

Natural Science: Associate in Science Degree (Biological Sciences)

The purpose of the Associate in Science in Natural Science (A.S.N.S.) degree is to address the needs of students interested in science, technology, engineering, and mathematics (STEM). Students can use the A.S.N.S. degree to better market their science background or in preparation for transfer to a four-year institution. The A.S.N.S. in Biological Sciences provides a clear pathway to properly prepare students for transfer with core introductory courses and laboratories in chemistry, mathematics, and physics typically required in the first two years of a broad range of biological science baccalaureate degrees at four-year universities.

Biological Sciences Program Student Learning Outcomes (PSLOs) approved 03/01/2013:

1. Analyze data effectively using currently available technology.
2. Communicate scientific ideas and principles clearly and effectively.
3. Analyze and apply fundamental mathematical, physical, and chemical concepts and techniques to scientific issues.
4. Apply fundamental concepts and techniques in their chosen natural science field of student, such as biology, chemistry, engineering, physics, etc.

Fall (Semester 1)

| Course | Course Title/Category | Credits |
|-----------|--|---------|
| CHEM 161 | General Chemistry I | 3 |
| CHEM 161L | General Chemistry Lab I | 1 |
| MATH 241 | Calculus I | 4 |
| SCI 170 | STEMinar: Science, Technology, Engineering, and Mathematics Seminar | 1 |
| | Foundations: Global and Multicultural Perspectives (FG): Any FGA, FGB, or FGC course | 3 |
| | Foundations: Written Communication (FW): Any FW course | 3 |

1. CHEM 161: This course fulfills the Diversification: Physical Sciences (DP) category.
2. CHEM 161L: This course fulfills the Diversification: Laboratory (science) (DY) category.
3. MATH 241: This course fulfills the Foundations: Quantitative Reasoning (FQ) category.
4. Foundations: Global and Multicultural Perspectives (FG): A total of 6 credits are required and are recommended to be completed in semesters 1 and 2. Any two courses with different FG designations are required.

Spring (Semester 2)

| Course | Course Title/Category | Credits |
|-----------|--|---------|
| CHEM 162 | General Chemistry II | 3 |
| CHEM 162L | General Chemistry II Laboratory | 1 |
| MATH 242 | Calculus II | 4 |
| | Diversification: Social Sciences (DS): Any DS course | 3 |
| | Electives: Any 100-level or higher course (3 credits) | 3 |
| | Foundations: Global and Multicultural Perspectives (FG): Any FGA, FGB, or FGC course | 3 |

1. Foundations: Global and Multicultural Perspectives (FG): A total of 6 credits are required and are recommended to be completed in semesters 1 and 2. Any two courses with different FG designations are required.

Fall (Semester 3)

| Course | Course Title/Category | Credits |
|-----------|--|---------|
| BIOL 171 | Introduction to Biology I | 3 |
| BIOL 171L | Introduction to Biology Laboratory I | 1 |
| | PHYS 151 or PHYS 170 | 3-4 |
| | PHYS 151L or PHYS 170L | 1 |
| | Diversification: Arts (DA), Humanities (DH), or Literatures (DL) | 3 |
| | Electives: Any 100-level or higher course (3 credits) | 3 |

1. BIOL 171: This course fulfills the Diversification: Biological Sciences (DB) category.

Spring (Semester 4)

| Course | Course Title/Category | Credits |
|-----------|---|---------|
| BIOL 172 | Introduction to Biology II | 3 |
| BIOL 172L | Introduction to Biology Laboratory II | 1 |
| | PHYS 152 or PHYS 272 | 3 |
| | PHYS 152L or PHYS 272L | 1 |
| | Electives: Any 100-level or higher course (5-6 credits) | 5-6 |

Graduation Requirements (to be satisfied within the 60-credit A.S. degree)

| Course | Course Title/Category | Credits |
|--------|--|-----------|
| | Graduation Requirement: Writing Intensive (WI): At least 1 WI course | |
| | Total Credits | 60 |

Category Descriptions

Diversification: Arts (DA), Humanities (DH), or Literatures (DL)

Refer to the "Diversification and Foundations Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Diversification: Social Sciences (DS): Any DS course

Refer to the "Diversification and Foundations Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Foundations: Global and Multicultural Perspectives (FG): Any FGA, FGB, or FGC course

Refer to the "Diversification and Foundations Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Foundations: Written Communication (FW): Any FW course

Refer to the "Diversification and Foundations Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Graduation Requirement: Writing Intensive (WI): At least 1 WI course

Refer to the "Graduation Requirement Course List" under the "Programs (Certificates and Degrees)" section of the catalog for more information.