:Science Elect.Agric./Appl., Bus., or Science.Total Restricted Electives38****NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total ≥ 120 credits	<b>Required Empha</b>	<u>sis Courses</u>		
APSC 4414 <sup>+</sup> Beef/Sheep Production, or       4         APSC 4444 <sup>+</sup> Swine Production       3         * APSC 2114 is a prerequisite for APSC 4414 and 4444         + Credits count in the in-major GPA <b>Restricted Electives</b> Science Electives (Min. 15 cr.) <b>Other:</b> Agri./Appl. Electives         Business Electives <b>Credits Needed:</b> Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         3 <b>Total Restricted Electives</b> Stree Electives: Choose free electives to         total ≥ 120 credits		<b>e e</b>	1	
APSC 4444 <sup>+</sup> Swine Production       3         * APSC 2114 is a prerequisite for APSC 4414 and 4444         * Credits count in the in-major GPA <b>Restricted Electives</b> Science Electives (Min. 15 cr.) <u>Other:</u> Agri./Appl. Electives         Business Electives <u>Credits Needed:</u> Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         3 <b>**NOTE: At least 9 of the 38 credits must be 4XXX</b> Free Electives: Choose free electives to         total ≥ 120 credits				
* APSC 2114 is a prerequisite for APSC 4414 and 4444 + Credits count in the in-major GPA  Restricted Electives Science Electives (Min. 15 cr.) Other: Agri./Appl. Electives Business Electives Credits Needed: Science Elect. Agric./Appl., Bus., or Science. Total Restricted Electives 38** **NOTE: At least 9 of the 38 credits must be 4XXX Free Electives: Choose free electives to total ≥ 120 credits Needed:		1	•	
* Credits count in the in-major GPA   Restricted Electives   Science Electives (Min. 15 cr.)   Other:   Agri./Appl. Electives   Business Electives   Credits Needed:   Science Elect.   Agric./Appl., Bus., or Science.   Total Restricted Electives   38**   **NOTE: At least 9 of the 38 credits must be 4XXX   Free Electives: Choose free electives to   total ≥ 120 credits			5	
Restricted Electives         Science Electives (Min. 15 cr.)         Other:         Agri./Appl. Electives         Business Electives         Credits Needed:         Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to         total ≥ 120 credits	1	*	14 and 4444	
Science Electives (Min. 15 cr.)         Other:         Agri./Appl. Electives         Business Electives         Credits Needed:         Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to         total ≥ 120 credits	<sup>+</sup> Credits count in t	he in-major GPA		
Science Electives (Min. 15 cr.)         Other:         Agri./Appl. Electives         Business Electives         Credits Needed:         Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to         total ≥ 120 credits				
Other:       Agri./Appl. Electives         Business Electives				
Agri./Appl. Electives         Business Electives         Credits Needed:         Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to total ≥ 120 credits	Science E	lectives (Min. 15 cr.)		
Business Electives <u>Credits Needed:</u> Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to         total ≥ 120 credits	Other:			
Credits Needed: Science Elect. Agric./Appl., Bus., or Science.Total Restricted Electives38****NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total $\geq 120$ creditsNeeded:	Agri./A	Appl. Electives		
Science Elect.         Agric./Appl., Bus., or Science.         Total Restricted Electives         38**         **NOTE: At least 9 of the 38 credits must be 4XXX         Free Electives: Choose free electives to total ≥ 120 credits         Needed:	Busine	ss Electives		
Agric./Appl., Bus., or Science.Total Restricted Electives <b>38**</b> **NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total $\geq 120$ creditsNeeded:	Credits N	leeded:		
Total Restricted Electives $38**$ **NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total $\geq 120$ creditsNeeded:	Science	e Elect.		
**NOTE: At least 9 of the 38 credits must be 4XXXFree Electives: Choose free electives to total $\geq$ 120 creditsNeeded:	Agric./	Appl., Bus., or Scienc	e	
Free Electives: Choose free electives tototal $\geq 120$ creditsNeeded:	-			
total $\geq$ 120 credits Needed:	**NOTE: At least	9 of the 38 credits must	t be 4XXX	
	Free Electives: Cl	hoose free electives to		
Total Electives (minimum) 47 or 50	tota	$l \ge 120$ credits Nee	eded:	
	Tot	al Electives (minimum)	) 47 or <u>50</u>	

SC	IENCE OPTIC	ON
- Po	oultry Emphas	is -
Courses & No.	Title	Credits
<b>Required</b> Course		
APSC 2104 <sup>*,+</sup> Poultr	2	1
APSC 4404 <sup>+</sup> Comme		
* ALS 2304 is a co-	*	-
APSC 2104 is a pr	*	
<sup>+</sup> Credits count in th	ne in-major GPA	
Restricted Electiv	<u>es</u> ectives ( Min. 1	15 cr.)
Other:		<u> </u>
	Appl. Electives	
-	ss Electives	
Credits N		
	e Electives	
Agric.	Appl., Bus., or	Science
	ricted Electives	38**
**NOTE: At least 9	of the 38 credi	ts must be 4XXX
Free Electives: C	hoose free elect	tives to
	al $\geq$ 120 credits	
	Electives (mini	

