Code # AG24

**Bulletin Change Transmittal Form**

[x]  **Undergraduate Curriculum Council** - Print 1 copy for signatures and save 1 electronic copy.

[ ]  **Graduate Council** - Print 1 copy for signatures and send 1 electronic copy to mmcginnis@astate.edu

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| --- |
| **Bulletin Change**Please attach a copy of all catalogue pages requiring editorial changes. |

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| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**COPE Chair (if applicable)** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Department Chair:**  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**General Education Committee Chair (If applicable)**   |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Undergraduate Curriculum Council Chair** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Graduate Curriculum Committee Chair** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Vice Chancellor for Academic Affairs** |

**1.Contact Person** (Name, Email Address, Phone Number)

J. Kim Pittcock, kpittcoc@astate.edu; 870-972-2847

**2.Proposed Change**

Delete the 3 hours from the Agriculture core, that is an option of 10 courses. This adds 3 hours back into every major and emphasis areas within the college in Agriculture.

 In Agricultural Business, emphasis area of Agricultural communications, the 3 hours were added to the Emphasis area. This also allowed for a revision of this area that will mirror the Communications minor. In the 4 additional Agricultural Business emphasis areas, the 3 hours from the Agri core were incorporated into the Electives.

In Agricultural Studies Major, Agricultural Science emphasis, the 3 hours were placed in the emphasis area. The AGRI prefix will be added in this area and the FDST prefix (program dropped) will be deleted. In the Agricultural Education emphasis area, the 3 hours were placed in the emphasis area with a change in the number of hours and addition of course areas.

In Animal Science major, the 3 hours were placed in the Electives for all 3 emphasis areas.

In Plant and Soil Science, Agronomy emphasis area, the 3 hours were placed in the emphasis area. BIO 1503 was moved to the emphasis area also, with the removal of the requirement of the lab. Also AGRI 3543 and PSSC 3503 are both required, instead of either (OR) course in the emphasis areas. In the Emphasis area of Science/Research, the 3 hours were added to the Electives section. In the Environmental Horticulture emphasis area, the 3 hours were added to the Emphasis section and the same BIO 1503 change as noted from Agronomy Emphasis.

**3.Effective Date**

Fall 2014

**4.Justification**

Reduction of the 3 hours from the core was needed because several of the courses are no longer offered and several others now have prerequisites. The Genetics course(s) are required in several of the majors and thus cannot be taken by Animal or Plant and Soil Science Majors.

**From the most current electronic version of the bulletin, copy all bulletin pages that this proposal affects and paste it to the end of this proposal.**

**To copy from the bulletin:**

1. Minimize this form.
2. Go to <http://registrar.astate.edu/bulletin.htm> and choose either undergraduate or graduate.
3. This will take you to a list of the bulletins by year, please open the most current bulletin.
4. Find the page(s) you wish to copy, click on the “select” button and highlight the pages you want to copy.
5. Right-click on the highlighted area.
6. Click on “copy”.
7. Minimize the bulletin and maximize this page.
8. Right-click immediately below this area and choose “paste”.
9. For additions to the bulletin, please change font color and make the font size larger than the surrounding text. Make it noticeable.
10. For deletions, strike through the text, change the font color, and enlarge the font size. Make it noticeable.

\*\*note: areas in green were approved in Feb 2014 and do not appear in the 2013-14 Bulletin

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**Agricultural Programs**

**COLLEGE OF AGRICULTURE CORE COURSES**

|  |  |
| --- | --- |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| AGEC 1003, Introduction to Agricultural Business | 3 |
| AGRI 3233, Applied Agricultural Statistics **OR**ECON 2113, Business Statistics **OR**STAT 3233, Applied Statistics I | 3 |
| AGRI 3723, Agricultural Connections: Technical Interpretation and ProfessionalApplications | 3 |
| ANSC 1613, Introduction to Animal Science | 3 |
| PSSC 1303, Introduction to Plant Science | 3 |
| PSSC 2813, Soils | 3 |
| **~~Select three hours from the following:~~**~~AGED 3453, Agricultural Structural Systems~~~~AGED 445V, Practicum in Agricultural Communications~~~~AGED 4473, International Agriculture Study Tour~~~~AGRI 2213, Genetic Improvement of Plants and Animals~~~~BIOL 3013, Genetics~~~~FDST 2203, Introduction to Food Science PSSC 3503, Agriculture Spatial Technologies I TECH 2453, Solid Works I~~~~TECH 3863, Industrial Safety~~~~TECH 4823, Quality Assurance~~ | ~~3~~ |
| **Total Required Hours:** | **~~21~~ 18** |

