



## **CURRICULUM GUIDE** **2012-2013**

### **PHYSICAL SCIENCE**

#### Certificate of Accomplishment in Physical Science

#### **Requirements for Certificate of Accomplishment:**

- a) Complete satisfactorily the courses listed for the particular certificate.
- b) Complete at least 50% of the required units at Ohlone College.
- c) Maintain a 2.0 grade point average.

#### **PHYSICAL SCIENCE**

The Certificate of Accomplishment in Physical Science is awarded for studies of the physical world from the very small to the infinite. Upon completion of this certificate students will have investigated such phenomena as light, energy, the states of matter, chemical reactions, the formation of planet earth, and its place in the universe. This certificate provides an excellent foundation for further studies in science education and other fields.

#### **Student Learning Outcomes**

1. Demonstrate a comprehension of physical and environmental reality by understanding how fundamental physical laws explain the huge variety of natural phenomena and their interconnectedness.
2. Build critical thinking and quantitative skills by gaining insight into the models and approximations of the physical sciences, and by searching for the physical interpretation of mathematical results.
3. Develop basic experimental skills by the practice of setting up and conducting an experiment with due regards to minimizing measurement error, by the precise classification of objects, phenomena and data, and by the thoughtful discussion and interpretation of the results.
4. Demonstrate basic and technical communication skills by working in groups on a laboratory experiment.

PHYS-108	Survey of Physics	3
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Choose one course from the following:

CHEM-101A	General Chemistry OR	5
CHEM-108	Survey of Chemistry	(3)

Choose one group from the following:

GEOL-101	Introduction to Geology OR	4
GEOL-102	Introduction to Oceanography AND	(3)
GEOL-102L	Oceanography Laboratory	(1)

Choose one group from the following:

ASTR-101A	General Astronomy of the Solar System AND	3
ASTR-102	General Astronomy Laboratory	1
	OR	
ASTR-101B	General Astronomy Beyond the Solar System AND	(3)
ASTR-102	General Astronomy Laboratory	<u>(1)</u>
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