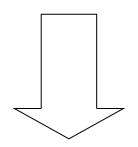
USDA - ACIS Grant

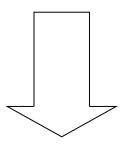
Environmental Science Pathway

Arizona Western College

Associates of Environmental Science with a biology emphasis



Northern Arizona University– Yuma Bachelor's in Environmental Science with a biology emphasis



Food and Agricultural Science Careers

- Agronomist
- Environmental consultant
- Environmental education officer
- Environmental manager
- EPA
- FDA
- Nature conservation officer
- Recycling officer
- Sustainability consultant
- USDA
- Waste management officer

• Water quality scientist

Bachelor of Science: Biological and Ecological Sciences Degree Requirements & 4-Year Plan

	Associate in Science & AGEC-S	S		Bachelor of Science	
Undergraduate Catalog (64 credits)			Undergraduate Catalog (120 Units)		
(AWC Coursework)			(NAU Coursework)		
	am is designed for those students pursuing a c			Ecological Sciences degree encompas	
	sciences. Students who wish to pursue a pre-		numerous cutting-edge disciplines. Each offers a multitude of		
preparation should follow this program as well. It is recommended			exciting career paths. You can also train to teach biology in		
	idents who wish to enter other related fields,			mary schools. You can prepare for adr	
	chnology or pre-professional health science (dental, or veterinary school, or for ot	her
	netry, pre-pharmacy, and pre-veterinary) shou		professional traini		
	am and consult with an Academic Advisor for t te courses and sequences for their particular f			. IN BIOLOGICAL AND ECOLOGICAL SO	
<u> </u>	EARN THE A.S. IN BIOLOGY YOU MUST COM			S (FULFILLED BY COMPLETING AGEC-	
10	REQUIREMENTS IN THE FOLLOWING 3 BLOC		AWC)	S (FOLFILLED BT COMPLETING AGEC-	(35 Cred
1. Require	d Major Courses	(8 Credits)		AND GENERAL EDUCATION COURSES	•
BIO 181	General Biology (Majors) I	4 credits	AWC		(29 Cred
BIO 181	General Biology (Majors) II	4 credits	3. MAJOR COURSE	5	(35 Cred
	epartmental Requirements	(19 Credits)	BSC 326/326LW	Ecology: Ecology Lab	4 cred
BIO 205	Microbiology	4 credits	(Jr. Level Writing		1 0,00
MAT 270	Applied Statistics	4 credits	Requirement)		
	east one of the following courses to satisfy the		BSC 350/350L	Classical and Molecular Genetics:	4 cred
requireme		(4 credits)		Genetics Lab	
BIO 234	Desert Biology		BSC 408 or 485	Fieldwork Experience, or	3 cred
ENV 230	Foundations			Undergraduate Research	
GPH 239	Intro to Geographic Information Systems		BSC 435C	Evolutionary Biology	3 cred
Select a m	inimum of 7 additional credits from the follow	ving courses:	BSC 460, BSC	Principles of Biochemistry:	4 cred
BIO 201, B	IO 202, BIO 234, CHM 235, CHM 236, ENV 230	D, GPH 239,	460L or CHM	Biochemistry Lab, or	
ENV 280, 0	GLG 101, GLG 102, GLG 110, PLS 200, PLS 211,	PLS 240, PHY	360, CHM 460L	Fundamental Biochemistry:	
111, PHY 1	112, PHY 121, and PHY 131	(7 credits)		Biochemistry Lab	
011110005	Over the Champing of Deputy and free DC	E 111	At least 14 credits	of additional NAU course work: any 1	00 +- 200
CHIVI 235	Organic Chemistry I (Requirement for BS	5 credits		-	
CHM 235	degree)	5 credits	level BIO courses e	except BIO 100 or any BIO recitation.	Any BSC
CHM 235 3. ARIZON		C-S	level BIO courses e course except 310	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6	Any BSC units of
3. ARIZON	degree) A GENERAL EDUCATION CURRICULUM -AGEO	C-S (37 Credits)	level BIO courses e course except 310 non-BIO prefix cou	except BIO 100 or any BIO recitation.	Any BSC units of
3. ARIZON English Co	degree) A GENERAL EDUCATION CURRICULUM -AGEC mposition	C-S (37 Credits) (6 credits)	level BIO courses e course except 310	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6	Any BSC units of , 355, 37
3. ARIZON English Co ENG 101	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition	C-S (37 Credits) (6 credits) 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irses from the following: PSY 320, 350	Any BSC units of , 355, 37 14 cre
3. ARIZON English Co ENG 101 ENG 102	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition	C-S (37 Credits) (6 credits) 3 credits 3 credits	level BIO courses e course except 310 non-BIO prefix cou	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irses from the following: PSY 320, 350	Any BSC units of , 355, 37
3. ARIZON English Co ENG 101 ENG 102	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition	C-S (37 Credits) (6 credits) 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES	Any BSC units of , 355, 37 14 cre (21 Cree
	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition	C-S (37 Credits) (6 credits) 3 credits 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irses from the following: PSY 320, 350	Any BSC units of , 355, 37 14 cre (21 Cree
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che	Any BSC units of , 355, 37 14 cre (21 Cree
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che	Any BSC units of , 355, 37 14 cre (21 Cree
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits rts list and	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider the requirements	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry.	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits rts list and (6 credits)	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements the requ	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge.
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits rts list and (6 credits) 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements the requ	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge.
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities	C-S (37 Credits) 3 credits 3 credits (5 credits) 5 credits rts list and (6 credits) 3 credits 3 credits 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements the requ	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge.