**Major in Agricultural Business Bachelor of Science in Agriculture Emphasis in Agricultural Communications**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**ECON 2313, Macroeconomics**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 4033, Agricultural Law **OR**LAW 2023, Legal Environment of Business | 3 |
| AGEC 4053, Agricultural Finance | 3 |
| AGEC 4073, Agricultural Business Management | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| CIT 1503, Microcomputer Applications | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3153, Organizational Behavior **OR**MGMT 3123 Principles of Management | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Agricultural Communications):**Student may select from one of the career specialty areas or consult an advisor anddesign a program to meet the student’s particular career goals. The student consider- ing graduate school is strongly encouraged to take MATH 2143, Business Calculus or any other calculus course as an elective if it is not part of the emphasis area. | **Sem. Hrs.** |
| ~~AD 3023, Advertising and the Print Media~~  | ~~3~~ |
| CMAC 1001, Media Grammar and Style | 1 |
| CMAC 2003, Media Writing | 3 |
| CMP 2313, Multimedia Production | 3 |
| MMJ 2013, Multimedia Reporting | 3 |
| ~~MMJ 3003, Feature and Magazine Article Writing~~ | ~~3~~ |
| ~~Electives in Communications~~ | ~~6~~ |
| Nine hours of upper-level electives offered in Multimedia Journalism | 9 |
| **Sub-total** | **~~18~~ 19** |
| **Electives:** | **Sem. Hrs.** |
| Electives | ~~10~~  12 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Business Bachelor of Science in Agriculture Emphasis in Agricultural Economics**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**ECON 2313, Macroeconomics**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 4033, Agricultural Law **OR**LAW 2023, Legal Environment of Business | 3 |
| AGEC 4053, Agricultural Finance | 3 |
| AGEC 4073, Agricultural Business Management | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| CIT 1503, Microcomputer Applications | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3153, Organizational Behavior **OR**MGMT 3123 Principles of Management | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Agricultural Economics):**Student may select from one of the career specialty areas or consult an advisor anddesign a program to meet the student’s particular career goals. The student consider- ing graduate school is strongly encouraged to take MATH 2143, Business Calculus or any other calculus course as an elective if it is not part of the emphasis area. | **Sem. Hrs.** |
| CIT 3523, Operations Management | 3 |
| ECON 3313, Microeconomic Analysis | 3 |
| ECON 3353, Macroeconomic Analysis | 3 |
| MATH 2143, Business Calculus | 3 |
| Electives in MATH, ECON, MGMT, AGEC | 6 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Electives | ~~10~~ 13 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Business Bachelor of Science in Agriculture Emphasis in Agricultural Finance**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**ECON 2313, Macroeconomics**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 4033, Agricultural Law **OR**LAW 2023, Legal Environment of Business | 3 |
| AGEC 4053, Agricultural Finance | 3 |
| AGEC 4073, Agricultural Business Management | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| CIT 1503, Microcomputer Applications | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3153, Organizational Behavior **OR**MGMT 3123 Principles of Management | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Agricultural Finance):**Student may select from one of the career specialty areas or consult an advisor anddesign a program to meet the student’s particular career goals. The student consider- ing graduate school is strongly encouraged to take MATH 2143, Business Calculus or any other calculus course as an elective if it is not part of the emphasis area. | **Sem. Hrs.** |
| AGEC 3053, Commodity Futures Markets | 3 |
| ECON 3323, Money and Banking | 3 |
| FIN 3713, Business Finance | 3 |
| Electives in AGEC, FIN, ECON | 9 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Electives | ~~10~~ 13 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Business**

