

ASSOCIATE DEGREE PROGRAM

Biological Science — Associate in Science

Required Courses (15 credits)

BIO 201A	Biology	5
BIO 201B	Biology	5
BIO 204	Microbiology	5

Complete the following group of courses (21-28 credits):

- Math 236 or 247
- Chem 201A and 201B
- Physics 205A and 205B, OR, Physics 208A and 208B and 208C.

MATH 236	Introduction To Applied Statistics	3
or MATH 247	Introduction To Statistics	(4)
CHEM 201A	General College Chemistry I	5
and CHEM 201B	General College Chemistry II	5
PHYS 205A	General Physics	4
and PHYS 205B	General Physics	4
or PHYS 208A	PRINCIPLES OF PHYSICS 1	(5)
and PHYS 208B	PRINCIPLES OF PHYSICS 2	(5)
and PHYS 208C	MODERN PHYSICS	(4)
Total Credits		36-43

[Click Here for Program Student Learning Outcomes](#)



Highway 1
San Luis Obispo, California 93403

Program Outcome Report for BIOLOGICAL SCIENCE

A: Outcome

Apply the Scientific Method, including developing the ability to design, implement, and critically evaluate a Scientific Study and a Controlled Experiment. Bio 201A

Assessment

Bio 201A

B: Outcome

Write a scientific paper.

Assessment

Bio 201A

C: Outcome

Use the metric system to make measurements of length, volume, and mass.

Assessment

Bio 201A

D: Outcome

Outline the metabolic reactions of living organisms.

Assessment

Bio 201A

E: Outcome

Use a compound light microscope and dissecting microscope to characterize cell structure and organism morphology.

Assessment

Bio 202

F: Outcome

Explain the mechanisms by which cells divide, explain the processes of asexual and sexual reproduction, and place cell division in the context of life cycles.

Assessment

Bio 202

G: Outcome

Explain the basic principles of anatomy and physiology of organisms.

Assessment

Bio 201B

H: Outcome

Outline the taxonomy and phylogenetic relationships of the major groups of organisms.

Assessment

Bio 201B

I: Outcome

Analyze the processes that lead to evolution and explain the role of evolution in life's diversity.

Assessment

Bio 201B

J: Outcome

Define microorganisms; describe their main cell components and the functions of each.

Assessment

Bio 204

K: Outcome

Describe the biological features of major bacterial, virus, fungi and parasite organisms of importance in medicine, industry, biotechnology and environmental systems.

Assessment

Bio 204

L: Outcome

Define the components of the immune system and describe the mechanisms that regulate host-microbe interactions.

Assessment

Bio 204