

Employability Handbook

Biology Program



Department of Biology



Eastern Connecticut State University
83 Windham Street
Willimantic, CT 06226

As a Biology Student, you have a broad range of job opportunities when you graduate, from entering a career in health care to working as a field biologist on protecting endangered wildlife. The direction you choose may change over your time at Eastern, but our program offers a diversity of courses and training in competitive skills to nurture your developing interests as you prepare for life after Eastern.

You should take time to talk with family and friends about your career interests, and of equal importance, seek out professionals who are living your career goals, to ask for insight. There are many opportunities for paid internships with companies and government agencies alike. Reach for these opportunities, because now is the time to prepare your skill set for your future career. With mentoring from faculty, and the resources provided by the Center for Internships for Career Development (CICD), you will find support as you prepare for job interviews and applications.

According to the Bureau of Labor Statistics, projected job growth in the Biological Sciences is strong, with competitive pay and benefits packages. Biology graduates are employed in a broad array of economic sectors both in the state of Connecticut and nationwide.





TABLE OF CONTENTS

- I. Why have an employability handbook for Biology?
- II. What is employability?
- III. Knowledge and skills you will acquire
- IV. What do Biology graduates do?
- V. Where do Biology graduates work?
- VI. How can I get additional experience and skills?
- VII. What's next?



I. Why have an employability handbook for Biology?

Raise your awareness of what employability is

Explain how your employability is enhanced by majoring in Biology

Draw your attention to the many complementary opportunities beyond the major that can help you further enhance your employability

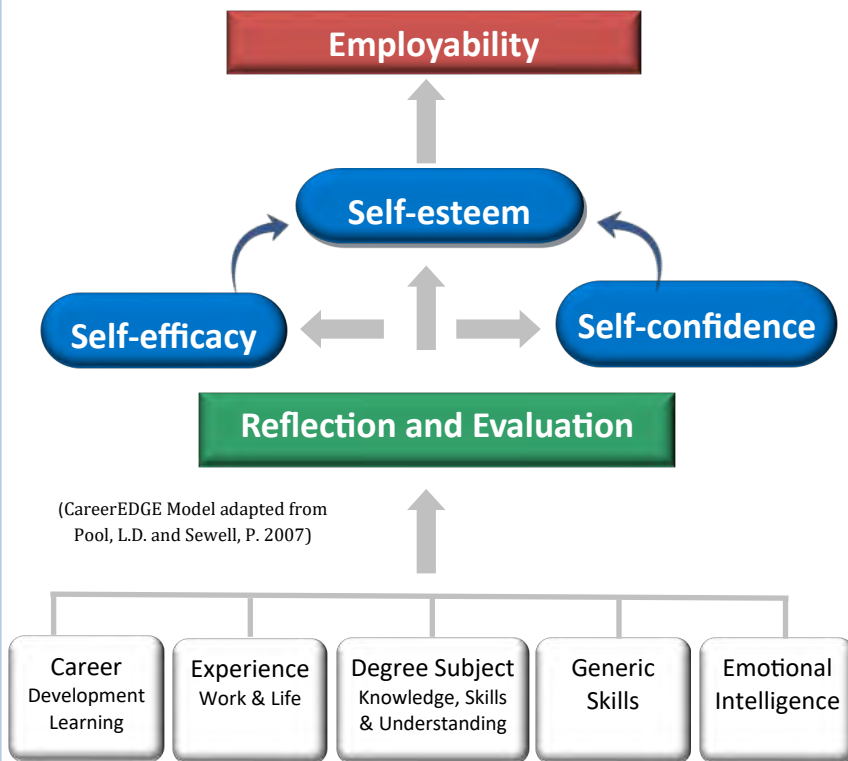
Introduce you to the wide range of employment options for Biology graduates



II. What is employability?

Employability is a set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen career which benefits themselves, the workforce, the community and the economy.”

Taken from “Pedagogy for Employability’,
Higher Education Academy, 2012



Biology Program Goals:

1. Develop knowledge of key concepts, scientific principles, and over-arching themes in the Biological Sciences.
2. Demonstrate techniques and approaches in scientific inquiry and critical thinking.
3. Demonstrate scientific literacy and effective communication of scientific information.

III. Knowledge and Major Learning Outcomes

KNOWLEDGE:

The Biology Department provides foundational training in skills and concepts required for a broad range of careers. Our goal is to provide students with broad exposure to Biology, relying on time spent conducting experiments in the lab and the field, as well as analyzing and interpreting data gathered from experiments. Students gain hands-on training and experience in applying concepts in Biology to real world issues, while reflecting on the relevance of these issues to society within the context of Eastern's liberal arts mission.

