Code # SM25 (2015)

**Bulletin / Banner 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 pheath@astate.edu

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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)

D. Gilmore, dgilmore@astate.edu. 972-3263

**2.Proposed Change**

Create Biological Sciences-specific foreign language requirement to replace college-wide requirement which is being stricken. See below.

**3.Effective Date**

Fall 2016

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

Foreign language requirements for the departments within the College of Science and Mathematics are in place at the college level. Abandonment of the requirements at the college-level means that individual departments within the college must specify what, if any, foreign language requirements should take their place. The consensus within the Department of Biological Sciences is to maintain the current College requirements as the Departmental requirements.

**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.* |

**Department of Biological Sciences**

*Professor Thomas Risch, Chair***Professors:** *Cramer, Farris, A. Grippo, R. Grippo, Johnson, McKay, Srivatsan, Trauth* **Associate Professors:** *Bennett, Bouldin, Gilmore, Huss, Marsico, Medina-Boliver, Sikkel* **Assistant Professors:** *Boves, Fluker, Rolland, Zhou***Instructors:** *Huggins, Klotz*

The Department of Biological Sciences serves students desiring to gain a broad background in biology, botany, environmental biology, zoology, or wildlife ecology and management. This preparation qualifies students for professional work in health professions, teaching, research, industry, or for graduate study.

The Bachelor of Science in Education degree or Bachelor of Science degree is awarded to students successfully completing one of the programs described below. These programs are planned for students preparing for careers requiring a broad spectrum in biology or a more specialized area within the biological sciences.

For lecture courses having an associated laboratory course, both lecture and laboratory courses must be passed before credit for graduation is assigned.

Foreign Language Requirement

All students seeking a baccalaureate degree in the Department of Biological Sciences must demonstrate a basic proficiency in a foreign language. This may be done in one of the following ways:

1. By completing two years of a single foreign language in high school.

2. By completing the second semester of an elementary foreign language course at the col­lege level. Students with no foreign language experience must enroll in the first semester of the freshman year and complete six hours of a single language. Students who have completed one year of a foreign language in high school should enroll in Elementary Language II (3 hours).

3. By passing an examination acceptable to the foreign language faculty as proof of pro­ficiency equivalent to successful completion of the second semester of the elementary year of a foreign language at the college level.

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**Major in Biological Sciences**

**Bachelor of Science
Emphasis in Biology**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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **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 LaboratoryBIO 2013* ***AND*** *2011, Biology of the Cell and LaboratoryCOMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **35**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357for foreign language requirements).*  |  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3011, Genetics and Laboratory  | 4  |
| BIO 3023, Principles of Ecology  | 3  |
| BIO 4021, Biological Seminar  | 1  |
| CHEM 1023 **AND** 1021, General Chemistry II and Laboratory  | 4  |
| CHEM 3103 **AND** 3101, Organic Chemistry I and Laboratory  | 4  |
| CHEM 3113 **AND** 3111, Organic Chemistry II and Laboratory  | 4  |
| MATH 2194, Survey of Calculus  | 4  |
| PHYS 2054, General Physics I  | 4  |
| PHYS 2064, General Physics II  | 4  |
| BIO 4542 **AND** 4541, Mycology and Laboratory **OR**BIO 4552 **AND** 4551, Medical Mycology and Laboratory  | 3  |

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**Major in Biological Sciences**

**Bachelor of Science**

**Emphasis in Botany**

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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **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* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **35**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3011, Genetics and Laboratory  | 4  |
| BIO 3023, Principles of Ecology  | 3  |

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**Major in Biological Sciences**

**Bachelor of Science**

**Emphasis in Environmental Biology**

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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **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* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **35**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Bio­logical Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3011, Genetics and Laboratory  | 4  |
| PHYS 2064, General Physics II  | 4  |

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**Major in Biological Sciences**

**Bachelor of Science**

**Emphasis in Pre-professional Studies**

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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **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* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **35**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3011, Genetics and Laboratory  | 4  |
| BIO 3023, Principles of Ecology  | 3  |

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**Major in Biological Sciences**

**Bachelor of Science**

**Emphasis in Zoology**

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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **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* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **35**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |

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**Major in General Science**

**Bachelor of Science in Education**

**Emphasis in Biology**

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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **Students with this major must take the following:** *MATH 2194, Survey of Calculus* *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *POSC 2103, Introduction to United States Government* *PSY 2013, Introduction to Psychology* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **36**  |
| **Language Requirement:**  |  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3011, Genetics and Laboratory  | 4  |

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**Major in Biotechnology**

**Bachelor of 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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **Students with this major must take the following:** *MATH 2194, Survey of Calculus* *CHEM 1013 AND CHEM 1011, General Chemistry I and Laboratory* *BIO 2013 AND 2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **36**  |
| **Language Requirement:**  |  |
| *A student must complete the foreign language requirements before being considered a Biological Sciences Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| BIO 2042, Biotechnology in a Global Society  | 2  |
| BIO 3013 **AND** BIO 3011, Genetics and Laboratory  | 4  |

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**Major in Wildlife Ecology and Management**

**Bachelor of 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.**  |
| BIO 1013, Making Connections - Biology  | **3**  |
| **General Education Requirements:**  | **Sem. Hrs.**  |
| See General Education Curriculum for Baccalaureate degrees (p. 83) **Students with this major must take the following:** *MATH 1054, Precalculus Mathematics or MATH course that requires MATH 1023 as a prerequisite* *CHEM 1013* ***AND*** *1011, General Chemistry I and Laboratory* *BIO 2013* ***AND*** *2011, Biology of the Cell and Laboratory* *COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)*  | **36**  |
| **Language Requirement:**  | **Sem. Hrs.**  |
| *A student must complete the foreign language requirements before being considered a Wildlife Ecol­ogy and Management Major. (Refer to p. 357 for foreign language requirements).*  |
| **Major Requirements:**  | **Sem. Hrs.**  |
| AGST 3543, Fundamentals of GIS/GPS  | 3  |
| BIO 1303 **AND** 1301, Biology of Animals and Laboratory  | 4  |
| BIO 1503 **AND** 1501, Biology of Plants and Laboratory  | 4  |
| BIO 3013 **AND** 3311, Genetics and Laboratory  | 4  |

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