**Bachelor of Science in Agriculture**

**Emphasis in Agricultural Marketing and Management**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**ECON 2313, Macroeconomics**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 4033, Agricultural Law **OR**LAW 2023, Legal Environment of Business | 3 |
| AGEC 4053, Agricultural Finance | 3 |
| AGEC 4073, Agricultural Business Management | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| CIT 1503, Microcomputer Applications | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3153, Organizational Behavior **OR**MGMT 3123 Principles of Management | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Agricultural Marketing and Management):** Student may select from one of the career specialty areas or consult an advisor and design a program to meet the student’s particular career goals. The student consider- ing graduate school is strongly encouraged to take MATH 2143, Business Calculus or any other calculus course as an elective if it is not part of the emphasis area. | **Sem. Hrs.** |
| AGEC 3053, Commodity Futures Markets | 3 |
| AGEC 4023, International Commodity Marketing | 3 |
| MKTG 3043, Retailing **OR**AGEC 3063, Agricultural Sales and Services | 3 |
| Electives in AGEC, MKTG, MGMT | 9 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Electives | ~~10~~ 13 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Business Bachelor of Science in Agriculture Emphasis in Farm Management**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**ECON 2313, Macroeconomics**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 4033, Agricultural Law **OR**LAW 2023, Legal Environment of Business | 3 |
| AGEC 4053, Agricultural Finance | 3 |
| AGEC 4073, Agricultural Business Management | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| CIT 1503, Microcomputer Applications | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3153, Organizational Behavior **OR**MGMT 3123 Principles of Management | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Farm Management):**Student may select from one of the career specialty areas or consult an advisor anddesign a program to meet the student’s particular career goals. The student consider- ing graduate school is strongly encouraged to take MATH 2143, Business Calculus or any other calculus course as an elective if it is not part of the emphasis area. | **Sem. Hrs.** |
| AGEC 3013, Computerized Ag Records **OR**ACCT 4013, Tax Accounting | 3 |
| AGEC 3053, Commodity Futures Markets | 3 |
| AGEC 4013, Farm Appraisal | 3 |
| Electives in PSSC, ANSC, AGEC | 9 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Electives | ~~10~~ 13 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Studies Bachelor of Science in Agriculture Emphasis in Agricultural Science**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| See emphasis area below. |  |
| **Emphasis Area (Agricultural Science):** | **Sem. Hrs** |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry | 2 |
| Electives from AGEC, AGED, AGRI, ANSC, ~~FDST,~~ PSSC/HORT, and TECH*No more than 12 hours in one area.* | ~~41~~ 44 |
| **Minor:** | **Sem. Hrs** |
| Minor must be approved by advisor and should not include courses taken to fulfill general educationrequirements. | 18 |
| **Total Required Hours:** | **120** |

**Major in Agricultural Studies Bachelor of Science in Agriculture Emphasis in Agricultural Education**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory**BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| See emphasis area below. |  |
| **Emphasis Area (Agricultural Education):** | **Sem. Hrs** |
| ANSC, 1621, Introduction to Animal Science Laboratory | 1 |
| PSSC 2811, Soils Lab | 1 |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry | 2 |
| **Select three of the following:**AGED 2433, Principles of Agricultural Power: Electricity and Internal Combustion EnginesAGED 2453, Application of Welding Technologies to AgricultureAGED 3433, Agricultural Equipment Hydraulic SystemsAGED 3453, Agricultural Structural Systems | 9 |
| **~~Nine~~ Twelve hours of the following eighteen must be upper-level:** |  |
| AGRI, or AGED elective | 0-3 |
| ~~PSSC or~~ HORT elective | 0-3~~-6~~ |
| AGEC elective | 3 |
| ANSC elective | 3-6 |
| PSSC Elective | 3-6 |
| TECH Elective | 3 |
| **Sub-total** | **~~28~~ 31** |
| **Professional Education Requirements:**Grade of “C” or better required for all Professional Education Requirements.Courses denoted below with an asterisk (\*) require admission to the Teacher Education Program. For additional information, see Professional Education Requirements for Secondary Majors in the College of Education section. | **Sem. Hrs** |
| AGED 1403, Basic Agricultural Mechanics | 3 |
| AGED 1411, Introduction to Agricultural and Extension Education | 1 |
| AGED 4433, Methods of Teaching Agricultural Mechanics | 3 |
| AGED 4462, Agricultural Youth Organizations | 2 |
| SCED 2513 Introduction to Secondary Teaching | 3 |
| VOED 4503, Foundations of Adult Education in Vocational Education | 3 |
| PSY, 3703, Educational Psychology | 3 |
| \*EDAG 4623, Special methods for Teaching Agricultural Education | 3 |
| \*TIAG 4826, Teaching Internship in the Secondary School | 12 |
| **Sub-total** | **33** |
| **Total Required Hours:** | **120** |