BIOLOGY LEARNING OUTCOMES

1. Obtain a solid foundation in the basics of Biology
2. Develop competency in field and lab techniques used in research
3. Formulate and refine hypotheses, conduct experiments, analyze and interpret data
4. Present findings in written/oral formats, and demonstrate the relevance of findings to society

ECSU LIBERAL ARTS LEARNING OUTCOMES

1. Critical thinking
2. Ethical reasoning
3. Communication
4. Creativity
5. Quantitative literacy

IV. What do Biology graduates do?

Eastern's Biology majors graduate with the scientific background and key skills that support entry into various career pathways. These include a plethora of jobs in health care, with companies, state and federal government agencies, as well as entrance into professional and graduate schools. Because a Biology graduate has completed a rigorous science degree, they are employable in numerous other sectors that require training in marketable lab and data analysis skills

CAREER OPTIONS

• Physician/PA	• Pharmaceutical industry
• Dentist	• Forensics
• Veterinarian	• Genetic Counselor
• Optometrist	• Wildlife Biologist
• Research Assistant	• Geneticist
• Computational Biologist	• Biotechnologist
• Marine Biologist	• Microbiologist
• Cannabis Industry	• Plant Biologist
• Ecologist	• Biomedical Researcher

Justin Gomez-Stafford '21 (Pursuing Masters in Genetic Counseling at Stanford University)


"I feel ready to take on this new journey thanks to Eastern's rigorous curriculum and incredibly knowledgeable faculty, who molded me into a better scholar year after year."

Jacob Dayton '19 (2018 Goldwater Scholar)

"This recognition is a testament to the strength of Eastern's Biology program and the value of the research experiences I've had."

V. Where do Biology graduates work?

Graduates are currently employed by such organizations as Alexion Pharmaceuticals, Bristol-Meyers-Squibb, Kinetic Biomedical, and State of Connecticut Department of Environmental Protection, among many others. Recent Biology graduates are also currently progressing in medical school and Masters and PhD graduate programs in Biology. Others are pursuing careers as K-12 educators.

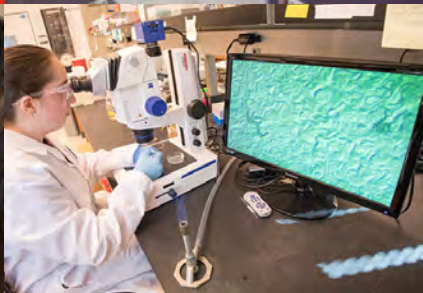
ALEXIONCARIS[®]
LIFE SCIENCESBristol Myers SquibbUCONN | SCHOOL OF NURSINGHARVARD
MEDICAL SCHOOLAMGRAPH
*Quality. Service. Sustainability.
Packaging for the Next Generation.*Massachusetts General Hospital
Founding Member, Mass General BrighamYale SCHOOL OF MEDICINESaputo
Dairy Foods USAARVINAS

Recent Biology Graduates

- **Monica Hernandez-Rodriguez** '22 - Park Operation Specialist, city of Raleigh, NC Municipal Government
- **Cassidy Baranowski** '21 - Masters Program in Secondary Education, Eastern Connecticut State University
- **Justin Gomez-Stafford**, '21 - Pursuing Masters in Genetic Counseling at Stanford University
- **Liam Stolpe** '21 - Pursuing Masters in Biology at Tufts University
- **Valeria Cervantes-Maldonado** '21 - Certified Pharmacy Technician at Grady Health System in Atlanta, GA
- **Kaila Robinson**, '20 - Accelerated Nursing Program at UCONN
- **Ryan Caldwell** '20 - Research Assistant at the Jackson Laboratory in Hartford, CT
- **Stefanos Stravoravdis** '20 ~ PhD candidate in Microbiology at UMASS Amherst
- **Christopher Shimwell**, '20 - Physician Assistant Program at Yale School of Medicine
- **Jacob Dayton** '19 - PhD candidate in Biology at Tufts University
- **Savon Vigil** '19 - Associate Scientist, Biomarker Mass Spectrometry, with Pfizer
- **Mitch Karr** '19 - Doctor of Medicine program at Philadelphia School of Osteopathic Medicine
- **Max Walter** '19 - Registered Nurse at Mass General Hospital
- **Roshani Budhathoki** '19 - PhD candidate in Plant Science at UCONN
- **Megan Deacon** '18 - Master of Science in Occupational Therapy (2021) at Tufts University
- **Melody Slater** '18 - Pharmaceutical Research Operations Specialist at Caris Life Science
- **Jacques Mercier** '17 - Associate Scientist at Arvinas
- **Lillian Hyde** '17 - Research Assistant at the Jackson Laboratory, Bar Harbor Maine (2017-2018), PhD candidate at Hanover Biomedical Research School in Germany
- **Dominique Dubois** '17 - Laboratory Technician at Edgewell Personal Care, Portland, OR
- **Manan Bhatt** '15 - Quality Technician at Amgraph Packaging
- **Benjamin Abrahams** '15 - Doctor of Dental Medicine, Midwestern University



