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| For Academic Affairs and Research Use Only | |
| CIP Code: |  |
| Degree Code: |  |

**Bulletin / Banner Change Transmittal Form**

**[X ] Undergraduate Curriculum Council**

**[ ] Graduate Council**

Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

Email completed proposals to [curriculum@astate.edu](mailto:curriculum@astate.edu) for inclusion in curriculum committee agenda.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | NA | Enter date |   **Department Curriculum Committee Chair** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **COPE Chair (if applicable)** |
| |  |  | | --- | --- | | Donald Kennedy | 1/25/2018 |   **Department Chair:** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Head of Unit (If applicable)** |
| |  |  | | --- | --- | | J Kim Pittcock | 1/24/2018 |   **College Curriculum Committee Chair** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Undergraduate Curriculum Council Chair** |
| |  |  | | --- | --- | | Timothy Burcham | 1/25/2018 |   **College Dean** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Graduate Curriculum Committee Chair** |
| |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **General Education Committee Chair (If applicable)** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Vice Chancellor for Academic Affairs** |

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

Dr. Donald Kennedy, [dkennedy@astate.edu](mailto:dkennedy@astate.edu) 870-972-3704

**2. Proposed Change**

The current Agriculture Core is 18 hours, the college is now expanding the new Agriculture Core to 24 hours.

Core changes: Addition of TECH 3773, Statistics as a choice of one of the statistics courses.

2 new courses: AGRI 3813, Agricultural Biosystems I and AGRI 3823, Agricultural Biosystems II will be added.

Addition of AGRI 420V, Internships in Agriculture as an option to with AGRI 4723 (number changed from 3723).

This change will reduce all the majors’ elective hours.

In the Major in Ag Studies, 2 emphasis areas will have additional changes. Emphasis of Agri Edu has a deleted course that is no longer taught, as well as the reduction in elective hours. For the Agri Systems Technology emphasis area, 3 hours of electives were reduced and a 3 hour course (choose 1 of 3) was deleted because further reduction of upper level electives would leave the student 3 hours short of upper level credit hours.

**3. Effective Date**

Fall 2018

**4. Justification –** *Please provide details as to why this change is necessary.*

The College of Agriculture, Engineering & Technology is expanding the Agriculture Core to address many current trends and applications that the graduates need to be successful in the Agri workforce, and up to date on current trends in the field of Agriculture. Changes in the Agriculture Core will facilitate this goal.

**Bulletin Changes**

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| --- |
| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Follow the following guidelines for indicating necessary changes.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.**  - Deleted courses/credit hours should be marked with a red strike-through (~~red strikethrough~~)  - New credit hours and text changes should be listed in blue using enlarged font (blue using enlarged font).  - Any new courses should be listed in blue bold italics using enlarged font (***blue bold italics using enlarged font***)  *You can easily apply any of these changes by selecting the example text in the instructions above, double-clicking the ‘format painter’ icon 🡪 , and selecting the text you would like to apply the change to.*  *Please visit* [*https://youtu.be/yjdL2n4lZm4*](https://youtu.be/yjdL2n4lZm4) *for more detailed instructions.* |

**AGRICULTURE CORE COURSES**

|  |  |
| --- | --- |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| **Select four of the following:**  AGEC 1003, Introduction to Agricultural Business  AGST 2003, Introduction to Ag Systems Technology  ANSC 1613, Introduction to Animal Science  PSSC 1303, Introduction to Plant Science  PSSC 2813, Soils | ~~3~~  **12** |
| **Select one of the following:**  AGRI 3233, Applied Agricultural Statistics **~~OR~~**  **~~ECON 2113, Business Statistics OR~~**  STAT 3233, Applied Statistics  **TECH 3773, Statistics** | 3 |
| **AGRI 3813, Agricultural Biosystems I**  **AGRI 3823, Agricultural Biosystems II** | **3**  **3** |
| **Select one of the following:**  **AGRI 420V, Internships in Agriculture**  AGRI ~~3723~~ **4723**, Agricultural Connections: Technical Interpretation and Professional Applications | 3 |
| ~~ANSC 1613, Introduction to Animal Science~~ | ~~3~~ |
| ~~PSSC 1303, Introduction to Plant Science~~ | ~~3~~ |
| ~~PSSC 2813, Soils~~  *~~(Not Required for Animal Science - Pre-veterinary Majors)~~* | ~~0-3~~ |
| **Total Required Hours:** | **~~15-18~~**  **24** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

