

# Natural Science: Associate in Science Degree (Physical 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 Physical 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 Physical science baccalaureate degrees at four-year universities.

## *Physical 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
MATH 242	Calculus II	4
	CHEM, ECE, or ICS Option	1-4
	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
PHYS 170	General Physics I	4
PHYS 170L	General Physics I Lab	1
	Diversification: Arts (DA), Humanities (DH), or Literatures (DL)	3
	Electives: Any 100-level or higher course (6 credits)	6

## Spring (Semester 4)

Course	Course Title/Category	Credits
PHYS 272	General Physics II	3
PHYS 272L	General Physics II Lab	1
	Electives: Any 100-level or higher course (11 credits)	11

## Graduation Requirements (to be satisfied within the 61-64-credit A.S. degree)

Course	Course Title/Category	Credits
	Graduation Requirement: Writing Intensive (WI): At least 1 WI course	
	Total Credits	61-64

## Category Descriptions

### CHEM, ECE, or ICS Option

Choose from the following:

CHEM 162L (1), ECE 160 (4), ICS 111 (3)

### 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.