

**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**

Name: \_\_\_\_\_ Last Four of Student ID # \_\_\_\_\_

**CURRICULUM FOR LIBERAL EDUCATION**

| 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                               | 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 | 3 _____ 3 _____             |
| AAEC 1005, 1006 or (Area 3)                | Economics of Food & Fiber Systems or            | 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 <sup>†</sup> _____    | 0 or 3 _____                |
| <b>Subtotal</b>                            |   | <b>33 or 36<sup>†</sup></b> |

<sup>†</sup> Certain Area 7 courses may also count as Area 2 or restricted elective courses. See the Curriculum for Liberal Education Guide 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   | 4 _____         |
| 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   |                 |
|  | Choose in consultation with your advisor**  | 2 _____         |
| <u>Choose one of the following courses:</u>  |   |                 |
| AAEC 2104, 2434, 3454, or MGT 3304   | Personal Fin. Plan, Foundations in Ag. Bus.,<br>Small Bus. Mgt. & Entrepreneurship., or Mgt. Theory & Leadership Practice | 3 _____         |
| <b>Subtotal</b>  |   | <b>38</b>       |
| <b>** These credits will NOT be included in the calculation of the in-major GPA. Choice must be approved by the APSC Capstone Committee.</b> |   |                 |

**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**

|                    |                           |                        |                    |
|--------------------|---------------------------|------------------------|--------------------|
| AAEC 2104          | APSC (including P/F only) | ENGL 3104 <sup>1</sup> | HNFE 1004          |
| AAEC 3XXX & higher | BSE 2XXX & higher         | FIW 2XXX & higher      | HNFE 2XXX & higher |
| ALCE 3XXX & higher | CSES 2XXX & higher        | FST 2XXX & higher      | HORT 2XXX & higher |
| ALS 2XXX & higher  | DASC 2XXX & higher        | GEOG 4XXX              | PPWS 2XXX & higher |
|                    | ENT 2XXX & higher         |                        |                    |

| Course | Cr. | Grade | Course | Cr. | Grade | Course | Cr. | Grade |
|--------|-----|-------|--------|-----|-------|--------|-----|-------|
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |

**Business Electives:**

|                    |                   |                        |                    |
|--------------------|-------------------|------------------------|--------------------|
| AAEC 2104          | AHRM 2404         | ECON 2XXX & higher     | IS 2XXX & higher   |
| AAEC 2434          | APSC 3764         | ENGL 3774 <sup>1</sup> | LDRS 1016          |
| AAEC 3XXX & higher | APSC 4554         | FIN 3XXX & higher; HTM | MGT 3XXX & higher  |
| ACIS 1504          | BIT 2XXX & higher | 2XXX & higher          | MKTG 3XXX & higher |
| ACIS 2XXX & higher | COMM 2XXX         |                        |                    |
| AHRM 2304          |                   |                        |                    |

| Course | Cr. | Grade | Course | Cr. | Grade | Course | Cr. | Grade |
|--------|-----|-------|--------|-----|-------|--------|-----|-------|
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |

**Science Electives:**

|                        |                                 |                        |                           |
|------------------------|---------------------------------|------------------------|---------------------------|
| ALS 2404               | BCHM 2XXX & higher              | ENSC 3XXX              | MATH 1015 & higher        |
| ALS 4554               | (except 4074)                   | ENT 3XXX               | NEUR 2025, 2026, 3044,    |
| ALS 4574               | BIOL 2XXX & higher              | ENT 4354               | 4044                      |
| APSC 3304              | (except 2204 and 3404)          | ENGL 3764 <sup>1</sup> | PHYS 2XXX & higher        |
| APSC 4304              | BMVS 4XXX & higher <sup>2</sup> | FIW 2314               | (except 2074, 2325, 2326) |
| APSC 4224              | CHEM 2XXX & higher              | FST 3XXX & higher      | PPWS 3XXX                 |
| APSC 4054              | (except 4024)                   | HNFE 3XXX              | PSYC 2074                 |
| APSC 3064 or APSC 4064 | DASC 4304                       |                        | STAT 3XXX & higher        |
| APSC 4994 (P/F)        | DASC 4374                       |                        | UH 4994                   |
|                        | DASC 4384                       |                        |                           |

| Course | Cr. | Grade | Course | Cr. | Grade | Course | Cr. | Grade |
|--------|-----|-------|--------|-----|-------|--------|-----|-------|
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |

