**Biology MAJOR MAP**

**Possible Programs of Study:**

**1ST YEAR**
- Explore the foundational principles of Cell and Molecular Biology and Ecology, Evolution, and Biodiversity, and engage in inquiry-based learning. Learn about opportunities for majors throughout your time at Winthrop in the Freshmen Symposium in Biology.

**2ND YEAR**
- Delve into the field of genetics and further explore the sub-disciplines of biology. Practice the methods of experimental and applied biology. Take courses in areas of interest and required for pre-professional programs. Consider a minor if you have a particular area of interest.

**3RD OR FINAL YEAR**
- Delve into the field of genetics and further explore the sub-disciplines of biology. Practice the methods of experimental biology. Take courses in areas of interest and required for pre-professional programs. Consider a minor if you have a particular area of interest. Learn about biological research and career opportunities in the Biology seminar courses. Continue to develop as an investigative learner.

**4TH OR FINAL YEAR**
- Finish all courses for your major and optional minor. Complete your senior capstone course. Learn about biological research and career opportunities in the Biology seminar courses. Continue to develop as an investigative learner.

**AFTER GRADUATION**

**CAREERS OF INTEREST**
- Biomedical Researcher
- Conservation Biology
- Data Analyst
- Biodiversity
- Environmental Consultant
- Genetic Counselor
- Grant writer/reviewer
- Journal editor
- Laboratory Technician
- Land Manager
- Medical Laboratory Scientist
- Medical Technologist
- Medical Writer
- Museum Curator
- Occupational Therapist
- Pharmacist
- Physical Therapist
- Physician
- Physician's Assistant
- Professor
- Public Health Official
- Science Journal Editor
- Science Outreach Coordinator
- Science Policymaker
- Scientist (Biomedical, Ecological, Organismal, Cell and Molecular Biology)
- Teacher
- Veterinarian
- Wildlife Manager
- Zoologist

**SKILLS & QUALIFICATIONS I MIGHT NEED INCLUDE:**
- Ability to apply the process of science (hypothesized method)
- Ability to communicate and collaborate with other disciplines
- Ability to interpret primary literature
- Ability to learn independently
- Ability to understand relationships between science and society
- Ability to use modeling and simulation
- Ability to use quantitative reasoning
- Ability to tap into the interdisciplinary nature of science
- Basic laboratory techniques and ability to follow protocols
- Clear communication (verbal, oral, and visual)
- Critical thinking and problem-solving
- Data entry and management
- Effectively collaborate with others
- Ethical reasoning
- Proficiency in Microsoft programs (Excel, Word, PowerPoint)

**COURSEWORK & MILESTONES**

- Core courses, requirements, electives...
- 2ND YEAR
- 3RD OR FINAL YEAR
- After Graduation

**RELEVANT EXPERIENCE**

- (clubs, jobs, volunteering, research, internships...)
- Join student organizations such as the Beta Beta Beta Biological Honors Society, the various health professions organizations, the Student Environmental Action Coalition (SEAC), or Health Professions Connection (HPC). Consider a freshman research experience with SEA – PHAGES.
- Explore experiential learning opportunities such as internships and research with faculty mentors. Apply for summer research programs at Winthrop or another university, such as a Research Experience for Undergraduates (REU) Program. Explore summer experiences such as shadowing and volunteer work related to future career goals.
- Take the Professional Development for Biology Internships course. Participate in internships and/or conduct research with faculty mentors. Apply for summer research programs at Winthrop or another university, such as a Research Experience for Undergraduates (REU) Program. Investigate opportunities for additional experiences related to careers of interest with volunteering or student organization leadership.
- Participate in research with faculty mentors or through research-based courses. Complete internships that can prepare you for graduate programs, professional schools, or employment.

**COMMUNITY CONNECTION**

- (student gov't associations...)
- Attend seminars and symposia to gain insight into potential careers through the Department Seminars, Bench to Bedside program or the HPC. Consider becoming a tutor at the Student Success Center or a peer mentor for other biology majors.
- Attend Winthrop cultural events focusing on another culture or on international issues.
- Review the biology curriculum and general education requirements and learn about specific program tracks. Discover the diverse career options possible with a degree in biology in Freshman Symposium in Biology. Consult with your academic advisor to review program requirements and long-term goals, and develop a 4-year plan.

**GLOBAL THINKING**

- (study abroad, travel, 3rd year exchange...)
- Review the biology curriculum and general education requirements and learn about specific program tracks. Discover the diverse career options possible with a degree in biology in Freshman Symposium in Biology. Consult with your academic advisor to review program requirements and long-term goals, and develop a 4-year plan.
- Consider study abroad options. Volunteer at a community organization or an agency where you can practice your second language skills and learn more about people from other cultures.
- Take a travel course with Winthrop faculty such as Travel Field Conservation Biology. Study abroad. Take summer field courses at U.S. field stations or in other countries. Volunteer at a community organization or agency where you can practice your second language skills and learn more about people from other cultures.
- Work with your advisor to ensure you have no outstanding course requirements. Apply to graduate.
- Apply for the Accelerated Master’s Degree program and complete 9 hrs of 500-level courses for graduate credit. Interview for graduate/professional programs or jobs.