105

**Major in Agricultural Business**

**Bachelor of Science in Agriculture**

**Emphasis in Agricultural Economics and Finance**

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

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR***  *CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory*  *ECON 2313, Principles of Macroeconomics*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3053, Commodity Futures Markets | 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 **OR** CS 1013, Introduction to Computers | 3 |
| ECON 2323, Principles of Microeconomics | 3 |
| MGMT 3123 Principles of Management **OR** MGMT 3153, Organizational Behavior | 3 |
| MKTG 3013, Marketing | 3 |
| **Sub-total** | **33** |
| **Emphasis Area (Agricultural Economics and Finance):**  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. | **Sem. Hrs.** |
| CIT 3523, Operations Management | 3 |
| ECON 3313, Microeconomic Analysis | 3 |
| ECON 3323, Money and Banking | 3 |
| ECON 3353, Macroeconomic Analysis | 3 |
| FIN 3713, Business Finance | 3 |
| FIN 3763, Financial Institutions and Markets | 3 |
| MATH 2143, Business Calculus | 3 |
| **Sub-total** | **21** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~10~~**  **~~4~~** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

106

**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/.

|  |  |
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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR***  *CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory*  *ECON 2313, Principles of Macroeconomics*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| ACCT 2033, Introduction to Financial Accounting | 3 |
| ACCT 2133, Introduction to Managerial Accounting | 3 |
| AGEC 3053, Commodity Futures Markets | 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 **OR** CS 1013, Introduction to Computers | 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. | **Sem. Hrs.** |
| AGEC 3003, Agricultural Marketing | 3 |
| AGEC 3013, Agricultural Records | 3 |
| AGEC 3063, Agricultural Sales and Services | 3 |
| AGEC 4013, Farm Appraisal | 3 |
| AGEC 4023, International Commodity Marketing | 3 |
| AGEC 4043, Land Economics | 3 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~13~~**  **7** |
| **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/.

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *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** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **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, ANSC, AGRI, PSSC/HORT, TECH *No more than 12 hours in one area.* | 44  **38** |
| **Sub-total** | **~~46~~**  **40** |
| **Minor:** | **Sem. Hrs** |
| Minor must be approved by advisor and should not include courses taken to fulfill general education requirements. | **18** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

108

**Major in Agricultural Studies**

**Bachelor of Science in Agriculture**

**Emphasis in Agricultural Communications**

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

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory*  *CHEM 1013,* ***AND*** *CHEM 1011, General Chemistry I and Laboratory* ***OR***  *CHEM 1043* ***AND*** *CHEM 1041, Fundamental Concepts of Chemistry and Laboratory*  *CMAC 1003, Mass Communications in Modern Society*  *ECON 2313, Principles of Macroeconomics* ***OR***  *ECON 2333, Economic Issues and Concepts*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| See emphasis area below. | **-** |
| **Emphasis Area (Agricultural Communications:)** | **Sem. Hrs** |
| AD 3023, Principles of Advertising **OR** PR 3003, Principles of Public Relations | 3 |
| AGEC 3063, Agricultural Sales and Services | 3 |
| AGEC 4083, Agricultural Policy and Current Issues | 3 |
| AGED 1411, Introduction to Agricultural and Extension Education | 1 |
| AGED 3443, Leadership in Agriculture | 3 |
| AGED 445V, Practicum in Agricultural Communications | 3 |
| AGED 4462, Agricultural Youth Organizations | 2 |
| AGRI 420V, Internships in Agriculture | 3 |
| AGRI 4433, Organic Agricultural Production | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| AGST 1003, Modern Agricultural Systems | 3 |
| AGST 3543, Fundamentals of GIS/GPS | 3 |
| CMAC 1001, Media Grammar and Style | 1 |
| CMAC 2003, Media Writing | 3 |
| CMAC 2053, Introduction to Visual Communications | 3 |
| ENG 3043, Technical Writing **OR** MDIA 4053, Advanced Reporting | 3 |
| MDIA 2013 **AND** MDIA 2010, Multimedia Reporting Laboratory | 3 |
| MDIA 2313, Multimedia Production | 3 |
| MDIA 3313, Audio and Video Production | 3 |
| PRAD 4213, Social Media in Strategic Communications **OR** GCOM 3673, Desktop Publishing | 3 |
| AGEC, AGED, AGRI, AGST, ANSC, HORT, PSSC or VOED electives | **9**  **3** |
| **Sub-total** | **64** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