**Free Electives:**

| Course | Cr. | Grade | Course | Cr. | Grade | Course | Cr. | Grade |
|--------|-----|-------|--------|-----|-------|--------|-----|-------|
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |
| _____  | ___ | ___   | _____  | ___ | ___   | _____  | ___ | ___   |

<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>PRE-VET OPTION</b><br><b>- Livestock Emphasis -</b>   |   |                    |
|--|---|--------------------|
| Course & No.   | Title   | Credits            |
| <b><u>Required Emphasis Courses</u></b>  |   |                    |
| APSC 2114* <sup>+</sup>  | Livestock Management and Handling   | 1 _____            |
| <b><u>Choose one of the following:</u></b>   |   |                    |
| APSC 4414 <sup>+</sup>   | Beef/Sheep Production   | 4 _____            |
| APSC 4444 <sup>+</sup>   | Swine Production  | or 3 _____         |
| <p>*APSC 2114 is a prerequisite for APSC 4414 and 4444</p> <p>+ Credits count in the in-major GPA</p>  |   |                    |
| <b><u>Required Science Courses:**</u></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 | 3 _____ or 4 _____ |
| <b><u>Restricted Electives:</u></b>  |   |                    |
|  | Science Electives   | _____              |
|  | Agricultural/Applied Electives  | _____              |
|  | Business Electives  | _____              |
| <b><u>Credits Needed:</u></b>  |   |                    |
|  | Agric./Applied, Business, or Science Electives  | _____              |
|  | <b>Total Restricted Electives</b>   | <b>38***</b>       |
| <p><b>**NOTE:</b> 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.</p> <p><b>***At least 9 of the 38 credits must be 4XXX</b></p> |   |                    |
| <b>Free Electives:</b> Choose free electives to total ≥ 120 credits  |   |                    |
|  | <b>Needed:</b>  | _____              |
|  | <b>Total Electives (minimum)</b>  | <b>47 or 50</b>    |



| <b>PRE-VET OPTION<br/>- Poultry Emphasis -</b>   |  |                                      |
|--|--|--------------------------------------|
| <b>Course &amp; No.</b>  | <b>Title</b>   | <b>Credits</b>                       |
| <b><u>Required Emphasis Courses:</u></b>   |  |                                      |
| APSC 2104* <sup>+</sup>  | Poultry Lab  | 1 _____                              |
| APSC 4404 <sup>+</sup>   | Commercial Poultry Enterprise Management   | 4 _____                              |
| <p>* ALS 2304 is a co-requisite of APSC 2104; APSC 2104 is a prerequisite for APSC 4404</p> <p><sup>+</sup> Credits count in the in-major GPA</p>  |  |                                      |
| <b><u>Required Science Courses:**</u></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, 3 _____ or 4 _____<br>Biochemistry for Biotechnology<br>& Life Sciences, or General Biochemistry |                                      |
| <b><u>Restricted Electives:</u></b>  |  |                                      |
|  |  | Science Electives _____              |
|  |  | Agricultural/Applied Electives _____ |
|  |  | Business Electives _____             |
| <br><b><u>Credits Needed:</u></b>  |  |                                      |
|  |  | Agric./Applied, Business, or _____   |
|  |  | Science Electives _____              |
| <b>Total Restricted Electives</b>  |  | <b>38***</b>                         |
| <p><b>**NOTE:</b> 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.</p> <p><b>***At least 9 of the 38 credits must be 4XXX</b></p> |  |                                      |
| <b>Free Electives:</b> Choose free electives to total $\geq 120$ credits _____   |  |                                      |
|  |  | <b>Needed:</b> _____                 |
| <b>Total Electives (minimum)</b>   |  | <b>47 or 50</b>                      |

