

## WHY BIOLOGY AT ALGOMA U

What Algoma's Biology program offers is hands-on experience. First, many of our courses have weekly labs, ensuring that students see and touch the biology they are learning about. Second, because we are relatively small, our Biology students have more opportunities to conduct research with our professors, who are excellent researchers. In fact, our full-time faculty members typically hire 15-20 students each summer and many more volunteer or work with faculty under the Work Study program during the academic year. Third, Biology offers two internship courses that allow our students to work with external companies, research institutes, or faculty researchers depending on their interests. Finally, a key element of the four-year biology is the honours thesis course in which our students undertake an advanced research project. We take pride in giving students opportunities and experiences that allow them to graduate from our biology program as experienced scientists.

4th Year Thesis Course  
Students in our program have the option of

delving deeper into a specific area of interest in our honours thesis course. Thesis students work directly with a faculty supervisor to design and execute a scientific research project. Students collect and analyze their data, then present their results in our Thesis Research Colloquium. Many students have gone on to present their research at national and even international conferences and have published their research in peer-reviewed scientific journals, a rarity for undergraduates. It is no surprise that many of our graduates have been accepted to graduate schools and professional programs (e.g. Medicine). We believe that our program gives students truly unique opportunities.

## COURSE HIGHLIGHTS

Our courses provide a broad introduction to the breadth of topics within the field of Biology. Our program also includes many courses that teach students important components of experimental design and the scientific method. We have a wealth of courses addressing topics related to human biology, which students interested in medical

fields generally pursue (e.g. Human Anatomy & Physiology, Biomedical Ethics, Nutritional Science, Cancer Biology). In addition a larger collection of courses are offered for students with diverse interests.

## LEARNING OUTCOMES

- Understand the key concepts and theories in the biological sciences.
- Explore the current state of knowledge in the biological sciences and investigate innovative solutions to biological problems using an integrative approach.
- Apply versatile and comprehensive knowledge of the theory, principles, and concepts in the biological sciences and foundational scientific disciplines in an integrative manner.
- Understand and analyze complex issues by applying scientific data in a multidisciplinary context.
- Generate novel research questions and hypotheses, collect and analyze data, and formulate and defend appropriate conclusions, using a rigorous scientific methodology.
- Think critically, particularly with respect to science and technology-based decision making.
- Communicate scientific information effectively in both written and oral format to a variety of audiences.
- Participate in collegial peer review processes.
- Contribute as an effective team member in collaborative and multidisciplinary research teams, both as a participant and as a leader.



## WHY STUDY AT ALGOMA U IN SAULT STE. MARIE?

Algoma U is located in Sault Ste. Marie, a city of 75,000 people in Northern Ontario. "The Soo", as locals call it, has all the amenities of a big city – shopping, entertainment, sports teams, festivals, and cultural activities – but without the hassle of traffic. We're lucky enough to live in a city surrounded by the great outdoors. With Lake Superior and the St. Mary's River literally just steps from our front door, there's always something to do. You can catch some sun at the beach or walk our beautiful boardwalk. With the highest elevation in Ontario, Searchmont Resort is a popular winter destination for our students, offering great alpine skiing and snowboarding.

## ADMISSION REQUIREMENTS

ENG4U, MHF4U, 2U/M Sciences (Biology & Chemistry recommended). Minimum 70%.

Applying to Algoma U is simple. We're ready to help answer all of your questions and more. Before you know it, you'll be walking across campus to your first class.

[algomau.ca/apply](http://algomau.ca/apply)

## GAIN. EXPERIENCE.

Experiential Learning is "learning by doing." There are many experiential learning opportunities in the classroom, lab and in the community. Students in the Biology program have participated in labs, internships, and conferences. A full inventory of Biology experiential learning opportunities is listed in this Experience Map.

## SKILLS EMPLOYERS ARE SEEKING

With over 2,000 business leaders surveyed, the top skills they would like to see in their employees include:

1. Leadership
2. Communication
3. Collaboration
4. Time Management
5. Understanding the impact of technology
6. Consistent global training

## USING THIS EXPERIENCE MAP

Making a plan in first year will lead to your success. We're ready to assist you with your plan.

This Experience Map offers suggestions, which is a guide to explore many options. Understanding where you want to be will help you make the correct decisions to get you there.

We're also here to help you with your physical and mental well-being. We want you to succeed in all aspects of your life. For further assistance, visit Student Success Central, in NW307.



Questions?  
[info@algomau.ca](mailto:info@algomau.ca)



[algomau.ca/biology](http://algomau.ca/biology)



