

# Animal Science BS Industry and Business Emphasis Curriculum Guide

Effective Beginning Fall 2014

|             |                         |                              |
|-------------|-------------------------|------------------------------|
| Name:       | ID:                     | Term/Year of Program Entry:  |
| Advisor(s): | Minors (if applicable): | Anticipated Graduation Date: |

All courses required within the Animal Science major must be taken A-F graded unless only offered as S-N. A grad of C- or higher is required in these courses. Consult an advisor with questions. The listed courses necessary for the Animal Science degree do not account for the University requirement of 120 or more credits necessary for awarding of a bachelor's degree. The student should plan for additional classes or minor(s) to account for the total needed.

## Foundation Courses

| Course & Credits  | Term(s) Offered                  | LE Status* OR College Requirement**           | Term Completed/Grade |
|---|----------------------------------|---|----------------------|
| Biol 1009 General Biology (4)   | F, S, SS                         | Biol  |                      |
| Comm 1101 Intro. to Public Speaking (3)   | F,S,SS                           | CLE   |                      |
| Writ 3562W Technical & Professional Writing (4)   | F,S,SS                           | WI (meets both upper level req. in the major) |                      |
| Math 1031 College Algebra (3)<br>or Math 1142 Short Calculus (4)<br>or Math 1271 Calculus (4) | F, S, SS<br>F, S, SS<br>F, S, SS | Math<br>Math<br>Math                          |                      |

## Professional Courses

|   |      |  |  |
|---|------|--|--|
| AnSc 1101 Introductory Animal Science (4)       | S    |  |  |
| AnSc 2401 Animal Nutrition (3)                  | F    |  |  |
| AnSc 3011 Statistics for Animal Scientists (4)  | F, S |  |  |
| AnSc 3221 Animal Breeding (4)                   | F    |  |  |
| AnSc 3301 Human & Animal Physiology Lecture (3) | F, S |  |  |
| AnSc 3302 Human & Animal Physiology Lab (1)     | F, S |  |  |

## Choose 1 course or course grouping from:

| Course & Credits   | Term(s) Offered | Term Completed/Grade |
|--|-----------------|----------------------|
| AnSc 4601 Pork Production Systems Mgmt. (4)  | F               |                      |
| AnSc 4602 Sheep Production Systems Mgmt. (4)   | S               |                      |
| AnSc 4603 Beef Production Systems Mgmt. (4)  | F               |                      |
| AnSc 4604 Dairy Production Systems Mgmt. (4)   | S               |                      |
| VCS 4606 Small Animal Mgmt. (3)  | S               |                      |
| AnSc 2055 Horse Management (2)<br><b>and</b><br>AnSc 2056 Horse Management Practicum (2) | F<br>F          |                      |
| Approved course through the Midwest Poultry Consortium                                   | SS              |                      |

## Required Coursework for Industry/Business Emphasis

Students in this emphasis must complete all courses below:

| Course & Credits   | Term(s) Offered | LE Status*  | Term Completed/Grade |
|--|-----------------|---|----------------------|
| ApEc 110 Principles of Microeconomics (4)  | F,S             |   |                      |
| Chem 1015 Intro. Chemistry Lecture (3)<br>and<br>Chem 1017 Introductory Chemistry Lab (1)        | ALL<br>ALL      | Phys-both lecture and lab required to complete LE |                      |
| BioC 2011 Biochem. for the Ag & Hlth Sciences (3)<br>or Hort 2100 Horticultural Biochemistry (3) | F,S<br>F        |   |                      |

**Select a minimum of (12) credits from the following courses:  
Classes used here cannot count for other requirements, unless a liberal education core or theme.**

| Course & Credits  | Term(s) Offered | LE Status* | Term Completed/Grade |
|---|-----------------|------------|----------------------|
| AnSc 3801 Livestock Merchandising (3)   | S               |            |                      |
| ApEc 1102 Principles of Macroeconomics (3)  | S               |            |                      |
| ApEc 1251 Principles of Accounting (3)  | F               |            |                      |
| ApEc 3001 Applied Microeconomics: Consumers, Producers and Markets (3)<br><i>[pre-req Calculus]</i> | F,S             |            |                      |
| ApEc 3002 Applied Microeconomics: Managerial Economics (4)<br><i>[pre-req ApEc 3001]</i>            | F,S             |            |                      |
| ApEc 3411 Commodity Marketing (3)   | F               |            |                      |
| ApEc 3451 Food & Agricultural Sales (3)   | S               |            |                      |
| ApEc 3501 Agribusiness Finance (3)  | F               |            |                      |
| ApEc 3811 Principles of Farm Management (3)   | S               |            |                      |
| ApEc 3821 Retail Center Management (3)  | S               |            |                      |
| ApEc 4451 Food Marketing Economics (3)  | F               |            |                      |
| ApEc 4821W Agribusiness Management (3)<br><i>[pre-req ApEc 3002 and MGMT 3001]</i>                  | S               |            |                      |
| Comm 3411 Introduction to Small Group Communication (3)   | ALL             |            |                      |
| Jour 3201 Principles of Strategic Communication: Advertising (3)                                    | ALL             |            |                      |
| Jour 4551 New Media and Culture (3)   | ALL             | TS & AH    |                      |
| Writ 3152W Writing on Issues of Science & Technology (4)  | F,S             | WI         |                      |
| Writ 3257 Technical & Professional Presentations (3)  | F,S             |            |                      |