**Major in Agricultural Studies Bachelor of Science in Agriculture Emphasis in Agricultural Systems Technology**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra*PHYS 2504, General Physics I*BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section)~~PSSC 3503, Agriculture Spatial Technologies I required.~~ | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| ~~See emphasis area below.~~ PSSC 3503, Agriculture Spatial Technologies I  | 3 |
| **Emphasis Area (Agricultural Systems Technology):** | **Sem. Hrs** |
| AGEC 3003, Agricultural Marketing or AGEC 3013, Agricultural Records or AGEC 3063, Agricultural Sales and Service | 3 |
| AGRI 3543, Fundamentals of GIS | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| AGED 3433, Agricultural Equipment Hydraulic Systems | 3 |
| CHEM 1043, Fundamental Concepts of Chemistry | 3 |
| MATH 1033, Plane Trigonometry | 3 |
| PHYS 2064. General Physics II | ~~3~~4 |
| AGRI 4773, Remote Sensing | 3 |
| TECH 2453, Solid Works I | 3 |
| TECH 2453 Solidworks I | 3 |
| PSSC 3513, Agricultural Spatial Technologies II | 3 |
| PSSC 4543, Advanced GIS for Agriculture and Natural Resources | 3 |
| PSSC 4713, Soil Quality Assessment and Interpretation or PSSC 4853, Soil and Water Conservation | 3 |
| TECH 2863, Principles of Technology | 3 |
| TECH 4813, Operations Systems Research | 3 |
| TECH 3803, Electrical Systems | 3 |
| TECH 3863, Industrial Safety | 3 |
| PSSC 3323, Weeds and Weed Control | 3 |
| Upper level elective in PSSC | 3 |
| Upper level elective in TECH | 3 |
| **Sub-total** | **61** |
| **Total Required Hours:** | **120** |

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**Major in Animal Science Bachelor of Science in Agriculture Emphasis in Animal Science**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:**In order to receive General Education credit for either of the microbiology courses, students with this major must take BIO 1303 **AND** 1301, Biology of Animals and Laboratory. The credit hours for the Biology of Animal courses will NOT count toward the total General Education hours. | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR****CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Laboratory**BIO 2103* ***AND*** *2101, Microbiology for Nursing and Allied Health and Laboratory* ***OR****BIO 4104, Microbiology**ECON 2313, Principles of Macroeconomics* ***OR*** *ECON 2333, Economic issues and Concepts**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry **OR**CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 2 or 4 |
| BIO 1303 **AND** 1301, Biology of Animals and Lab **OR**BIO 2013 **AND** 2011, Biology of the Cell and Lab | 4 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR**BIO 3013, Genetics | 3 |
| **Select four of the following:**ANSC 3203, Small Animal Care and ManagementANSC 3653, Meat Science and ProcessingANSC 3663, Sheep Production ANSC 4613, Horse Production ANSC 4623, Beef ProductionANSC 4643 Techniques of Farm Animal Production | 12 |
| **Sub-total** | **28 or 30** |
| **Emphasis Area (Animal Science):** | **Sem. Hrs.** |
| AGEC 4073, Agricultural Business Management | 3 |
| ANSC 3073, Poultry Flock Management | 3 |
| ANSC 4663, Principles of Breeding | 3 |
| ANSC 4673, Digestive Physiology and Nutrition of Animals | 3 |
| ANSC 4683, Theriogenology | 3 |
| **Sub-total** | 15 |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~16 or 18~~** **19-21** |
| **Total Required Hours:** | **120** |

