Applied Biological Sciences (Secondary Education in Biology), BS

Do you have an interest in building a strong foundation in applied biology and a passion to teach? This program offers a blend of classroom instruction and professional experiences, preparing you to ask the right questions, navigate uncertainty and make a difference.

Program Description

The secondary education in biology concentration is designed for students who want to teach biology at the high school level.

In addition to the standard curriculum, students receive hands-on experience in laboratory instruction in this BS program in applied biological sciences. The goal of the program is to prepare students to become teachers who excel both in biology and the related sciences.

Students in this program contextualize knowledge through experience-based learning activities, including:

- case studies
- faculty-guided research and service-learning projects
- hands on laboratories
- secondary education clinical experience

Students enrolling in this concentration should also contact the Mary Lou Fulton Teachers College for information on teacher preparation coursework.

This major is eligible for the Western Undergraduate Exchange program at the following location: Polytechnic campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150% of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of the WUE program.
At a Glance

- **College/School:** College of Integrative Sciences and Arts
- **Location:** Polytechnic campus or Online
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 251 - Calculus for Life Sciences
- **Math Intensity:** Moderate

Required Courses (Major Map)

2022 - 2023 Major Map
Major Map (Archives)

Concurrent Program Options

Students pursuing concurrent degrees (also known as a double major) earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

Applied Biological Sciences, MS

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.

Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.

Freshman | Transfer | International | Readmission

Change of Major Requirements

A current ASU student has no additional requirements for changing majors.
Students should refer to https://changemajor.apps.asu.edu for information about how to change a major to this program.

**Transfer Options**

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use MyPath2ASU™ to outline a list of recommended courses to take prior to transfer.

ASU has transfer partnerships in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/MyPath2ASU.

**Global Opportunities**

**Global Experience**

Those wishing to pursue a future in education must understand how classrooms are shaped by the students’ diverse experiences, backgrounds and cultures. Study abroad offers firsthand experience in a wide range of cultures and communities, which can enhance a degree program. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. Programs can be found in a variety of countries around the world. https://goglobal.asu.edu/

**Career Opportunities**

Graduates of this concentration are prepared to teach biology in high schools as well as pursue numerous entry-level careers in biology. Employment opportunities exist in private and public sectors. Graduates of the general program in applied biological sciences are also prepared to succeed in graduate or professional schools in disciplines such as:

- animal health
- dentistry
- medicine
- non-profit educator
- physical therapy
- teaching

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.
<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Technician</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td>Biological Technician 🌿</td>
<td>4.9%</td>
<td>$46,340</td>
</tr>
<tr>
<td>Fundraising Consultant 🌿</td>
<td>14.3%</td>
<td>$59,610</td>
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<tr>
<td>High School Teacher</td>
<td>3.8%</td>
<td>$62,870</td>
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<tr>
<td>Middle School Teacher</td>
<td>3.6%</td>
<td>$60,810</td>
</tr>
<tr>
<td>Museum Exhibit Designer 🌿</td>
<td>11.6%</td>
<td>$45,710</td>
</tr>
</tbody>
</table>

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

🌞 Bright Outlook  💚 Green Occupation

**Professional Licensure**

ASU programs that may lead to professional licensure or certification are intended to prepare students for potential licensure or certification in Arizona. Completion of an ASU program may not meet educational requirements for licensure or certification in another state. For more information, students should visit the ASU professional licensure webpage: [https://admission.asu.edu/academics/licensure](https://admission.asu.edu/academics/licensure).

**Contact Information**

[College of Integrative Sciences and Arts](https://admission.asu.edu/academics)  | SANCA 233
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[CISA@asu.edu](mailto:CISA@asu.edu)  | 480-727-1526