### Advising Worksheet for Animal Science Core Requirements

**Effective 2016-2017 Bulletin - 120 hrs**

<table>
<thead>
<tr>
<th>College Integrative Course (3 Hr)</th>
<th>MET</th>
<th>HR</th>
<th>ACE</th>
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</thead>
<tbody>
<tr>
<td>SCIL 101 Science and Decision-Making for a Complex World (B)</td>
<td>3</td>
<td>0</td>
<td>0</td>
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<thead>
<tr>
<th>Department Req (16 Hr)</th>
<th>MET</th>
<th>HR</th>
<th>ACE</th>
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<tbody>
<tr>
<td>ASCI 095 Animal Science Major Orientation Seminar (F)</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>ASCI 100 Fund of Animal Biology w/lab (B)</td>
<td>4</td>
<td>0</td>
<td>0</td>
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<tr>
<td>ASCI 201 Professional Development for Careers in Animal Science (S)</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>ASCI 320 Animal Nutrition &amp; Feeding (B)</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>ASCI 491 Animal Science Seminar (B)</td>
<td>1</td>
<td>1</td>
<td>1</td>
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| Capstone Course, Select From: ASCI 451, Livestock Management on Range & Pasture (AGRO 445/RNGE 445 - (F), ASCI 485 Animal Systems Analysis (S), ASCI 486 Animal Biological Systems (F) | 3 | 10 | 10 |

<table>
<thead>
<tr>
<th>Natural Sciences (8 Hr)</th>
<th>MET</th>
<th>HR</th>
<th>ACE</th>
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<tbody>
<tr>
<td>AGRO 315 Genetics or BIOS 206 General Genetics. <strong>NOTE:</strong> BIOS 206 requires both LIFE 120 &amp; LIFE 120L and LIFE 121 &amp; LIFE 121L as prerequisites (B)</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<tr>
<td>BIOS 101 &amp; BIOS General Biology &amp; Lab (B)</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<tr>
<td>LIFE 120 &amp; LIFE 120L Fundamentals of Biology I &amp; Lab (B)</td>
<td>4</td>
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**NOTE:** Students enrolled in the Biology or Veterinary Option are required to take LIFE 120 & LIFE 120L

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<tr>
<th>Mathematics and Statistics (5-10 Hr)</th>
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<tbody>
<tr>
<td>MATH 102 Trigonometry (2 cr) &amp; STAT 218 Introduction to Statistics (3 cr); plus one from MSYM 109 Physical Principles in Agriculture &amp; Life Sciences (4 cr) or PHYS 141 Elementary General Physics I (5 cr) or PHYS 151 Elements of Physics (4 cr), MATH 104 Applied Calculus (3 cr) &amp; STAT 218 Introduction to Statistics (3 cr), MATH 106 Calculus 1 (5 cr)</td>
<td>3</td>
<td>3</td>
<td>3</td>
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**NOTE:** Proficiency at the college algebra level must be demonstrated either by a placement exam or through coursework. If MATH 103 is taken instead of MATH 102, only 2 credit hours can be counted toward this requirement. **Note:** Students in the Veterinary Animal Sciences Option must take PHYS 141 as a required course for admittance to the ISU CVM

<table>
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<tr>
<th>Communications (9 cr)</th>
<th>MET</th>
<th>HR</th>
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<tr>
<td>WRITTEN: Select from ENGL 150 Writing &amp; Inquiry, ENGL 151 Writing &amp; Argument, ENGL 254 Writing &amp; Communities, JGEN 120 Basic Business Comm, JGEN 200 Technical Comm I, JGEN 300 Technical Comm II</td>
<td>1</td>
<td>1</td>
<td>1</td>
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**COMMUNICATIONS AND INTERPERSONAL SKILLS:** Select from any courses from the above listings not used to fulfill the ACE 1 or ACE 2 requirements. ALEC 202, ALEC 207 (ADPR 207), ALEC 302, ALEC 305, ALEC 350, ALEC 480, COMM 212, COMM 325, JGEN 103, JGEN 220, MNGT 311, MNGT 365

<table>
<thead>
<tr>
<th>Economics, Humanities &amp; Social Sciences (15 Hr)</th>
<th>MET</th>
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<th>ACE</th>
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<tbody>
<tr>
<td>ECON 200 or ECON 211 or ECON 212 or AECN 141</td>
<td>3</td>
<td>3</td>
<td>3</td>
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**ACE Courses, select one course each from ACE outcomes 5, 7, 8, and 9**