**Major in Animal Science Bachelor of Science in Agriculture Emphasis in Equine Management**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:**In order to receive General Education credit for either of the microbiology courses, students with this major must take BIO 1303 **AND** 1301, Biology of Animals and Laboratory. The credit hours for the Biology of Animal courses will NOT count toward the total General Education hours. | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR****CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Laboratory**BIO 2103* ***AND*** *2101, Microbiology for Nursing and Allied Health and Laboratory* ***OR****BIO 4104, Microbiology**ECON 2313, Principles of Macroeconomics* ***OR*** *ECON 2333, Economic issues and Concepts**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry **OR**CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 2 or 4 |
| BIO 1303 **AND** 1301, Biology of Animals and Lab **OR**BIO 2013 **AND** 2011, Biology of the Cell and Lab | 4 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR**BIO 3013, Genetics | 3 |
| **Select four of the following:**ANSC 3203, Small Animal Care and ManagementANSC 3653, Meat Science and ProcessingANSC 3663, Sheep ProductionANSC 4623, Beef ProductionANSC 4643, Techniques of Farm Animal Production | 12 |
| **Sub-total** | **28 or 30** |
| **Emphasis Area (Equine Management):** | **Sem. Hrs.** |
| AGEC 4073, Agricultural Business Management | 3 |
| ANSC 1522, Beginning English Equitation | 2 |
| ANSC 1602, Equitation | 2 |

**Major in Animal Science (cont.) Bachelor of Science in Agriculture Emphasis in Equine Management**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

|  |  |
| --- | --- |
| ANSC 1612, Intermediate Western Equitation | 2 |
| ANSC 2623, Equine Care and Management | 3 |
| ANSC 4613 Horse Production | 3 |
| ANSC 4743, Equine Nutrition | 3 |
| **Sub-total** | 18 |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~13 or 15~~  16-18** |
| **Total Required Hours:** | **120** |

**Major in Animal Science Bachelor of Science in Agriculture Emphasis in Pre-veterinary**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course:** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:**In order to receive General Education credit for either of the microbiology courses, students with this major must take BIO 1303 **AND** 1301, Biology of Animals and Laboratory. The credit hours for the Biology of Animal courses will NOT count toward the total General Education hours. | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR****CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Laboratory**BIO 4104, Microbiology**ECON 2313, Principles of Macroeconomics* ***OR*** *ECON 2333, Economic issues and Concepts**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 4 |
| BIO 1303 **AND** 1301, Biology of Animals and Lab **OR**BIO 2013 **AND** 2011, Biology of the Cell and Lab | 4 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR**BIO 3013, Genetics | 3 |
| **Select three of the following:**ANSC 3203, Small Animal Care and ManagementANSC 3653, Meat Science and ProcessingANSC 3663, Sheep Production ANSC 4613, Horse Production ANSC 4623, Beef ProductionANSC 4643 Techniques of Farm Animal Production | 9 |
| **Sub-total** | **27** |
| **Emphasis Area (Pre-veterinary):** | **Sem. Hrs.** |
| ANSC 4673, Digestive Physiology and Nutrition of Animals | 3 |
| ANSC 4683, Theriogenology | 3 |
| CHEM 3103 **AND** 3101, Organic Chemistry I and Laboratory | 4 |
| CHEM 4243, Biochemistry | 3 |
| MATH 1033, Plane Trigonometry **OR**MATH 1054, Precalculus | 3-4 |
| PHYS 2054, General Physics I | 4 |
| PHYS 2064, General Physics II | 4 |
| **Sub-total** | **24-25** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~9-10~~ 12-13** |
| **Total Required Hours:** | **120** |

