

Animal Science (BS): Industry (11ANSCBS-11ANSCIAS)

Freshman Year

Fall Semester	Credit	Spring Semester	Credit
ALS 103 Freshman Transitions and Diversity in Agriculture and Life Sciences	1	CH 101 Chem – A Molecular Science ²	3
ANS 150 Introduction to Animal Science ²	3	CH 102 General Chemistry Lab	1
ANS 151 Intro to Animal Science Lab	1	Animal Science Course ³	3
BIO 181 Intro Bio: Ecol, Evol, Biodiv & Lab	4	MA 114 Intro Finite Math or MA 121 Elements of Calculus or MA 131 Calc for Life & Mgt Sci A	3
ENG 101 Acad Writing & Research ²	4	BIO 183 Intro Bio: Cell & Molec Biol & Lab	4
MA 107 Pre-calculus I ²	3	HES_*** Health & Exercise Studies Course ^E	1
	16		15

Sophomore Year

Fall Semester	Credit	Spring Semester	Credit
ANS 205 Physiology of Domestic Animals	3	ANS 220 Repro & Lact Dom Anim	3
ANS 206 Anatomy of Domestic Animals	1	ANS 221 Repro & Lact Dom Anim Lab	1
ANS 215 Basic Agricultural Genetics	3	Business Mgt or Marketing Elective ⁵	3
ARE 201, EC 201, EC 202, or EC 205 ^D	3	ST 311 Intro to Statistics or ST(BUS) 350 Econ & Business Statistics	3
CH 220 Intro Organi Chem or (CH 221 Org Chem I and CH 222 Org Chem I Lab)	4	Social Science GEP Course ^D	3
COM 110, COM 112, or COM 211	3	HES_*** Health & Exercise Studies Course ^E	1
	17		14

Junior Year

Fall Semester	Credit	Spring Semester	Credit
ANS 230 Nutrition Dom Anim	3	CALS Group A, B, or C elective ⁴	5
ANS 231 Nutrition Dom Anim Lab	1	Business/Economics Elective ⁶	3
PY 131 Conceptual Physics	4	Animal Science Course ³	2
Business/Economics Elective ⁶	3	Humanities GEP Course ^C	6
Free Elective ⁹	3		
	14		16

Senior Year

Fall Semester	Credit	Spring Semester	Credit
ANS Animal Management Elective ⁷	3	ANS Discipline Course Elective ⁸	3
Interdisciplinary Perspectives GEP Courses ⁶	5-6	ANS Animal Management Elective ⁷	3
Free Elective ⁹	3	Additional Breadth GEP Course ^F	3
CALS Group A, B, or C elective ⁴	3	Free Elective ⁹	2
		CALS Group A,B, or C elective ⁴	3
	14-15		14

Minimum Credit Hours Required for Graduation*:

120

Major/Program Footnotes

1. Use of animals and animal specimens is critical to our educational program. To obtain full credit for Animal Science courses, students are required to participate in laboratory procedures involving animals and animal specimens. All activities with live animals are IACUC (Institutional Animal Care and Use Committee) approved. Many lectures also incorporate animals or animal specimens into the course.
2. ANS 150, MA 107, ENG 101, and CH 101 must be completed with a grade of C-minus or higher, and the student should repeat the course in the semester following the initial attempt if less than a C-minus is earned.
3. VMP 420 or any Animal Science (ANS) course (except ANS 225, ANS 301, ANS 480, ANS 492, ANS 493, ANS 494) that is not fulfilling another requirement can fulfill this Animal Science Elective category.
4. Courses for the Minor in Agricultural Business Management fulfill this requirement. The course listings for the College of Agriculture and Life Sciences Group A, Group B, or Group C electives can be found at : (<http://harvest.cals.ncsu.edu/index.cfm?showpage=25>).
5. Select one course (3 credits) from: ARE 303, Farm Management; ARE 304 Agribusiness Management; ARE 311, Agricultural Markets; or ARE 312, Agribusiness Marketing.
6. Select two courses (6 credits) from : ACC 200, Intro to Managerial Accounting; ARE 215, Small Business Accounting; ARE 303, Farm Management; ARE 304, Agribusiness Management; ARE 306, Agricultural Law; ARE 309, Environmental Law & Economic Policy; ARE 311, Agricultural Markets; ARE 312, Agribusiness Marketing; ARE 321, Agricultural Financial Management; ARE 332, Human Resource Management for Agribusiness; BUS 320, Financial Management; BUS 360, Marketing Methods; MIE 310, Introduction to Entrepreneurship; or MIE 330, Human Resource Management. Note: this 6 credit requirement is in addition to the 3 credits listed in footnote 5 (total of 9 credit hours) Note: 300-level BUS courses restricted to BUS minors & majors; 400-level BUS courses restricted to BUS majors.
7. Students must select at least two animal management courses (6 credits) from the following list: ANS 400, Companion Animal Management; ANS 402, Beef Cattle Mgt with ANS 462, Beef Cattle Management Lab; ANS 403, Swine Management; ANS 404, Dairy Cattle Management with ANS 464, Dairy Cattle Management Lab; ANS 408, Small Ruminant Management; ANS 410 Equine Management; ANS 411, Management of Growing and Performance Horses
8. Total of 3 credit hours (one course) is required from the following approved Animal Science Discipline courses: ANS(NTR,PO) 415, Comparative Nutrition; ANS(NTR) 419, Human Nutrition in Health and Disease; ANS 440, Selection of Domestic Animals; ANS 452, Advanced Reproductive Physiology and Biotechnology; ANS 453, Growth & Development of Domestic Animals; ANS/NTR 454, Lactation, Milk, and Nutrition; VMP 420, Diseases of Farm Animals; or any 500-level ANS course.
9. Students are encouraged to take an Ethics course as part of their Humanities, Additional Breadth, Interdisciplinary Perspectives, or Free electives.

*General Education Program (GEP) requirements and GEP Footnotes

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <https://oucc.dasa.ncsu.edu/general-education-program/>.

A. Mathematical Sciences (6 credit hours – one course with MA or ST prefix): **Major requirements fulfill this requirement.**

B. Natural Sciences (7 credit hours – include one laboratory course or course with a lab): **Major requirements fulfill this requirement.**

C. Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: COM 211

D. Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: ARE 201 or EC 201, EC 202 or EC 205

E. Health & Exercise Studies (2 credit hours – at least one 100-level Health & Exercise Studies Course)

Choose from the University approved GEP Health & Exercise Studies course list.

F. Additional Breadth (3 credit hours to be selected from the following checked University approved GEP course lists)

X Humanities/Social Sciences/Visual and Performing Arts

G. Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list .

H. Introduction to Writing (4 credit hours satisfied by completing ENG 101 with a C- or better)

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements

I. U.S. Diversity(USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite.

J. Global Knowledge (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite.

K. Foreign Language proficiency Proficiency at the FL_102 level is required for graduation.