



# Science, Technology, Engineering, and Mathematics

## Career and Academic Pathways (CAPs)

### Program Map: Associate of Arts Degree for Environmental Studies: Biology

Total number of units: 57-58 units

Top Code/Academic Plan: 3020.00

Updated on February 20, 2022

Fall 1	Course Code	Course	Units	Notes	Advising Notes
Program Course	ENV SCI 001	<b>Introduction to Environmental Sciences</b>	<b>3</b>	This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <a href="#">ELAC Honors Program website</a> or contact Dr. Bermudez at <a href="mailto:bermudn@elac.edu">bermudn@elac.edu</a> .	
GE Course	CHEM 065	<b>Introductory General Chemistry</b>	<b>4</b>	This course is a pre-requisite for CHEM 101, but can also meet part of the required elective units; in addition, this course will meet LACCD GE Area A. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <a href="#">ELAC Honors Program website</a> or contact Dr. Bermudez at <a href="mailto:bermudn@elac.edu">bermudn@elac.edu</a> .	This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low-Cost Textbook Classes."
GE Course	Area D2: Communication and Analytical Thinking		<b>5</b>	5 unit math course is suggested, in order to meet LACCD General Education Area D2; see counselor for best options. MATH 120 or higher is required.	
GE Course	ENGLISH 101	<b>LACCD General Education Area D1: English Composition</b>	<b>3</b>	This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <a href="#">ELAC Honors Program website</a> or contact Dr. Bermudez at <a href="mailto:bermudn@elac.edu">bermudn@elac.edu</a> .	This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low-Cost Textbook Classes."

**Total Units 12**

Winter	Course Code	Course	Units	Notes	Advising Notes
Program Course	CHEM 101	<b>General Chemistry I</b>	<b>5</b>		

**Total Units 5**

Spring 1	Course Code	Course	Units	Notes	Advising Notes
Program Course	BIOLOGY 006	<b>General Biology I</b>	<b>5</b>		
Program Course	ECON 060	<b>Economics and the Environment</b>	<b>3</b>	This course also meets LACCD General Education Area B2: Social and Behavioral Science. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <a href="#">ELAC Honors Program website</a> or contact Dr. Bermudez at <a href="mailto:bermudn@elac.edu">bermudn@elac.edu</a> .	
Program Course	ENV SCI 022	<b>The Human Environment: Physical Processes Lab</b>	<b>2</b>		

**Total Units 10**

Summer	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	Any degree applicable course		3	These elective units are required to reach 60 units; may not be needed if student has already acquired units elsewhere, or earned AP credit; see counselor for more details as needed.	

**Total Units 3**

Fall 2	Course Code	Course	Units	Notes	Advising Notes
Program Course	BIOLOGY 009	<b>Man and His Environment: Biological Processes</b>	3		This course is available in the Fall.
Program Course	PHILOS 028	<b>Environmental Ethics</b>	3		
GE Course	Area B1: American Institutions		3		
GE Course	HEALTH 002	<b>LACCD General Education Area</b>	3	Suggested because it incorporate both GE Area E1 and E2.	

**Total Units 12**

Winter	Course Code	Course	Units	Notes	Advising Notes
Program Course	PHYSICS 017	<b>Energy &amp; The Environment</b>	4	This course also meets the pre-requisite for any Physics series, should a student need physics for transfer or another degree; see counselor more details. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <a href="#">ELAC Honors Program website</a> or contact Dr. Bermudez at <a href="mailto:bermudn@elac.edu">bermudn@elac.edu</a> .	

**Total Units 4**

Spring 2	Course Code	Course	Units	Notes	Advising Notes
Program Course	BIOLOGY 022	<b>Marine Biology</b>	4		
Program Course	ENV SCI 024	<b>Global Climate Change</b>	3		
Program Course	Any degree applicable course		1 to 2	These elective units are required to reach 60 units; may not be needed if student has already acquired units elsewhere, or earned AP credit; see counselor for more details as needed.	
Program Course	HISTORY 097	<b>Introduction to History of Science</b>	3	Student also has the option to complete HISTORY 078 or LAW 060, but this course is suggested as it can double as part of the LACCD GE pattern - Area C.	

**Total Units 11 to 12**

#### **Degree Path and Requirements:**

The courses are designed to equip students with necessary lab skills that involve the scientific method, and the critical understanding of the interrelationship between science and nature; helping students to be more avid in the studying and solving of environmental problems that deal with biological science matters. Specifically, this program uses an interdisciplinary approach to introduce students to an overview of environmental biology issues from a variety of perspectives; preparing students to research, analyze, and propose solutions to the different and intricate environmental challenges that the world may face.

This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with [counselors](#).

#### **Department Advising Notes:**

9 units of major courses in this degree may be double counted in LACCD General Education. See [a counselor](#) .

#### **Program Description**

The Environmental Studies: Biology Program is an interdisciplinary and multidisciplinary course of study that presents an overview of environmental biology issues and studies the interrelationship between biology and the environment. The curriculum prepares students to deal with the complex environmental problems that confront society by providing a broad, basic understanding of how physical, biological and human components of the

environment interact. The degree's core courses examine the relationship between nature and social systems. Furthermore, they introduce students to the interplay between natural and social systems, and the ideological foundations of humankind's attitudes and behaviors with respect to their ever-changing environments.

### **Career and Transfer Opportunities**

This degree leads to employment in Environmental Science. Here is a [career option](#) related to this pathway. Visit the [Transfer Center](#) for transfer and guaranteed transfer information, which varies based on transfer college. Make an appointment with [a counselor](#) for transfer information. Students can visit [Career and Job Services](#) for career counseling and further exploration.

### **Youtube Videos**

Career One Stop: [Environmental Scientists and Specialists. Including Health Career Video](#)

### **Program Map**

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

### **Prerequisite Course**

A specific course that must be completed before advancing to the next course.

Check the online catalog at [elac.edu](http://elac.edu) for the latest and most accurate information.

### **Contact**

Dr. Kirk Olsen  
Department Chair  
[olsenkn@elac.edu](mailto:olsenkn@elac.edu)  
323-265-8878