**Major in Plant and Soil Science Bachelor of Science in Agriculture Emphasis in Agronomy**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Lab**BIOL 1003* ***AND*** *1001, Biological Sciences and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| AGEC 3013, Computerized Agricultural Records **OR**CIT 1503, Microcomputer Applications | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| ~~BIO 1503~~ **~~AND~~** ~~1501, Biology of Plants and Laboratory~~ | 4 |
| BIO 3303 **AND** 3301, General Entomology and Laboratory **OR**BIO 3313 **AND** 3311, Economic Entomology and Laboratory | 4 |
| PSSC 3313, Plant Disease Management | 3 |
| PSSC 2811, Soils Laboratory | 1 |
| PSSC 1301, Plant Science Laboratory | 1 |
| PSSC 4313, Plant Growth and Development | 3 |
| **Sub-total** | **~~25~~ 21** |
| **Emphasis Area (Agronomy):** | **Sem. Hrs.** |
| AGRI 3543, Fundamentals of GIS **~~OR~~**~~PSSC 3503, Agricultural Spatial Technologies~~ | 3 |
| CHEM 1052, Fundamentals Concepts of Chemistry II | 2 |
| PSSC 3323, Weeds and Weed Control | 3 |
| PSSC 3503, Agricultural Spatial Technologies I | 3 |
| PSSC 4813, Soil Fertility | 3 |
| PSSC or HORT electives, or BIO 1503 , Biology of Plants or related area | 18 |
| **Sub-total** | **~~29~~ 32** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~7~~ 11** |
| **Total Required Hours:** | **120** |

**Major in Plant and Soil Science Bachelor of Science in Agriculture Emphasis in Science/Research**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Lab**BIOL 1003* ***AND*** *1001, Biological Sciences and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| AGEC 3013, Computerized Agricultural Records **OR**CIT 1503, Microcomputer Applications | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory | 4 |
| BIO 3303 **AND** 3301, General Entomology and Laboratory **OR**BIO 3313 **AND** 3311, Economic Entomology and Laboratory | 4 |
| PSSC 3313, Plant Disease Management | 3 |
| PSSC 2811, Soils Laboratory | 1 |
| PSSC 1301, Plant Science Laboratory | 1 |
| PSSC 4313, Plant Growth and Development | 3 |
| **Sub-total** | **25**  |
| **Emphasis Area (Science/Research):** | **Sem. Hrs.** |
| CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 4 |
| CHEM 3103 **AND** 3101, Organic I and Laboratory | 4 |
| CHEM 3113 **AND** 3111, Organic II and Laboratory | 4 |
| CHEM 4243, Biochemistry | 3 |
| **Select one of the following:**MATH 2204, Calculus IMATH 2194, Survey of CalculusAGRI 4233, Experimental Agricultural Statistics | 3-4 |
| PSSC or HORT electives or related area | 10-11 |
| **Sub-total** | **29** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~7~~ 10** |
| **Total Required Hours:** | **120** |

**Major in Plant and Soil Science**

 **Bachelor of Science in Agriculture Emphasis in Environmental Horticulture**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Lab**BIOL 1003* ***AND*** *1001, Biological Sciences and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | ~~21~~ 18 |
| **Major Requirements:** | **Sem. Hrs.** |
| AGEC 3013, Computerized Agricultural Records **OR**CIT 1503, Microcomputer Applications | 3 |
| AGRI 2213, Genetic Improvement of Plants and Animals | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| ~~BIO 1503~~ **~~AND~~** ~~1501, Biology of Plants and Laboratory~~ | 4 |
| BIO 3303 **AND** 3301, General Entomology and Laboratory **OR**BIO 3313 **AND** 3311, Economic Entomology and Laboratory | 4 |
| PSSC 3313, Plant Disease Management | 3 |
| PSSC 2811, Soils Laboratory | 1 |
| PSSC 1301, Plant Science Laboratory | 1 |
| PSSC 4313, Plant Growth and Development | 3 |
| **Sub-total** | **~~25~~ 21** |
| **Emphasis Area (Environmental Horticulture):** | **Sem. Hrs.** |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry | 2 |
| HORT 3293, Landscape Plant Materials | 3 |
| HORT 2253, Fundamentals of Horticulture | 3 |
| HORT 4253, Greenhouse Management | 3 |
| HORT electives or BIO 1503 , Biology of Plants or related area or related area | 18 |
| PSSC 3323, Weeds and Weed Control | 3 |
| **Sub-total** | **~~29~~ 32** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~7~~ 11** |
| **Total Required Hours:** | **120** |