110

**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/.

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *CHEM 1011, General Chemistry I and Laboratory* ***OR***  *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** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **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 Engines  AGED 2453, Application of Welding Technologies to Agriculture  AGED 3433, Agricultural Equipment Hydraulic Systems  AGED 3453, Agricultural Structural Systems | 9 |
| Electives in AGRI, AGEC, AGED, ANSC, HORT, PSSC, or TECH  *(~~12~~ 9 hours must be upper-level and all electives must be approved by advisor)* | **~~18~~**  **15** |
| **Sub-total** | **~~31~~ 28** |
| **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 and Behavioral Science 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~~ 30** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

111

**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/.

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *PHYS 2054, General Physics I*  *BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| See emphasis area below. |  |
| **Emphasis Area (Agricultural Systems Technology):** | **Sem. Hrs** |
| **Select one of the following:**  AGEC 3003, Agricultural Marketing **~~OR~~**  AGEC 3013, Agricultural Records **~~OR~~**  AGEC 3063, Agricultural Sales and Service | 3 |
| AGED 3433, Agricultural Equipment Hydraulic Systems | 3 |
| AGRI 4223, Agriculture and the Environment | 3 |
| AGST 1003, Modern Agricultural Systems | 3 |
| **~~AGST 2003, Intro to Ag Systems Technology OR TECH 2863, Principles of Technology~~** | **~~3~~** |
| AGST 3503, Agricultural Spatial Technologies I | 3 |
| AGST 3513, Agricultural Spatial Technologies II | 3 |
| AGST 3543, Fundamentals of GIS/GPS | 3 |
| AGST 4003, Modern Irrigation Systems | 3 |
| AGST 4013, Precision Application Technology | 3 |
| AGST 4543, Advanced GIS for Agriculture and Natural Resources | 3 |
| AGST 4773, Remote Sensing | 3 |
| CHEM 1043, Fundamental Concepts of Chemistry | 3 |
| MATH 1033, Plane Trigonometry | 3 |
| PHYS 2064, General Physics II | 4 |
| **Select one of the following:**  PSSC 3323, Weeds and Weed Control **~~OR~~**  PSSC 4713, Soil Quality Assessment and Interpretation **~~OR~~**  PSSC 4853, Soil and Water Conservation | 3 |
| TECH 3803, Electrical Systems | 3 |
| TECH 3863, Industrial Safety | 3 |
| TECH 4813, Operations Systems Research | 3 |
| Upper-level electives in AGST, AGRI, PSSC | **~~6~~**  **3** |
| **Sub-total** | **64** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

112

**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/.

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR***  *CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Laboratory*  *ECON 2313, Principles of Macroeconomics* ***OR***  *ECON 2333, Economic issues and Concepts*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR** BIO 3013, Genetics | 3 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| BIO 2103 **AND** 2101, Microbiology for Nursing and Allied Health and Laboratory | 4 |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry **OR** CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 2 or 4 |
| Animal Science (ANSC) Upper-level Electives | 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 |
| 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** |
| **Additional Support Courses:** | **Sem. Hrs.** |
| Upper-level Support Courses (AGEC, AGED, ANSC, BIO, CHEM, PSSC) | **9** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~7 or 9~~**  **1-3** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