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	1 <sup>ST</sup> YEAR	2 <sup>ND</sup> YEAR	3 <sup>RD</sup> YEAR OR FINAL YEAR	4 <sup>TH</sup> YEAR OR FINAL YEAR	AFTER GRAD?
<b>GET ASSISTANCE</b>	BIOL1506*/1507*, CHMI1006/1007 6 credits from Group III Sciences at 1000 series Math 1036 MATH1037 OR 1057 OR PHIL1116 *60% required Electives: 6 credits from group I – Humanities and/or group II – Social Sciences Meet with your Academic Advisor to select courses.	Make an appointment with your Faculty Advisor in early February to develop your academic plan.  Questions about rules and regulations in your program? See your Academic Advisor in Student Success Central.  Want to enhance your degree? Consider a <b>minor or certificate</b> .	Continue to meet with your Faculty Advisor to ensure you are meeting program requirements and academic goals.  This is a good time to investigate a Master's Degree, Post-graduate Diploma or Bachelor of Education. Please make an appointment in Student Success Central for full details.	Complete degree requirements and ensure you've met all deadlines for post-graduate options.  <b>Apply to graduate.</b>	<b>AFTER GRAD?</b>  After completing a degree in Biology, students are open to an array of career paths and opportunities.  Many of our students pursue graduate programs and go on to pursue exciting careers in many areas.  Graduates can and have pursued:
<b>GET EXPERIENCE</b>	Take COOP0101 as a first step to be enrolled in the co-op program at Algoma University. Check your <b>Student Portal</b> for job postings.  Visit the <b>Experiential Learning HUB</b> to learn about exciting opportunities! Start connecting to career opportunities in your first year by joining the <b>Career Link Program</b> .	Use the skills gained from COOP0101 to apply for a co-op placement or summer job. Continue to keep an eye out for job opportunities on your <b>Student Portal</b> .  Listings include general employment, local/non-local co-op opportunities, on-campus employment and volunteer opportunities.	Attend the fourth-year thesis presentations to gain knowledge to prepare yourself to complete your thesis project.  Apply for co-op opportunities to gain experience and improve your network.  <b>Courses with EL component.</b>	Complete a thesis and present it to fellow classmates, faculty and other AU community members!  Take advantage of the New Graduate Transition Program!  <b>Courses with EL component.</b>	<ul style="list-style-type: none"><li>• Research</li><li>• Health Care</li><li>• Education</li><li>• Environmental Management and Conservation</li><li>• Museums, Aquariums, Zoos, Parks, and Nature Centres</li><li>• Biotechnology</li><li>• Forensic Science</li><li>• Politics and Policy</li><li>• Business and Industry</li></ul>
<b>GET CONNECTED</b>	Get involved with volunteer opportunities on campus with the <b>Food Bank</b> , the <b>Thunder Street Team</b> or apply to be an <b>Orientation Week leader</b> . Come support our <b>Varsity Thunderbird</b> athletic teams and participate in <b>Intramurals</b> at the GLC.  Consider joining one of the many <b>clubs</b> through AUSU.  Be sure to sign up for one of our historical campus tours.	Volunteer off campus. Reach out to local organizations such as: <b>Algoma Public Health</b> , the <b>John Howard Society</b> , <b>Algoma Family Services</b> , <b>THRIVE Child Developmental Centre</b> , or the <b>Sault Area Hospital</b> . For more volunteer opportunities visit <b>Volunteer Sault Ste. Marie</b> .  Think about running for a position with the <b>Algoma University Students' Union</b> .	Update your <b>LinkedIn</b> profile and connect virtually with alumni, classmates, faculty and professionals in the Biology field.  Networking is the most important technique to get jobs in today's society, over 75% of jobs come from networking.	Consider joining professional associations like <b>Canadian Society for Molecular BioSciences</b> , <b>BIOTECanada</b> , and the Canadian Society for Ecology and Evolution. Join groups on LinkedIn reflecting your field of study.  Join groups on LinkedIn reflecting specific careers or topics of interest in Biology.	
<b>GET THINKING GLOBALLY</b>	Attend a <b>Study Abroad</b> info session and consider studying in China, Spain, South Korea, Mexico, France, Austria or Japan and see which places appeal to YOU.  Gather information on the various global opportunities. Algoma U is proud to offer <b>Study Abroad</b> and the Student Work Abroad Program.	Are you interested in doing a study exchange? Check out <b>Study Abroad</b> and attend an information session to get the info you need and to ensure your application is submitted by the deadline.  Your next adventure is waiting!	Improve your language skills through some of our Modern Language courses or learn about another culture.  Consider doing a <b>Short-Term Summer Study Abroad</b> opportunity. Gain experience, knowledge and have the opportunity to tour a new country while working!	If you are an international student looking to stay in Canada to work, talk to a <b>Student Success Academic Advisor</b> .  To learn more about working in Canada, volunteer at <b>Discover the Sault</b> through the Economic Development Centre.	
<b>GET READY FOR LIFE AFTER GRADUATION</b>	Check out <b>Career Cruising</b> (login: algomauc password: saultsternarie) to determine potential career paths that you can pursue in the future.  Bring your resume to the next level! <b>Optimal Resume</b> is an excellent resource to develop your resume and cover letter. Visit <b>Career Services</b> in the <b>Experiential Learning HUB</b> for assistance.	<b>Lynda.com</b> is available to help you learn the skills you need to achieve your full potential. Once you complete a learning path it will automatically be displayed as an accomplishment on your <b>LinkedIn</b> profile.  Use <b>Optimal Resume</b> to improve your resume and cover letter as well as practice your interview skills.	Start focusing on areas of interest and research education requirements for your career path.  Reach out to your <b>Academic Advisor</b> , <b>Student Success Central</b> or your faculty advisor to assist you in applying to a Master's Degree, Post-graduate Diploma or Bachelor of Education.  Take some time to create or update your resume and <b>LinkedIn</b> profile.	Use the resources available in <b>Career Services</b> to learn about the many job opportunities available to you upon graduation.  Attend the Career Conference to get some professional advice from the <b>Sault Community Career Centre</b> on your resume, job searching strategies and interview tips.	



Always remember to put your health first! Hit the **GLC** for some calming Yoga or an intense workout or take walks around campus to clear your mind.  
If you're feeling depressed, anxious or upset don't worry YOU ARE NOT ALONE. – Download the **I.M. Well App** or call 1-877-234-5327 for 24/7 free counselling or book an appointment with an on-campus counsellor by emailing [healthservices@algomau.ca](mailto:healthservices@algomau.ca). We're here for you. Visit the Learning Centre for information on free tutoring and learning strategies.