**Choose at least (6) credits from the list of "Approved Elective Courses".  
Consult an advisor for more information.**

**Classes used here cannot count for other requirements, unless a liberal education core or theme.**

| Course & Credits | Term(s) Offered | LE Status* | Term Completed/Grade |
|------------------|-----------------|------------|----------------------|
|                  |                 |            |                      |
|                  |                 |            |                      |
|                  |                 |            |                      |

**Experiential Learning Requirement**

| Course & Credits   | Term(s) Offered | LE Status* | Term Completed/Grade |
|--|-----------------|------------|----------------------|
| AnSc 4096 Professional Internship (3)<br>or AnSc 4009W Undergraduate Research Thesis (6)<br>(registration for 4009W requires a minimum of two semesters with credits split over those semesters) | ALL<br>ALL      |            |                      |

**Choose (1) course designated as Interdisciplinary. Classes listed can also meet electives or liberal education core or theme requirements. Select from and/or see advisor for most up to date list:**

| Course & Credits                                       | Term(s) Offered | LE Status* | Term Completed/Grade |
|--|-----------------|------------|----------------------|
| AnSc 3203W Global Food Prod. & the Citizen (3)         | S               | Envt, WI   |                      |
| ApEc 3202 An Intro. To the Food System (3)             | S               |            |                      |
| ApEc 4103 World Food Problems (3)                      | S               | GP         |                      |
| CFAN 1501 Biotech, People & the Environment (3)        | S               | TS         |                      |
| CFAN 3333 Insects, Microbes and Plants (3)             | F               |            |                      |
| ESPM 1011 Issues in the Environment (3)                | F,S             | Envt       |                      |
| ESPM 4021W Problem Solving: Environ. Review (4)        | S               | WI         |                      |
| FScN 1102 Food: Safety, Risks, and Technology (3)      | F,S             | CLE        |                      |
| FW 2001W Intro to Fish., Wildlife, & Conserv. Blgy (3) | F               | Envt, WI   |                      |
| Hort 4850 Pollinator Protection (3)                    | S               |            |                      |
| PLPA 2003 Plaques, Famine and Beer (3)                 | F               | HP         |                      |

## Liberal Education Requirements-University Wide

Liberal Education (LE) courses are required by all students.

The following **CORE** requirements will not automatically be met by courses within this emphasis. Students should consult the online class schedule to find courses that satisfy the missing areas. Each course must be a minimum of 3 credits. Consult your advisor with questions.

| Requirement  | Course Title  | Term Completed/Grade |
|--|---|----------------------|
| Other Humanities (OH)  |   |                      |
| Literature (Lit)   |   |                      |
| Historical Perspectives (HP)<br><i>(suggestion: AnSc 1701)</i> |   |                      |
| University Writing-by placement                                | Writ 1301 or 1401 or AP or approved transfer course |                      |
| Writing Intensive Course (WI)-any level                        |   |                      |
| Writing Intensive Course (WI)-any level                        |   |                      |

The following liberal education **theme** requirements will not automatically be met by courses within this emphasis.

Students are required to *select two of the following and/or* consult your advisor with questions.

|                                  |  |  |
|----------------------------------|--|--|
| Diversity & Social Justice (DSJ) |  |  |
| Environment (Envt)               |  |  |
| Technology & Society (TS)        |  |  |

## Animal Science Elective Courses

Please note that certain courses have prerequisites or require instructor permission for enrollment. Some courses are not offered every semester listed or are on every other year schedule. Consult the online University course guide or see your advisor for the most updated information.

All classes subject to change/cancellation as merited by the department offering the course.

