



SALEM STATE UNIVERSITY  
CAREER SERVICES

# BIOLOGY

MAJOR CAREER GUIDE

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## **ACADEMIC INFORMATION**

Follow this link to the Salem State University Biology Department home page. Here you will find program information, degree options, course listings, licensure information, events information and much more:

<https://www.salemstate.edu/academics/college-arts-and-sciences/biology>

## **WHAT CAN I DO WITH MY MAJOR?**

Are you a Biology major or are you considering Biology as a major? Follow the link below to the “What Can I Do With My Major?” resource on the Salem State University Career Services web site:

<https://elearning.salemstate.edu/courses/939337/pages/what-can-you-do-with-your-major>

## **PROFESSIONAL ASSOCIATIONS**

As in any profession, staying connected to professionals in your field is vital. Below are links to professional associations for professionals in the field of biology. Stay up to date with industry trends, connect with fellow biology professionals and utilize resources for job searching:

[American Institute of Biological Sciences: Careers](#)

[The International Society for Computational Biology](#)

[American Society of Cell Biology](#)

[Biology Industry Organization](#)

[American Society of Microbiology](#)

[Council for the Advancement of Science Writing](#)

[Biotechnology Institute](#)

[American Academy of Forensic Science](#)

[American Society of Human Genetics](#)

[The National Academies](#)

[Informatics](#)

## **INFORMATIONAL INTERVIEWING**

Informational interviewing is a method of gathering information about career options, industries and employers. It is an opportunity to learn about a particular job from someone already in the field. It is *not* a job interview, but it can help you learn about job opportunities and build your network for when the job search comes. This is an ideal chance to help you gain a more thorough understanding of a particular industry or job. It's also a great way to determine “is this what I want to do?” and to learn about different paths others have taken to get where they are.

## **JOB SHADOWING**

An additional option you may want to consider to obtain information about your industry of choice is job shadowing. Job shadowing is an opportunity to step into the life of a professional in your field while they are working. Typically, job shadow experiences will last anywhere from one day to one week. Much like an informational interview, this is your opportunity to see firsthand what a “day in the life” of a professional is like.

## **VOLUNTEERING**

Volunteering is another great way to learn about what to expect when working in your industry. Similar to a job shadow, you will be able to see a “day in the life” of a professional while also contributing some of your own skills or services. Volunteering can give you a chance to gain new expertise and help you narrow down your specific interests in the field. Follow the links below to help you identify current volunteer opportunities:

<http://volunteer.nsuw.org/>

## **ADDITIONAL RESOURCES**

Pathways to Science Research Portal

- <http://www.pathwaystoscience.org/>

National Science Foundation

- <https://www.nsf.gov/crssprgm/reu/>

SAMPLE RESUME

**NADIA BIOLOGIST**

37 Loring Avenue, Salem, MA 01970 | n\_biologist@salemstate.edu | 111-222-3333

<b>Education</b>	<b>Bachelor of Science in Biology- May 20XX</b> <i>Salem State University, Salem, MA</i> Minor: <b>Chemistry</b> , GPA: <b>3.6</b>
<b>Projects</b>	Senior Research: <i>Scanning EM Characterization of the Atlantic Long-Fin Squid</i> Internship Research: <i>The Green Building Project</i> Research Collaboration, Chemistry Society: <i>Carbon Consumption at Salem State</i>
<b>Related Courses</b>	Honors Immunology, Genetics, Invertebrate Zoology, Marine Botany
<b>Laboratory Skills</b>	Electron Microscope
<b>Experience</b>	<b>Biology Society</b> , Salem State University, Salem, MA      September 20XX- May 20XX <i>President</i> <ul style="list-style-type: none"><li>• Organized speakers from the profession to discuss career paths in biology on a monthly basis at meetings</li><li>• Collaborate with Chemistry Society to research the effects of carbon consumption at Salem State</li><li>• Delegate tasks to executive board members as needed</li></ul> <b>A+ Tutoring Agency</b> , Salem, MA      June 20XX- September 20XX <i>Biology Tutor</i> <ul style="list-style-type: none"><li>• Tutored small groups of students about specific topics in biology such as the life cycle of a cell, laboratory safety, human anatomy, and photosynthesis</li><li>• Developed individual study plans with students that included memorization techniques and time management planning</li><li>• Researched biology-related articles to provide to students for additional reading</li></ul> <b>The Washington Center</b> , Washington, D.C.      July 20XX-August 20XX <i>Intern, Green Building Project</i> <ul style="list-style-type: none"><li>• Collaborated with a team to analyze the carbon impact of the Park Center building</li><li>• Researched &amp; submitted an action plan to reduce overall carbon consumption</li><li>• Recruited volunteers to implement physical changes to the building</li><li>• Actively participated in the rehabilitation of Marvin Gaye Park</li></ul>
<b>Volunteer</b>	<b>Community Garden Association of Peabody</b> , Peabody, MA      May 20XX- Present <ul style="list-style-type: none"><li>• Tended garden on weekends and holidays</li><li>• Researched adaptable plant species to withstand cold winters</li></ul>
<b>Skills</b>	Photoshop, Microsoft Word, Excel, PowerPoint, SPSS

**SAMPLE COVER LETTER**

**NADIA BIOLOGIST**

37 Loring Avenue, Salem, MA 01970 | n\_biologist@salemstate.edu | 111-222-3333

January 1, 20XX

John Smith  
Charles River Laboratories Inc.  
251 Ballardvale Street  
Wilmington, MA 01887

Dear Mr. Smith:

I am applying for the position of Assistant Scientist recently referred to me by Professor Granger. As my resume indicates, I recently completed a research project called Scanning EM Characterization of the Atlantic Long-Fin Squid, and previously researched several other topics throughout my coursework and extracurricular involvement. The skills I gained in this specific project, especially the use of an electron microscope, will prove to be advantageous to this position. I have completed my Bachelor of Science in Biology with a minor in Chemistry from Salem State University and believe that my skills and experiences make me a qualified candidate for the Assistant Scientist position.

As a result of my internship at The Washington Center, where I was drafting the report about changes to the carbon footprint, I am a skilled scientific and technical writer. I was able to hone these skills throughout my coursework, as there was a substantial writing component in the Immunology and Genetics course curriculum. My strong organizational and communication skills will be an essential benefit while working in the Assistant Scientist position at the Charles River Laboratories.

Your advertisement specified a need for someone who has experience with immunology. While taking courses for my degree, I was able to complete extensive laboratory experiments dealing with immunology under the supervision of an expert in the field. As President to the Biology Society, I regularly networked with professionals and researchers in the biology field, and I often selected candidates to speak on panels who were focused on immunology. On one occasion, I learned about "The Latest Immunology Project," which spurred my interest in positions at your company, since I know that Charles River Laboratories focuses their work on this topic. I look forward to talking with you further about the position of Assistant Scientist. Thank you for your consideration.

Sincerely,

Nadia Biologist

Enc: Resume

**SAMPLE COMPANIES**

ASTRAZENECA PHARMACEUTICALS

AVANT IMMUNOTHERAPEUTICS

GENZYME CORPORATION

PAREXEL INTERNATIONAL

QARA PHARMA SOLUTIONS

THE MASSACHUSETTS LIFE SCIENCES CENTER