| <b>PRE-VET OPTION<br/>- Equine Emphasis -</b>  |  |                 |
|--|--|-----------------|
| Course & No.   | Title  | Credits         |
| <b><u>Required Emphasis Courses</u></b>  |  |                 |
| APSC 2124* <sup>+</sup>  | Horse Management and Handling Lab  | 1 _____         |
| APSC 2424*   | Introduction to Equine Industry  | 3 _____         |
| APSC 4424 <sup>+</sup>   | Horse Production and Management  | 4 _____         |
| * APSC 2124 and 2424 are prerequisites for APSC 4424   |  |                 |
| <sup>+</sup> Credits count in the in-major GPA   |  |                 |
| <b><u>Required Science Courses:**</u></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, 3 _____ or 4 _____<br>Biochemistry for Biotechnology &<br>Life Sciences, or General Biochemistry |                 |
| <b><u>Restricted Electives:</u></b>  |  |                 |
|  | Science Electives  | _____           |
|  | Agricultural/Applied Electives   | _____           |
|  | Business Electives   | _____           |
| <b><u>Credits Needed:</u></b>  |  |                 |
|  | Agric./Applied, Business, or<br>Science Electives  | _____           |
|  | <b>Total Restricted Electives</b>  | <b>38***</b>    |
| <b>**NOTE: These courses fulfill the requirements for admission to the VA/MD<br/>Regional College of Veterinary Medicine. Students are responsible for checking to<br/>be sure they meet the requirements for admission to other veterinary schools.</b> |  |                 |
| <b>***At least 9 of the 38 credits must be 4XXX</b>  |  |                 |
| <b>Free Electives:</b> Choose free electives to total ≥ 120 credits  |  |                 |
|  | <b>Needed:</b>   | _____           |
|  | <b>Total Electives (minimum)</b>   | <b>47 or 50</b> |

| <b>PRE-VET OPTION</b><br><b>- Companion and Laboratory Animal Emphasis -</b>   |  |                 |
|--|--|-----------------|
| Courses & No.  | Title  | Credits         |
| <b><u>Required Emphasis Courses</u></b>  |  |                 |
| APSC 2164* <sup>+</sup>  | Comp/Lab Anim. Care & Handling   | 1 _____         |
| APSC 3064*   | Companion/Lab Anim. Science  | 3 _____         |
| APSC 4464 <sup>+</sup>   | Companion/Lab Animal Health and Management   | 4 _____         |
| <p>* APSC 2164 and 3064 are prerequisite for APSC 4464</p> <p><sup>+</sup> Credits count in the in-major GPA</p>   |  |                 |
| <b><u>Required Science Courses:**</u></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, 3 _____ <b>or</b> 4 _____<br>Biochemistry for Biotechnology<br>& Life Sciences, <b>or</b> General Biochemistry |                 |
| <b><u>Restricted Electives:</u></b>  |  |                 |
|  | Science Electives  | _____           |
|  | Agricultural/Applied Electives   | _____           |
|  | Business Electives   | _____           |
| <b><u>Credits Needed:</u></b>  |  |                 |
|  | Agric./Applied, Business, or   | _____           |
|  | Science Electives  | _____           |
|  | <b>Total Restricted Electives</b>  | <b>38***</b>    |
| <p><b>**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.</b></p> <p><b>***At least 9 of the 38 credits must be 4XXX</b></p> |  |                 |
| <p><b>Free Electives:</b> Choose free electives to total ≥ 120 credits</p>   |  |                 |
|  | <b>Needed:</b>   | _____           |
|  | <b>Total Electives (minimum)</b>   | <b>47 or 50</b> |