Courses may not count for two areas, unless meeting a liberal education theme or core (designated with \*).

| Course     | Credits | Term    | Title of Course  |
|------------|---------|---------|--|
| AnSc 1001  | (1)     | F       | Orientation to Animal Science ( <i>designed for freshman</i> )     |
| AnSc 1011  | (3)     | F       | Animals and Society*   |
| AnSc 1201  | (3)     | S       | Backyard Chickens: Science, Technology, and Society                |
| AnSc 1403  | (3)     | S       | Companion Animal Nutrition & Care                                  |
| AnSc 1511  | (3)     | F       | Food Animal Products for Consumers                                 |
| AnSc 1701  | (3)     | F       | Historical Influence of the Horse on Society*                      |
| AnSc 2012  | (3)     | S       | Livestock and Carcass Evaluation                                   |
| AnSc 2055  | (2)     | F       | Horse Management   |
| AnSc 2056  | (2)     | F       | Horse Management Practicum   |
| AnSc 3007  | (3)     | S       | Equine Nutrition   |
| AnSc 3203W | (3)     | S       | Environment, Global Food Production & the Citizen*                 |
| AnSc 3305  | (4)     | F       | Repro Biology in Health & Disease w/ Lab                           |
| AnSc 3307  | (1)     | F,S     | Artificial Insemination Techniques                                 |
| AnSc 3403  | (3)     | F       | Companion Animal Hot Button Issues                                 |
| AnSc 3509  | (3)     | S       | Animal Biotechnology   |
| AnSc 3511  | (3)     | S       | Animal Growth and Development                                      |
| AnSc 3609  | (2)     | F       | Bus. Planning for Livestock Enterprises                            |
| AnSc 3801  | (3)     | S       | Livestock Merchandising  |
| AnSc 4011  | (3)     | S       | Dairy Cattle Genetics  |
| AnSc 4305  | (2)     | S       | Companion and Wild Species Reproduction ( <i>pre-req of 3305</i> ) |
| AnSc 4401  | (3)     | F       | Swine Nutrition  |
| AnSc 4403  | (3)     | S       | Ruminant Nutrition   |
| AnSc 4404  | (2)     | F       | Applied Dairy Nutrition  |
| AnSc 4601  | (4)     | F       | Pork Production Systems Mgmt w/ Lab                                |
| AnSc 4602  | (4)     | S       | Sheep Production Systems Mgmt w/ Lab                               |
| AnSc 4603  | (4)     | F       | Beef Production Systems Mgmt w/ Lab                                |
| AnSc 4604  | (4)     | S       | Dairy Production Systems Mgmt w/ Lab                               |
| AnSc 4613  | (2)     | F       | Advanced Beef Prod Systems Mgmt w/ Lab                             |
| AnSc 4614  | (4)     | S       | Advanced Dairy Prod Systems Mgmt w/ Lab                            |
| AFEE 2051  | (3)     | F       | Current Technical Competencies                                     |
| Agro 1103  | (4)     | F       | Crops, Environment & Society w/ Lab*                               |
| ApEc 1101  | (4)     | F,S     | Principles of Microeconomics*                                      |
| ApEc 1251  | (3)     | F       | Principles of Accounting   |
| ApEc 3411  | (3)     | F       | Commodity Marketing  |
| ApEc 3451  | (3)     | S       | Food & Agricultural Sales  |
| ApEc 3811  | (3)     | F       | Principles of Farm Management                                      |
| CFAN 1501  | (3)     | S       | Biotechnology, People & the Environment*                           |
| Ent 3281   | (3)     | F       | Veterinary Entomology  |
| FDSY 2102  | (3)     | SS      | Diversity of Agricultural Production Systems ( <i>off-campus</i> ) |
| FScN 1102  | (3)     | F,S     | Food: Safety, Risks and Technology*                                |
| FScN 2021  | (4)     | F,S     | Introductory Microbiology w/ Lab                                   |
| GCD 3022   | (3)     | F,S, SS | Genetics   |
| SOIL 2125  | (4)     | F,S     | Basic Soil Science w/ Lab*   |
| VBS 2032   | (5)     | F,S     | General Microbiology w/ Lab  |
| VBS 2100   | (3)     | S       | Companion Animal Anatomy w/ Dissection Lab                         |
| VCS 4606   | (3)     | S       | Small Animal Management  |
| VPM 3700   | (2)     | S       | Equine Reproduction and Breeding Mgmt                              |

Midwest Poultry Consortium Summer Courses—Madison, WI (varies; see advisor for more information)

Any CFANS major learning/study abroad course (contact advisor for more information)

