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

<table>
<thead>
<tr>
<th>Knowledge Areas</th>
<th>Year of Program</th>
<th>Course</th>
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<tbody>
<tr>
<td>biology</td>
<td>1</td>
<td>BIOL 120.3 Nature of Life</td>
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<tr>
<td></td>
<td>1</td>
<td>ANBI 110 Domestic Animal Biology</td>
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<tr>
<td></td>
<td>1</td>
<td>BIOL 224 Animal Body Systems</td>
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<td>animal management</td>
<td>2</td>
<td>ANSC 212 Livestock and Poultry Production</td>
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<td>3,4</td>
<td>Species specific courses</td>
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<tr>
<td>reproduction</td>
<td>1,2</td>
<td>ANSC 212 Livestock and Poultry Production</td>
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<td></td>
<td>3</td>
<td>VBMS 325 Animal Physiology II</td>
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<tr>
<td>genetics</td>
<td>2</td>
<td>ANSC 313 Animal breeding and genetics</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>ANBI 470 Applied Animal Biotechnology</td>
</tr>
<tr>
<td>physiology</td>
<td>3</td>
<td>VBMS 324 Animal Physiology I</td>
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<tr>
<td></td>
<td>3</td>
<td>VBMS 325 Animal Physiology II</td>
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<tr>
<td>endocrinology</td>
<td>3</td>
<td>VBMS 325 Animal Physiology II</td>
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<tr>
<td></td>
<td>4</td>
<td>ANBI 420 Comparative Endocrinology</td>
</tr>
<tr>
<td>environment</td>
<td>1</td>
<td>AGRC 112 Food/Animal Science</td>
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<td></td>
<td>3</td>
<td>ANBI 375 Animals and the environment</td>
</tr>
<tr>
<td>math</td>
<td>1</td>
<td>MATH 104 Calculus</td>
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<tr>
<td>basic statistics</td>
<td>2</td>
<td>PLSC 314 Statistical Methods</td>
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<tr>
<td></td>
<td>4</td>
<td>ANSC 313 Animal breeding and genetics</td>
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<tr>
<td>inorganic chemistry</td>
<td>1</td>
<td>CHEM 112 General Chemistry</td>
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<tr>
<td></td>
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<td>CHEM 115 …….</td>
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<td>organic chemistry</td>
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<tr>
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<td>BMSC 200 Biomolecules</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>BMSC Metabolism</td>
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<tr>
<td>microbiology</td>
<td>2</td>
<td>BMSC 210 Microbiology or FABS 212</td>
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<tr>
<td>immunology</td>
<td>1</td>
<td>ANBI 110 Domestic Animal Biology</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>ANBI 470 Applied animal biotechnology</td>
</tr>
<tr>
<td>digestion/nutrition</td>
<td>2</td>
<td>ANSC 212 Livestock and Poultry Production</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>ANSC 315 Animal and Poultry Nutrition</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Species specific courses</td>
</tr>
<tr>
<td>anatomy</td>
<td>3</td>
<td>VBMS 314 Comparative anatomy</td>
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<tr>
<td>disease assessment</td>
<td>4</td>
<td>VLAC 411 or VTPA 412</td>
</tr>
<tr>
<td>animal ethics</td>
<td>3</td>
<td>ANBI 375 Animals and the environment (paper)</td>
</tr>
<tr>
<td>animal behavior/welfare</td>
<td>1</td>
<td>AGRC 112 Food/Animal Science</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>ANBI 411 Behaviour of Domestic Animals</td>
</tr>
</tbody>
</table>
## Appendix 4: Disciplinary Mapping – Skills required for potential career paths identified for B.Sc. (An. Biosc.) graduates

<table>
<thead>
<tr>
<th>Potential Career</th>
<th>Required skills/knowledge areas</th>
</tr>
</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>Potential Career</th>
<th>Required skills/knowledge areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laboratory Animal</strong></td>
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</tr>
<tr>
<td>Anatomy</td>
<td>Anatomy</td>
</tr>
<tr>
<td>Animal behaviour/welfare</td>
<td>Animal behaviour/welfare</td>
</tr>
<tr>
<td>Animal handling/field training</td>
<td>Animal handling/field training</td>
</tr>
<tr>
<td>Basic statistics</td>
<td>Basic statistics</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Biohazard awareness</td>
<td>Biohazard awareness</td>
</tr>
<tr>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>Computer literacy</td>
<td>Computer literacy</td>
</tr>
<tr>
<td><strong>Regulatory Government</strong></td>
<td></td>
</tr>
<tr>
<td>Animal behaviour/welfare</td>
<td>Animal behaviour/welfare</td>
</tr>
<tr>
<td>Basic statistics</td>
<td>Basic statistics</td>
</tr>
<tr>
<td>Biohazard awareness</td>
<td>Biohazard awareness</td>
</tr>
<tr>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>Computer literacy</td>
<td>Computer literacy</td>
</tr>
<tr>
<td><strong>Environmental</strong> (animal related)</td>
<td></td>
</tr>
<tr>
<td>Anatomy</td>
<td>Anatomy</td>
</tr>
<tr>
<td>Animal behaviour/welfare</td>
<td>Animal behaviour/welfare</td>
</tr>
<tr>
<td>Basic statistics</td>
<td>Basic statistics</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>Biochemistry</td>
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<tr>
<td>Biohazard awareness</td>
<td>Biohazard awareness</td>
</tr>
<tr>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
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<tr>
<td>Computer literacy</td>
<td>Computer literacy</td>
</tr>
<tr>
<td><strong>Pre-vet</strong></td>
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<tr>
<td>Basic statistics</td>
<td>Basic statistics</td>
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<tr>
<td>Biochemistry</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>Genetics</td>
<td>Genetics</td>
</tr>
<tr>
<td>Inorganic chemistry</td>
<td>Inorganic chemistry</td>
</tr>
</tbody>
</table>