113

**Major in Animal Science**

**Bachelor of Science in Agriculture**

**Emphasis in Production and Management**

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

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* ***OR***  *CHEM 1043* ***AND*** *1041, Fundamental Concepts of Chemistry and Laboratory*  *ECON 2313, Principles of Macroeconomics* ***OR***  *ECON 2333, Economic issues and Concepts*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR** BIO 3013, Genetics | 3 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| BIO 2103 **AND** 2101, Microbiology for Nursing and Allied Health and Laboratory | 4 |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry **OR** CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 2 or 4 |
| Animal Science (ANSC) Upper-level Electives | 12 |
| **Sub-total** | **28 or 30** |
| **Emphasis Area (Production and Management):** | **Sem. Hrs.** |
| AGEC 4073, Agricultural Business Management | 3 |
| ANSC 3703, Poultry Flock Management | 3 |
| ANSC 4663, Principles of Breeding | 3 |
| ANSC 4673, Digestive Physiology and Nutrition of Animals | 3 |
| ANSC 4683, Reproductive Physiology | 3 |
| **Sub-total** | **15** |
| **Additional Support Courses:** | **Sem. Hrs.** |
| Upper-level Support Courses (AGEC, AGED, ANSC, BIO, CHEM, PSSC) | **6** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~13 or 15~~**  **7-9** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

114

**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/.

|  |  |
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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory*  *ECON 2313, Principles of Macroeconomics* ***OR***  *ECON 2333, Economic issues and Concepts*  *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~15~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| AGRI 2213, Genetic Improvement of Plants and Animals **OR** BIO 3013, Genetics | 3 |
| ANSC 1621, Introduction to Animal Science Laboratory | 1 |
| ANSC 3613, Nutritional Management of Domestic Animals | 3 |
| ANSC 3633, Veterinary Anatomy and Physiology | 3 |
| BIO 2103 **AND** 2101, Microbiology for Nursing and Allied Health and Laboratory **OR** BIO 4104, Microbiology | 4 |
| CHEM 1023 **AND** 1021, General Chemistry II and Laboratory | 4 |
| Animal Science (ANSC) Upper-level Electives | 9 |
| **Sub-total** | **27** |
| **Emphasis Area (Pre-veterinary):** | **Sem. Hrs.** |
| ANSC 4673, Digestive Physiology and Nutrition of Animals | 3 |
| ANSC 4683, Reproductive Physiology | 3 |
| CHEM 3103 **AND** 3101, Organic Chemistry I and Laboratory | 4 |
| CHEM 3113 **AND** 3111, Organic Chemistry II 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** | **28-29** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~11-12~~**  **5-6** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

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**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/.

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| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *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** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| AGEC 3013, 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 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** | **21** |
| **Emphasis Area (Agronomy):** | **Sem. Hrs.** |
| AGST 3503, Agricultural Spatial Technologies | 3 |
| AGST 3543, Fundamentals of GIS | 3 |
| CHEM 1052, Fundamental Concepts of Organic and Biochemistry | 2 |
| PSSC 3323, Weeds and Weed Control | 3 |
| PSSC 4804, Principles of Crop Production | 4 |
| PSSC 4813, Soil Fertility | 3 |
| AGRI, AGST, HORT or PSSC electives, or BIO 1503, Biology of Plants, or related area | 14 |
| **Sub-total** | **32** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~11~~**  **5** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

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**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/.

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 41) |  |
| **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. 84)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite*  *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** |
| **Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section) | **~~18~~**  **24** |
| **Major Requirements:** | **Sem. Hrs.** |
| AGEC 3013, 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 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** | **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 4333, Greenhouse and Nursery Production | 3 |
| PSSC 3323, Weeds and Weed Control | 3 |
| AGRI, AGST or HORT electives, or BIO 1503, Biology of Plants, or related area | 18 |
| **Sub-total** | **32** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **~~11~~**  **5** |
| **Total Required Hours:** | **120** |

*The bulletin can be accessed at http://www.astate.edu/a/registrar/students/*

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