

Tohono O'odham Community College



Associate of Science in Life Science

NAME:	TOCC ID:
TOCC EMAIL:	PHONE NUMBER:
TERM OF ADMISSION:	EXPECTED GRADUATION YEAR/TERM:
ADVISOR:	REQUIRED CREDITS FOR DEGREE: 60-62

I. General Education Courses (36 cr):

- Tohono O'odham Himdag (7 cr): HIS 122 (3 cr) and select one from the following: THO 101, THO 106 (4 cr)
- Mathematics (5 cr): MAT 220 Calculus I or higher
- Humanities and Fine Arts (3 cr): Any course from the General Education selection (Catalog p. 188)
- Social and Behavioral Sciences (3 cr): Any course from the General Education selection (Catalog p. 194)

Course	Course Name	Substitute	SEMESTER	YEAR	CREDITS	GRADE
PREFIX		Course				
HIS 122	Tohono O'odham History and					
	Culture					
THO						
WRT 101	Writing I					
WRT 102	Writing II					
MAT						
Humanities and Fine Arts						
Social and Behavioral Sciences						
BIO 105N	Environmental Biology					
BIO 181N	Unity of Life I					
BIO 182N	Unity of Life II					

II. Core Requirements (5 cr):

Course	Course Name	Substitute	Semester	YEAR	CREDITS	GRADE
PREFIX		Course				
BIO 232	Principles of Research in the Natural Sciences					
BIO 298	Service Learning Practicum (1 cr)					
BIO 299	Research Practicum (1 cr)					
				Total Co	re Credits	

III. Electives (19-21 cr):

Any course with an ANR, AST, BIO (except BIO 100N), CHM, GEO (except GEO 103), GLG, EGR, PHY prefix or MAT 220 and above, SCI 100, or SCI 290

Course	Course Name	Substitute	SEMESTER	YEAR	CREDITS	GRADE
PREFIX		Course				

Recommended Life Science Elective courses based on student interest in Life Sciences (Meet with Faculty Advisor for more information)

Agricultural Sciences

- ANR 111N Agroecology and Tohono O'odham Crop Production (4 credits)
- ANR 130N Plant Science (4 credits)
- ANR 286N Water Resources (4 credits)
- ANR 221N Soil Science (4 credits)
- BIO 208N Tohono O'odham Ethnobotany (4 credits)

Environmental Science

- CHM 151N General Chemistry I (5 credits)
- CHM 152N General Chemistry II (5 credits)
- PHY 121N Fundamentals of Physics I (5 credits)
 ANR 221N Soil Science (4 credits)

Natural Resources

- CHM 151N General Chemistry I (5 credits)
- CHM 152N General Chemistry II (5 credits)

CHOOSE COURSES FROM THE FOLLOWING LIST FOR A TOTAL OF AT LEAST 9 CREDITS:

- ANR 221N Soil Science (4 credits)
- ANR 286N Water Resources (4 credits)
- ANR 290N Wildlife Conservation (4 credits)
- ANR 128N Plant Ecology of the Sonoran Desert (4 credits)
- GEO217 Introduction to Global Positioning (2 credits)
- GEO 267 Introduction to Geographic Info Systems (3 credits)
- GEO 277 Advanced Geographic Information Systems (3 credits)
- BIO 254N Global Change Biology (4 credits)

Health Science

- CHM 151N General Chemistry I (5 credits)
- CHM 152N General Chemistry II (5 credits)
- PHY 121N Fundamentals of Physics I (5 credits)
- BIO 160N Intro to Human Anatomy & Physiology or BIO 127N Human Nutrition & Biology (4 credits)

Associate of Science in Life Science

TOCC's Science and Health programs include an Associate of Science in Life Science degree for transfer with the following concentrations: Agriculture, Health Science, and Natural Resources. All options in the AS Life Science are designed for students who plan to transfer to four-year colleges and universities after they graduate from TOCC. The AS Life Science degree can help a student attain admission to one of Arizona's public universities as a junior and prepares students for transfer to fields such as allied health, public health, medicine, veterinary studies, agriculture, natural resources, and science education.

Program Learning

- 1. Demonstrate knowledge of scientific concepts and vocabulary.
- 2. Design and conduct a research project.
- 3. Display a sense of place, by being able to identify health and environmental issues and propose a culturally-appropriate solution.
- 4. Apply critical and creative thinking skills to solve problems.

Areas of Focus

Health Sciences: This area is designed for transfer to four-year programs in health-related fields such as allied health, medicine, or veterinary science. Allied health careers include all non-nurse and non-physician health care fields and

some examples include audiologists, speech language pathologists, physical therapists, occupational therapists, diagnostic medical personnel (medical laboratory scientists), nutritionists, and dietitians.

Natural Resources: This area is designed for transfer to four-year programs in environmental science and, in particular, the area of environmental science that is involved in identifying, controlling, or eliminating sources of pollutants or hazards affecting the environment or public health. Some professions include soil conservationist, hydrologist, water quality specialist, environmental toxicologist, and air pollution analyst.

Environmental Sciences: This area is designed for transfer to four-year programs in the agricultural sciences which includes the study of the technologies of soil cultivation, crop cultivation and harvesting, animal production, and the processing of plant and animal products for human consumption and use. Careers include agronomist, animal scientist, crop production manager, agricultural education, agricultural extension agent, and horticulturist.

Agriculture Sciences: This area is designed for transfer to four-year programs in the agricultural sciences which includes the study of the technologies of soil cultivation, crop cultivation and harvesting, animal production, and the processing of plant and animal products for human consumption and use. Careers include agronomist, animal scientist, crop production manager, agricultural education, agricultural extension agent, and horticulturist.

Students:

You must secure official approval by your advisor(s) before submitting the **final** Program of Study. By signing or entering your name below, you agree to the following statement: "Students are responsible for complete knowledge of Academic Catalog requirements in their degree plan and for adhering to all policies in Academic Catalog and Student Handbook."

Signature Panel:

Please indicate approval of the curriculum on the Program of Study by placing your signature (formal electronic signatures are permitted) in the space provided.

Student:	Date:
Faculty Advisor:	Date:
Academic Advisor	Date:
Registrar:	Date:
Dean of Academics:	Date: