

# Programs

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## Biology, B.S.

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### (49 - 52 credits)

The Bachelor of Science in Biology, under the Department of Biology, Chemistry and Mathematics, is designed to provide broad preparation including pre-medical, pre-veterinary, and pre-dental training. Our department gives the student the basic entrance requirements for a variety of U.S. colleges of medicine, dentistry, and veterinary medicine. Entrance into these colleges is highly competitive. The completion of the degree does not guarantee acceptance. Albertus Magnus graduates have gone on to pursue medical, dental, and veterinary degrees. The Biology major at Albertus Magnus College also offers students opportunities to develop practical experience, through participation in faculty-directed research and career-related internship experiences.

This major meets the Connecticut State Department of Education requirements for those students enrolled in the initial teacher preparation program at Albertus Magnus College and are seeking a secondary level teacher certification with a biology or general science endorsement or middle level teacher certification with a general science endorsement. Contact the Department of Education and Teacher Preparation for additional information.

Upon completing the program of study in Biology, students will develop:

- Proficient knowledge base and breadth (introductory courses supplemented by upper-level courses).
- Proficient critical thinking skills (data interpretation/presentation especially in upper level courses e.g., SC 351).
- Proficiency in written/oral communication skills (lab reports, research papers in introductory & advanced courses, oral presentations and in-class discussions).
- Proficiency in experimental design (present both in introductory & advanced levels especially with laboratory report components; should include a degree of creativity especially in design of experiments, the choice of experimental tools and the proper choice of experimental "controls").
- Proficiency in information literacy (all courses include a “library component” for research projects/papers; seminars by invited library staff to facilitate database access, navigation and usage).
- Proficiency in quantitative analysis (data interpretation & presentation; covered in both introductory and upper-levels courses).

### **MAJOR REQUIREMENTS**

#### **REQUIRED CORE (41 credits)**

BI 111                      General Biology I

BI 111L	General Biology I Laboratory
BI 112	General Biology II
BI 112L	General Biology II Laboratory
BI 216	Cell Biology
BI 216L	Cell Biology Laboratory
BI 310	Genetics
BI 310L	Genetics Laboratory
CH 121	General Chemistry I
CH 121L	General Chemistry I Laboratory
CH 122	General Chemistry II
CH 122L	General Chemistry Laboratory II
CH 221W	Organic Chemistry I
CH 221L	Organic Chemistry I Laboratory
CH 222	Organic Chemistry II
CH 222L	Organic Chemistry II Laboratory
SC 131	General Physics I
SC 131L	General Physics I Laboratory
SC 132	General Physics II
SC 132L	General Physics II Laboratory
SC 351	Senior Science Seminar I

**REQUIRED CORRELATIVES (credits vary)**

CH 324	Biochemistry
CH 324L	Biochemistry Laboratory
SC 302	Practicum/Internship

Select one (3-4 credits):

MA 120	Pre-Calculus
MA 121	Calculus I