

# GENERAL STUDIES: NATURAL SCIENCES - PATTERN I

The Associate in Arts in General Studies Pattern I with an emphasis in Natural Sciences degree covers a broad area of study and is intended for students who may not be planning to transfer to a four-year university or who may need to explore possibilities before committing themselves to a major. The courses that fulfill the Natural Sciences area of emphasis will examine the physical universe, its' life forms and natural phenomena. The courses are designed to develop students' appreciation and understanding of the scientific method, and encourage an understanding of the relationships between science and other human activities.

Students are required to:

1. Complete Oxnard College's General Education requirements to include areas A-F
2. Choose an area of emphasis from one of three categories listed below.
  - a. Complete a minimum of **18 units in the chosen area of emphasis** with a grade of "C" or better (or a "P") in each of the courses selected within the chosen area.
  - b. Complete a minimum of **6 of the 18 units within a single discipline.**
3. Complete a minimum of 60 degree-applicable units.
4. Complete competency requirements in Mathematics and English
5. Complete requirements in scholarship (2.0 minimum cumulative degree-applicable GPA)
6. Complete residency requirements.
  - a. Complete residency requirements. For students in the Ventura County Community College District, a minimum of 12 semester units must be completed in residence within the district.

**NOTE:** Students planning to transfer to a four-year university are advised that this curriculum may not adequately prepare them for transfer. General Studies Patterns II and III are designed for transfer students.

Students will select a minimum of 18 units from the courses below, with a minimum of 6 units in a single discipline.

Course ID	Title	Units/ Hours
ANAT R101	General Human Anatomy	4
ANTH R101	Introduction to Biological Anthropology	3
ANTH R101H	Honors: Introduction to Biological Anthropology	3
ANTH R101L	Introduction to Biological Anthropology Lab	1
ANTH R118	Introduction to Forensic Science	3
AST R101	Introduction to Astronomy	3
AST R101L	Astronomy Laboratory	1
BIOL R100	Marine Biology	3
BIOL R100L	Marine Biology Laboratory	1
BIOL R101	General Biology	3
BIOL R101H	Honors: General Biology	3
BIOL R101L	General Biology Laboratory	1
BIOL R120	Principles of Biology I	4

BIOL R120L	Principles of Biology I Lab: Intro to Cellular and Molecular Biology	1
BIOL R122	Principles of Biology II	4
BIOL R122L	Principles of Biology II Laboratory	1
BIOL R155	Principles of Botany	3
BIOL R155L	Principles of Botany Laboratory	1
BIOL R170	Biological Marine Resource Management	1
CHEM R104	General, Organic, and Biological Chemistry	5
CHEM R110	Elementary Chemistry	5
CHEM R112	Elementary Organic and Biological Chemistry	5
CHEM R120	General Chemistry I	5
CHEM R122	General Chemistry II	5
CHEM R130	Organic Chemistry I	5
CHEM R132	Organic Chemistry II	5
ESRM R100	Introduction to Environmental Science	3
ESRM R100L	Introduction to Environmental Science Laboratory	1
GEOG R101	Elements of Physical Geography	3
GEOG R101L	Physical Geography Laboratory	1
GEOG R103	Introduction to Weather and Climate	3
GEOL R101	Physical Geology	3
GEOL R101L	Physical Geology Laboratory	1
GEOL R103	Introduction to Oceanography	3
GEOL R103L	Introduction to Oceanography Laboratory	1
GEOL R114	Historical Geology	3
GEOL R114L	Historical Geology Laboratory	1
GEOL R121	Earth Science with Laboratory	4
GEOL R130	Environmental Geology	3
MICR R100	Principles of Microbiology	3
MICR R100L	Principles of Microbiology Laboratory	2
MST R100	Marine Biology	3
MST R100L	Marine Biology Laboratory	1
MST R103	Introduction to Oceanography	3
MST R103L	Introduction to Oceanography Laboratory	1
PHSC R170	Concepts in Physical Science	4
PHSO R101	Human Physiology	5
PHYS R101	College Physics 1	4
PHYS R101L	College Physics 1 Laboratory	1
PHYS R102	College Physics 2	4
PHYS R102L	College Physics 2 Laboratory	1
PHYS R121	Physics with Calculus 1	5
PHYS R122	Physics with Calculus 2	5
PHYS R131	Physics for Scientists and Engineers 1	5
PHYS R132	Physics for Scientists and Engineers 2	5
PHYS R133	Physics for Scientists and Engineers 3	5
PSY R105	Introduction to Physiological Psychology	3
<b>Total Required Major Units</b>		<b>18</b>
Oxnard College General Education		29
Double-counted Units		- 3-6
Free Electives Required		16-19
<b>Total Units Required for the A.A. Degree</b>		<b>60</b>

Upon successful completion of this program, students will be able to:

- Utilize critical thinking skills in evaluating reports of scientific information regarding source, bias, and the scientific method.
- Demonstrate an understanding and appreciation of the scientific method
- Express an understanding of the relationships between science and other human activities which may include recognizing components of scientific decision making and apply personal and social values within the process of decision making in scientific endeavors.
- Apply appropriate quantitative and qualitative methods to interpret and analyze pertinent data.