F=Fall Only
S=Spring Only
B=Both Fall & Spring
SS=Summer Session

TBA: To be announced by semester

NOTE: Course offerings are subject to change

by Department offering the course
### Animal Science-Veterinary Option

#### Departmental Requirements (17)
- ASCI 210 Ani Products OR ASCI 315 Ani Growth (B) **3**
- ASCI 340 Animal Physiological Systems **4**
- ASCI 341 Physiology & Mgmt of Reproduction (F) **4**
- **Select one class from the following (3)**
  - ASCI 250 Animal Management (S) **3**
  - ASCI 251 Introduction to Companion Animals (F) **3**
  - ASCI 252 Intro to the Horse Industry & Mgmt (F) **3**
- ASCI ASCI 254 Basic Swine Science (2 cr) and one (1 cr) course from the following: ASCI 254A, ASCI 354D, ASCI 354E, ASC 354F **3**
- Addt'l ASCI or FBMS 400 level courses (Excluding ASCI 496 and VBMS 496) (3)

#### Natural Sciences (26)
- CHEM 109 General Chemistry I (ALL) **4**
- CHEM 110 General Chemistry II (ALL) **4**
- CHEM 251 & CHEM 253 Organic Chemistry I & Lab (ALL) **4**
- BIOC 321 Elements of Biochemistry (3) (B) OR BIOC 431 Structure & Metabolism (BIOS /CHEM 431) (2) (B) **3**
- Life 120 & 120L Organismic Biology (4) (B)
- LIFE 121 & LIFE 121L Fund of Biology II & Lab **4**
- BIOS 312 & BIOS 314 Microbiology & Lab (ALL) **4**
- From the core curriculum-math & physics (students MUST take PHYS 141)

**NOTE:** PHYS 141 is a required course for admittance to most college of veterinary medicine including ISU CVM

**NOTE:** Although PHYS 142 is not required for admission to the ISU CVM, it is required by other colleges of veterinary medicine including KSU

#### Business Courses (3)
- Select from the "Business Courses" listed in the Animal Science Business Option

**NOTE:** Two writing courses (6 cr) and one oral communications course (3 cr) are required. Communications elective must be a writing course. Select appropriate courses from listing given under "Core Requirements"

#### ANIMAL SCIENCE EXPERIENTIAL LEARNING

**Internship, Extension, Research or Teaching Experience**
- ASCI 395A Industry Experiences (ALL)
- ASCI 395B Extension & Services Experiences (ALL)
- ASCI 395D Research Experiences (ALL)
- ASCI 395E Undergraduate Teaching Experience (ALL)
- ASCI 419 Meat Investigations (FDST 419) (S)
- ASCI 490A Beef Feedlot Management (F, SS)
- ASCI 499H Honors Thesis (ALL)
- GRAS 490 Internship Exper in Grazing Livestock Sys (TBA)
- AECN 495A Internship in Agri Financing & Banking (TBA)
- ASCI 495B Intern in Food Products Marketing Mgmt (TBA)
- AECN 495C Internship in Agricultural & Public Policy (TBA)
- EAEP 395 Agribusiness Entrepreneurship Internship (TBA)

**Industry Study Tours**
- ASCI 311A Equine Industry Study Tour (S)
- ASCI 311B Meat Industry Study Tour (F)
- ASCI 311D Pork Industry Study Tour (S)
- ASCI 311E Beef Industry Study Tour (S)
- AGRI 310 study Tours in International Agriculture (ALL)

**Animal & Meat Evaluation Experience**
- ASCI 300A Meat Evaluation & Judging (B)
- ASCI 300B Livestock Evaluation & Judging (F)
- ASCI 300D Meat Animal Evaluation (B)
- ASCI 300E Horse Evaluation & Judging (B)
- ASCI 400A Advanced Meat Grading & Evaluation (F)
- ASCI 400B Advanced Livestock Evaluation & Judging (F)
- ASCI 400E Advanced Horse Evaluation & Judging (F)
- ASCI 361 Equestrian Team Horsemanship/ Equitation (F)
- ASCI 456 Beef Cattle Merchandising (S)
- ASCI 481 Beef Industry Scholars-Beef Summit (F)
- ASCI 482 Beef Industry Scholars-Nat'l Beef Industry Policy (AECN 482) (S-ODD YEARS)
- AGRI 388 Employment Seminar (F)
- AGRI 389 Agricultural Concerns Seminar (TBA)