## Animal Science B.S. Degree Sample Plan

### Industry & Business Emphasis

~ Electives listed are for sample purposes only -your actual courses and when taken may differ~

| <b>Fall 1</b>                                 |                               |                | <b>Spring 1</b> |                               |                |
|---|-------------------------------|----------------|-----------------|-------------------------------|----------------|
|   |                               | <b>Credits</b> |                 |                               | <b>Credits</b> |
| AnSc 1001                                     | Orientation to Animal Science | 1              | AnSc 1101       | Intro. Animal Science         | 4              |
| Math 1031                                     | College Algebra               | 3              | ApEc 1102       | Principles of Macroeconomics  | 3              |
| Writ 1301                                     | University Writing            | 4              | Chem 1015       | Intro. Chemistry Lecture      | 3              |
| ApEc 1101                                     | Prin. Of Microeconomics       | 4              | Chem 1017       | Intro. Chemistry Lab          | 1              |
| Liberal Education/Required Elective of Choice |                               | <u>3-4</u>     | AnSc 2012       | Livestock & Carcass Eval.     | <u>3</u>       |
|   | <i>Total Credits Fall 1</i>   | <i>15-16</i>   |                 | <i>Total Credits Spring 1</i> | <i>14</i>      |

| <b>Fall 2</b>                           |                             |                | <b>Spring 2</b>                                    |                                  |                |
|---|-----------------------------|----------------|--|----------------------------------|----------------|
|   |                             | <b>Credits</b> |  |                                  | <b>Credits</b> |
| AnSc 2401                               | Animal Nutrition            | 3              | AnSc 3011  | Statistics for Animal Scientists | 4              |
| Biol 1009                               | General Biology             | 4              | AnSc 3203W   | Global Food Prod. & Citizen      | 3              |
| Comm 1101                               | Public Speaking             | 3              | AnSc 1403  | Comp. Animal Nutrition & Care    | 3              |
| AnSc 1511                               | Food Animal Products        | 3              | Liberal Education Requirement(s)/Credits of Choice |                                  | <u>4-6</u>     |
| Liberal Education Requirement of Choice |                             | <u>3-4</u>     |  | <i>Total Credits Spring 2</i>    | <i>14-16</i>   |
|   | <i>Total Credits Fall 2</i> | <i>16-17</i>   |  |                                  |                |

| <b>Fall 3</b>                                      |                                |                | <b>Spring 3</b>                         |                               |                |
|--|--------------------------------|----------------|---|-------------------------------|----------------|
|  |                                | <b>Credits</b> |   |                               | <b>Credits</b> |
| AnSc 3221  | Animal Breeding                | 4              | AnSc 3301                               | Human & Animal Phys. Lecture  | 3              |
| AnSc 4096*   | Professional Internship        | 3              | AnSc 3302                               | Human & Animal Phys. Lab      | 1              |
| ApEc 1251  | Principles of Accounting       | 3              | AnSc 4604                               | Dairy Prod. Systems Mgmt.     | 4              |
| Liberal Education Requirement(s)/Credits of Choice |                                | <u>4-6</u>     | AnSc 4403                               | Ruminant Nutrition            | 3              |
|  | <i>Total Credits of Fall 3</i> | <i>14-16</i>   | Liberal Education Requirement of Choice |                               | <u>3-4</u>     |
|  |                                |                |   | <i>Total Credits Spring 3</i> | <i>14-15</i>   |

| <b>Fall 4</b>                           |                                   |                | <b>Spring 4</b>                          |                               |                |
|---|-----------------------------------|----------------|--|-------------------------------|----------------|
|   |                                   | <b>Credits</b> |  |                               | <b>Credits</b> |
| AnSc 3609                               | Bus. Planning for An. Enterprises | 2              | AnSc 4614                                | Adv. Dairy Prod. Mgmt.        | 4              |
| Hort 2100                               | Agricultural Biochemistry         | 3              | Writ 3562W                               | Tech. & Professional Writing  | 4              |
| ApEc 3411                               | Commodity Marketing               | 3              | ApEc 3821                                | Retail Center Mgmt.           | 3              |
| Writ 3152W                              | Writing on Issues in Sci. & Tech  | 4              | Remaining Requirements/Credits if needed |                               | <u>0-7</u>     |
| Liberal Education Requirement of Choice |                                   | <u>3-4</u>     |  | <i>Total Credits Spring 4</i> | <i>11-18</i>   |
|   | <i>Total Credits Fall 4</i>       | <i>15-16</i>   |  |                               |                |

\*Actual work for the internship is generally completed over a summer. Credit registration is done during a regular term. Minimum of (3) credit is required; up to (6) credits of internship are allowed.