



GUIDE TO MAJORS AT YESHIVA: BIOLOGY

Choosing a major can be stressful, but it is important to understand that you can pursue almost any career regardless of which major you choose. While there are some exceptions, most entry-level positions simply require general transferable skills—those that can be learned in one setting and applied in another. Relevant experience through internships and activities is generally more important to employers than a major. It is best to choose an area that you find interesting and in which you have the ability to do well.

What is the Biology Major?

Biologists study living organisms and their relationship to their environment. According to the course catalog, “The curriculum in biology provides students with an understanding of the biotic world from molecules and cells through organs and ecosystems. Course work and research opportunities develop students’ analytical and experimental skills, enabling them to continue the study of science at advanced levels.”

What can I do with a Biology Major?

Biology is the ideal preparation for students planning to enter professions such as medicine, dentistry and other health-related fields such as physical therapy, occupational therapy, physician assistant, and nursing. A background in biological science is also relevant for those wishing to pursue careers in teaching, industry, genetic counseling, veterinary medicine, nutrition, recreational therapy, public health, environmental science, biotechnology, pharmacy, bioinformatics, and bioengineering. Biology students interested in law often move into patent and/or environmental law. Additional career options include:

Scientific Research

- Agricultural Scientist
- Biochemist/Molecular Biologist
- Bioengineer
- Biological Photographer
- Ecologist
- Environmental Engineer
- EPA Inspector
- Food Scientist/Technologist
- Food and Drug Inspector
- Forensic Scientist
- Forester
- Horticultural Scientist
- Marine Biologist
- Medical Illustrator
- Medical Researcher
- Microbiologist

Animal Care

- Animal Trainer
- Aquarium Technician
- Veterinarian Technician
- Wildlife Biologist

Healthcare/ Allied Health

- Athletic Trainer
- Blood Bank Supervisor
- Environmental Health Specialist
- Hospital/HMO Administrator
- Physical Therapist
- Physiologist
- Public Health Statistician
- Registered Nurse
- Pharmaceutical Salesperson

Social Services

- Consumer Safety Officer
- Criminologist
- Funeral Director/Embalmer
- Occupational Safety Specialist
- Science Teacher

Graduate Study Required

- Anesthesiologist
- Biophysicist
- Biostatistician

- Chiropractor
- Dentist
- Dermatologist
- Optometrist
- Pharmacist
- Physician
- Pre-Law
- Professor
- Psychiatrist
- Radiologist
- Zoologist

*Students interested in health related careers may also wish to explore the joint programs offered between Yeshiva College and several external graduate programs in the fields of Optometry, Physical Therapy, Physician Assistant, and Podiatry. Visit <https://yu.edu/yeshiva-college/combined-joint-programs/> for details.

Skills and Abilities

Biology majors gain expertise in identifying, exploring and solving problems. Students gain communication skills in explaining and discussing their research and findings within the biological sciences. Some of the additional skills and abilities cultivated through the Biology major include:

Communication

- Write well both creatively and analytically
- Speak clearly, persuasively, and coherently
- Read extensively, draw conclusions, and share perspectives
- Listen to differing opinions and communicate thoughts

Leadership/ Teamwork

- Build, maintain, and establish relationships
- Initiate ideas within a team, manage a team, and facilitate cooperation
- Engage, motivate, set direction, and achieve goals
- Demonstrate curiosity - how and why things work and how they can be changed

Problem Solving

- Research causes of problems, choose courses of action, and evaluate potential solutions
- Learn quickly and adapt as new situations arise

Critical and Analytical Thinking

- Understand, absorb, and analyze complex material through written and verbal information
- Identify information and problems, gather evidence through research, evaluate a situation from a wide variety of viewpoints, and derive conclusions
- Complex thinking - the ability to process information and examine how projects can be done more effectively

Research

- Consult multiple sources, analyze data, and assess needs
- Research causes of problems and evaluate potential solutions
- Use intellectual agility to see things in a new light; utilize critical analysis