PRODUCTION - BUSINESS OPTION - Equine Emphasis -		
Courses & No.	Title	Credits
<b>Required Empha</b>	asis Courses	
APSC 2124 <sup>*,+</sup> Ho	orse Mgt. & Handling Lab	1
APSC 2424* Int	ro. to Equine Industry	3
APSC 4424 <sup>+</sup> Hors	se Production & Mgt.	4
* APSC 2124 an	d 2424 are prerequisite for	APSC 4424
<sup>+</sup> Credits count i	n the in-major GPA	
<u>Other:</u> Agri. Scien	s Electives (Min. 6 cr.) /Appl. Electives ace Electives <u>Needed:</u>	
Agric	./Appl., Bus., or Science	
	estricted Electives	38**
**NOTE: At leas	st 9 of the 38 credits must	be 4XXX
<b>Free Electives:</b>	Choose free electives to	
to	tal $\geq$ 120 credits Needed:	
Τα	otal Electives (minimum)	47 or 50

PRODUCTION - BUSINESS OPTION - Companion Animal Emphasis -		
Courses & No.	Title	Credits
<b>Required Empha</b>	asis Courses	
APSC 2164 <sup>*,+</sup> Co	mp/Lab Anim. Care &	1
Н	andling	
APSC 3064* Co	mpanion/Lab Anim Sci.	3
APSC 4464+- Co	mpanion/Lab Animal.	4
H	Iealth & Management	
* APSC 2164 an	d 3064 are prerequisite for	APSC 4464
+ Credits count i	n the in-major GPA	
<u>Other:</u> Agric. Science	ives s Electives (Min. 6 cr.) /Appl. Electives ee Electives Needed:	
Busir		
- ***	c./Appl., Bus., or Science	
-	estricted Electives	38**
	st 9 of the 38 credits mus	
<b>Free Electives:</b>	Choose free electives to	
to	$tal \ge 120$ credits Needed	:
To	otal Electives (minimum)	47 or 50

	SCIENCE OPTION	
	- Equine Emphasis -	
Courses & No.	Title	Credits
<b>Required Emph</b>		
	orse Mgt. & Handling Lab	1
	tro. to Equine Industry	3
	se Production & Mgt.	4
	d 2424 are prerequisite for A	PSC 4424
<sup>+</sup> Credits count i	n the in-major GPA	
<b>Restricted Elect</b>		
Other:	cience Electives (Min. 15 cr.)	
	Agric./Appl. Electives	
	Business Electives	
	redits Needed:	
	Science Electives	
	Agric/Appl., Bus. or Science	
Т	otal Restricted Electives	38**
	st 9 of the 38 credits must b	
Free Electives:	Choose free electives	
to to	tal $\geq$ 120 credits <b>Needed:</b>	
То	tal Electives (minimum)	47 or 50

SCIENCE OPTION	
- Companion Animal Emphasis -	
Courses & No. Title	Credits
<b>Required Emphasis Courses</b>	
APSC 2164 <sup>*,+</sup> Comp/Lab Anim. Care &	1
Handling	
APSC 3064 <sup>*</sup> Companion/Lab Anim. Sci.	3
APSC 4464 <sup>+</sup> - Companion/Lab Animal	4
Health & Management	
* APSC 2164 and 3064 are prerequisite for AI	PSC 4464
<sup>+</sup> Credits count in the in-major GPA	
5	
<b>Restricted Electives</b>	
Science Electives (Min. 15 cr.)	
Other:	
Agric./Appl. Electives	
Business Electives	
<b>Credits Needed:</b>	
Science Electives	
Agric/Appl., Bus. or Science	
<b>Total Restricted Electives</b>	38**
**NOTE: At least 9 of the 38 credits must be	e 4XXX
Free Electives: Choose free electives	
to total $\geq$ 120 credits Needed:	
<b>Total Electives (minimum)</b>	47 or 50

	PRE- VET OPTION	
Course & No.	Title	Credits
Choose one of the following four	combinations:	
APSC 2104 <sup>+</sup> ; APSC 4404 <sup>+</sup>	Poultry Lab, Commercial Poultry Enterprise Mgt.	1 4
OR		
APSC 2114 <sup>+</sup> ; APSC 4414 <sup>+</sup> or 4444	<sup>+</sup> Livestock Mgt &Handling, and Beef/Sheep or Swine Production	4 or 3
OR		
APSC 2124 <sup>+</sup> ; APSC 2424; APSC 4	424 <sup>+</sup> Horse Mgt. Laboratory, Equine Industry, Horse Prod.	1 34
<u>OR</u>		
	464 <sup>+</sup> Comp. & Lab Anim. Care & Handling, Comp/Lab Anim. Science, Comp/Laboratory Anim. Health & Mgt	1 34
<sup>+</sup> Credits count in the in-major Gl	PA	
<b>Required Science Courses:</b> *		
CHEM 2535 - 2536	Organic Chemistry	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, Biochemistry for Biotechnology Life Sciences, or General Biochemistry	<i>a</i> & 3 <b>or</b> 4
<b>Restricted Electives:</b>	Science Electives	
	Agricultural/Applied Electives Business Electives	
<u>Credits Needed:</u>	Agricultural/Applied, Business, or Science Electives Total Restricted Electives	38**
	quirements for admission to the VA/ MD Regional College of Ve g to be sure they meet the requirements for admission to other v t be 4XXX	
Free Electives: Choose free e	electives to total $\geq 120$ credits	
		ded:
	Total Electives (mini	mum) 47 or 50