*"During my time at Eastern, I was able to supplement my degree with a variety of independent research, travel and important life experiences that have been invaluable in both my professional and personal life."
- Anthony Lucia '13*



VI. How can I get additional skills and experience?

1. Volunteer with the Center for Community Engagement



<http://www.easternct.edu/cce/> Volunteer your time in the Windham/Willimantic community. CCE offers semester-long opportunities and one-time events in a variety of fields, including schools and non-profit organizations such as the No Freeze Shelter, Big Brothers/Big Sisters, and Jumpstart.

2. Get involved with campus leadership activities

<http://www.easternct.edu/studentactivities/clubs-orgs/club-index/>

Join Biology Club! Join the Pre-Health Society! Join Mycology Club! Tri-Beta (Biology Honor Society)



3. Do an Independent Study or Research Practicum

In your sophomore, junior or senior year, you may be provided with the opportunity to work one-on-one with a faculty member or as part of a student team on a research project that can be presented at a professional conference or at the CREATE Conference at Eastern.

4. Do an Internship to gain professional experience and possibly course credit

<https://www.internships.com/> Typically, in your junior or senior year, you may choose to do an on- or off-campus internship to develop professional skills. Biology students have interned with Tufts, Connecticut Agricultural Experiment Station, and Connecticut Department of Energy & Environmental Protection.

5. Study abroad or take a Global Field Course:

<https://www.easternct.edu/global-studies/study-abroad.html>
<https://www.easternct.edu/global-studies/global-field-courses.html>

Biology runs exciting annual field courses to domestic and international destinations (Bahamas, Costa Rica)



VII. What's Next?

Eastern's Center for Internships and Career Development (CICD) is ready to guide and support students on their career journey. Through programs, networking events and direct communication, the staff encourages students to engage in Eastern's services and develop career readiness skills in demand by employers. Whether an internship, graduate school or employment is the next stop for you, the center's staff is here to help.



Use ECN to build your brand, search for internships and jobs, upload your resume, and so much more!

[Login Here](#)



A skills and interests inventory tool you can use to explore majors and occupations based on your results. Use your Eastern e-mail and the ACCESS CODE: warrior and

[Register Here](#)



Explore hundreds of on-line videos and discover employment opportunities available to you based on your major or industry of choice.

[Click Here to Start](#)

Explore all the wonderful resources, on-line tools and in-person career support that the CICD provides!

Career Studio

PEER TO PEER CAREER COACHING

The Career Studio is located in Room 215 of Wood Support services and has several computers and a printer for students to use in their career readiness activities. Additionally, students can receive advice and assistance from our Career Peer Coaches related to resumes, cover letters, internship searches, LinkedIn and all of our on-line tools.



<https://www.easternct.edu/career/index.html>

VIII. Biology Department Employability Support

The Biology Department supports the career readiness of its majors in diverse ways.

1. Biology Majors are provided with individual advisement sessions every semester allowing students the opportunity to discuss their curriculum pathway, evolving interests, and potential career and graduate study destinations.
2. As part of our course curricula, students discuss employability, resume building and interview preparation.
3. The Biology Department runs a weekly seminar program with industry and academic professionals, and Biology graduates who present lectures and provide professional careers advice to Biology Majors.
4. Biology courses embed professional skills development throughout the curriculum and students are made aware of the skills they are developing so that they are incorporated into the individual's "language of Employability".
5. Biology liaises with the CICD to ensure that our majors are aware of career, internship and graduate study fairs, resume and interview workshops and Employer webinars. In addition, students are shown how to produce effective LinkedIn and other social media profiles.





CONTACT US:

Eastern Connecticut State University
Biology Department
83 Windham Street
Willimantic, CT 06226

Dr. Elizabeth Cowles
Department Chair
Email: cowlese@easternct.edu

Dr. Brett Mattingly
Assistant Department Chair
Email: mattinglyw@easternct.edu

<https://www.easternct.edu/biology/index.html>

NOTES:



EASTERN
CONNECTICUT
STATE UNIVERSITY