

Appendix 3: Disciplinary Mapping – Skills and Knowledge Areas attained through B.Sc. (An. Biosc.) course offerings

Skills	Year of Program	Courses
oral communication	2	RCM 300 Rhetorical communication
	3	ANBI 375 Animals and the environment (debate)
	4	ANSC 430 Intensive Feedlot Production
literature comprehension	3	ANBI 375 Animals and the environment (paper)
	4	ANBI 492 Thesis
scientific writing	1	AGRC 112 Food/Animal Science (term paper)
popular/extension writing	1	ENG 1xx
	2	RCM 300 Rhetorical communication
	4	ANSC 440 Monogastric Animal Production II
computer literacy	1	ANBI 110 Domestic Animal Biology
	2	ANSC 313 Animal breeding and genetics
laboratory skills	3	ANSC 315 Animal and Poultry Nutrition
	1,2	Chemistry labs
animal handling/field	2	ANSC 212 Livestock and Poultry Production
	3	ANSC 315 Animal and Poultry Nutrition
	4	ANSC 430 Intensive Feedlot Production
	4	ANSC 440 Monogastric Animal Production II
problem solving/ critical thinking	3	ANBI 360 Canine and Feline Science
	4	ANBI 470 Applied Animal Biotechnology
	4	ANSC 460 Dairy (solve farm problem)
marketing/business	3	ANBI 360 Canine and Feline Science
	3	ANBI 320 Equine Science
	4	ANSC 410 Cow-Calf Management
work independently	4	ANBI 492 Thesis
group/team work	1	AGRC 112 Food/Animal Science
	2	ANSC 313 Animal breeding and genetics
	4	ANSC 410 Cow-Calf Management
integrity/ethical behaviour	4	ANBI 470 Animal Biotechnology
Biohazard awareness	3	ANSC 315 Animal and Poultry Nutrition
	4	ANBI 470 Animal Biotechnology
time management	4	ANBI 492 Thesis

Appendix 3: Disciplinary Mapping – Skills and Knowledge Areas attained through B.Sc. (An. Biosc.) course offerings-continued

Knowledge Areas	Year of Program	Course
biology	1	BIOL 120.3 Nature of Life
	1	ANBI 110 Domestic Animal Biology
	1	BIOL 224 Animal Body Systems
animal management	2	ANSC 212 Livestock and Poultry Production
	3,4	<i>Species specific courses</i>
reproduction	1,2	ANSC 212 Livestock and Poultry Production
	3	VBMS 325 Animal Physiology II
genetics	2	ANSC 313 Animal breeding and genetics
	4	ANBI 470 Applied Animal Biotechnology
physiology	3	VBMS 324 Animal Physiology I
	3	VBMS 325 Animal Physiology II
endocrinology	3	VBMS 325 Animal Physiology II
	4	ANBI 420 Comparative Endocrinology
environment	1	AGRC 112 Food/Animal Science
	3	ANBI 375 Animals and the environment
math	1	MATH 104 Calculus
basic statistics	2	PLSC 314 Statistical Methods
	4	ANSC 313 Animal breeding and genetics
inorganic chemistry	1	CHEM 112 General Chemistry
	1	CHEM 115
organic chemistry	1	CHEM 250 Organic Chemistry
biochemistry	2	BMSC 200 Biomolecules
	2	BMSC Metabolism
microbiology	2	BMSC 210 Microbiology or FABS 212
immunology	1	ANBI 110 Domestic Animal Biology
	4	ANBI 470 Applied animal biotechnology
digestion/nutrition	2	ANSC 212 Livestock and Poultry Production
	3	ANSC 315 Animal and Poultry Nutrition
	3	<i>Species specific courses</i>
anatomy	3	VBMS 314 Comparative anatomy
disease assessment	4	VLAC 411 or VTPA 412
animal ethics	3	ANBI 375 Animals and the environment (paper)
animal behavior/welfare	1	AGRC 112 Food/Animal Science
	4	<i>ANBI 411 Behaviour of Domestic Animals</i>

Appendix 4: Disciplinary Mapping – Skills required for potential career paths identified for B.Sc. (An. Biosc.) graduates

Potential Career	Required skills/knowledge areas		
Pharmacology representative	Anatomy Basic statistics Biochemistry Biology Computer literacy Digestion/nutrition Endocrinology	Group/team work Immunology Inorganic chemistry Integrity/ethical behaviour Literature comprehension Marketing / business Math	Oral communication Organic chemistry Physiology Popular/extension writing Problem solving/critical thinking Scientific writing
Research technician	Animal behaviour/welfare Animal handling/field training Basic statistics Biochemistry Biohazard awareness Biology Computer literacy Digestion/nutrition Disease assessment	Endocrinology Environment Group/team work Immunology Inorganic chemistry Integrity/ethical behaviour Laboratory skills Literature comprehension Math	Microbiology Oral communication Organic chemistry Physiology Problem solving/critical thinking Reproduction Scientific writing
Companion Animal/Pet Industry	Anatomy Animal behaviour/welfare Animal handling/field training Basic statistics Biochemistry Biohazard awareness Biology Computer literacy	Digestion/nutrition Disease assessment Endocrinology Environment Genetics Group/team work Inorganic chemistry Integrity/ethical behaviour	Math Oral communication Organic chemistry Physiology Problem solving/critical thinking Reproduction

Appendix 4: Disciplinary Mapping – Skills required for potential career paths identified for B.Sc. (An. Biosc.) graduates - Continued

Potential Career	Required skills/knowledge areas		
Laboratory Animal	Anatomy	Digestion/nutrition	Literature comprehension
	Animal behaviour/welfare	Disease assessment	Math
	Animal handling/field training	Endocrinology	Oral communication
	Basic statistics	Genetics	Organic chemistry
	Biochemistry	Group/team work	Physiology
	Biohazard awareness	Inorganic chemistry	Problem solving/critical thinking
	Biology	Integrity/ethical behaviour	Scientific writing
Regulatory Government	Computer literacy	Laboratory skills	
	Animal behaviour/welfare	Digestion/nutrition	Math
	Basic statistics	Disease assessment	Oral communication
	Biohazard awareness	Environment	Popular/extension writing
Environmental (animal related)	Biology	Group/team work	Problem solving/critical thinking
	Computer literacy	Literature comprehension	Scientific writing
	Anatomy	Disease assessment	Literature comprehension
	Animal behaviour/welfare	Endocrinology	Organic chemistry
	Basic statistics	Environment	Organization skills
	Biochemistry	Genetics	Physiology
	Biohazard awareness	Group/team work	Popular/extension writing
Pre-vet	Biology	Inorganic chemistry	Problem solving/critical thinking
	Chemistry	Integrity/ethical behaviour	
	Computer literacy	Laboratory skills	
	Basic statistics	Integrity/ethical behaviour	Physics
	Biochemistry	Math	Physiology
Pre-vet	Biology	Microbiology	Oral communication
	Genetics	Oral communication	Popular/extension writing
	Inorganic chemistry	Organic chemistry	Integrity/ethical behaviour