

# PHYSICAL SCIENCES

## LONG BEACH CITY COLLEGE Curriculum Guide for Academic Year 2009-2010 Associate in Arts or Science

ALL INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE.

For possible updates to this guide please refer to the following website: <http://osca.lbcc.edu>

### CAREER OPPORTUNITIES

Students are provided an introduction to the lower division course preparation for transfer to a baccalaureate degree in various physical science majors.

This Associate Degree will prepare students for an entry-level position as laboratory technician. Appropriate course selection will also facilitate transfer in a related major.

### DEPARTMENTAL ADMISSION REQUIREMENTS

None. For more departmental information call (562) 938-4444.

### REQUIRED COURSES

### UNITS

Complete **TWELVE - THIRTEEN (12 - 13)** units from the following courses:

	NAME OF COURSE	UNITS	IN PROGRESS	COMPLETED GRADE
	ASTRONOMY			
†	CHEMISTRY			
	ENVIRONMENTAL SCIENCE 1			
	PHYSICAL GEOGRAPHY			
	GEOLOGY			
†	PHYSICS			
<b>Subtotal Units</b>		<b>12-13</b>		

Complete the following course:

Computer Class – Any class which satisfied the computer portion of the Information Competency requirement for graduation. See the current General Education Course Pattern Guide for a complete listing of acceptable courses.

1-4		
<b>1-4</b>		

**Subtotal Units**

Complete **FIVE - SIX (5-6)** units from any Mathematics course which has a prerequisite of Intermediate Algebra or higher

	NAME OF COURSE	UNITS	IN PROGRESS	COMPLETED GRADE
	MATH			
<b>Subtotal Units</b>		<b>5-6</b>		
<b>TOTAL UNITS</b>		<b>18-23</b>		

LEGEND
† Courses in these disciplines have prerequisite courses; prerequisite courses must be completed with at least a "C" or "P" grade (see catalog or schedule of classes).

**NOTE:** Courses are offered each semester excluding the following:

- CHEM 12A and 12B are offered in alternating semesters starting with 12A in the fall semester.
- PHYS 2b is offered once each year, usually in the second semester.
- PHYS 3C is offered every third semester / GEOL 3 is offered every fourth semester.

## GRADUATION REQUIREMENTS

For **ASSOCIATE IN ARTS or SCIENCE DEGREE:**

Complete the required units listed above with a minimum grade of "C" in each course. In addition, complete the A.A. (A.S.) degree requirements specified in the Catalog. The requirements for general education/proficiency and the field of concentration need to be from the same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout (see the catalog for definition of "continuous enrollment"). Fifty per cent (50%) or more of the unit requirements for this field of concentration must be completed in residence (credit earned by exam, where applicable, may be included).

**NOTE:** To receive a degree you must submit completed application forms in the Admissions and Records Office during your final semester of course work.

In general, "double-counting" is not allowed. That is, one course may not be used to fulfill both a field of concentration requirement and to fulfill a general education requirement.

*Students interested in transferring to a university to continue their study in this field of concentration or other majors are strongly advised to consult an LBCC academic counselor and refer to the ASSIST website ([www.assist.org](http://www.assist.org)) for major preparation information. Counselors can clarify the different major and admissions requirements at a university. Students may visit the Student Success/Transfer Services Center to access further educational resources. If you need to set up an appointment to see a counselor or schedule the SOAR Test, call LAC (562)938-4561 or PCC (562)938-3920.*