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences	C-S (37 Credits) 3 credits 3 credits (5 credits) 5 credits rts list and (6 credits) 3 credits 3 credits (5 credits)	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements the requ	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge.
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Sciences	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits 5 credits) 5 credits (6 credits) 3 credits 3 credits 3 credits 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider the requirements the Program Please contact NA	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 urses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informa
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Physical &	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits 5 credits (6 credits) 3 credits 3 credits 3 credits 3 credits 3 credits	level BIO courses e course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements the Program Please contact NA NAU-Yun	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410).	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informo
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Social & Be CHM 151 CHM 152	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science Behavioral Sciences General Chemistry I General Chemistry II	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits (5 credits) 5 credits (6 credits) 3 credits 3 credits 3 credits 3 credits (8 credits) 4 credits 4 credits	level BIO courses es course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements to Program Please contact NA NAU-Yun -At least 35 cree	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410). na General Admission Requirement	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informa
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Social & Be Physical & CHM 151 CHM 152	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science Biological Sciences General Chemistry I	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits (5 credits) 5 credits (6 credits) 3 credits 3 credits 3 credits 3 credits (8 credits) 4 credits 4 credits	level BIO courses es course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements to Program Please contact NA NAU-Yun -At least 35 cree	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410). ma General Admission Requirements edits & the AGEC or California IGET	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informa
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Physical & CHM 151 CHM 152 Additional	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science Behavioral Sciences General Chemistry I General Chemistry II Courses (see AGEC-S Additional Courses for p	C-S (37 Credits) (6 credits) 3 credits 3 credits (5 credits) 5 credits (5 credits) 5 credits (6 credits) 3 credits 3 credits 3 credits 3 credits (8 credits) 4 credits 4 credits	level BIO courses ed course except 310 non-BIO prefix cou 432 4.GENERAL ELECT If you are consider the requirements Program Please contact NA NAU-Yun -At least 35 creater cumulative GPA of	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410). Ina General Admission Requirement edits & the AGEC or California IGET f 2.5; or an associate degree with of GPA of 2.0	Any BSC units of , 355, 37 14 cree (21 Cree mistry sa ge. informa nts: C with a a cumula
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Social & Be CHM 151 CHM 152	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities – Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science Biological Sciences General Chemistry I General Chemistry II Courses (see AGEC-S Additional Courses for p College Physics I (Requirement for BS degree)	C-S (37 Credits) 3 credits 3 credits (5 credits) 5 credits (5 credits) 5 credits 3 credits 3 credits 3 credits 3 credits 3 credits 4 credits 4 credits 5 credits	level BIO courses et course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements to Program Please contact NA NAU-Yun -At least 35 cre cumulative GPA of -You will be consider	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410). na General Admission Requirements edits & the AGEC or California IGET f 2.5; or an associate degree with of GPA of 2.0 dered for admission if you have a 2 A (on a 4.0 scale) and at least 24 to	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informo nts: C with o a cumulo 2.0 or hig
3. ARIZON English Co ENG 101 ENG 102 Mathemat MAT 220 Arts/Huma one course Social & Be Physical & CHM 151 CHM 152 Additional selections)	degree) A GENERAL EDUCATION CURRICULUM -AGEO mposition Freshman Composition Freshman Composition tics Calculus I with Analytic Geometry or approved higher level math anities - Select at least one course from the A e from the Humanities list Arts Humanities ehavioral Sciences Social Science Behavioral Science Biological Sciences General Chemistry I General Chemistry II Courses (see AGEC-S Additional Courses for p College Physics I (Requirement for BS	C-S (37 Credits) 3 credits 3 credits (5 credits) 5 credits 5 credits 3 credits 3 credits 3 credits 3 credits 3 credits 3 credits 4 credits 4 credits 5 credits 5 credits	level BIO courses et course except 310 non-BIO prefix cou 432 4.GENERAL ELECTI If you are consider the requirements to Program Please contact NA NAU-Yun -At least 35 cre cumulative GPA of -You will be consider	except BIO 100 or any BIO recitation. ; up to 6 hours from BIO 497. Up to 6 irrses from the following: PSY 320, 350 VES ing a minor, 18 units of qualifying che for the Minor in Chemistry. requirements are subject to chan U-Yuma Science for most current (928-317-6410). ma General Admission Requirement edits & the AGEC or California IGET f 2.5; or an associate degree with a GPA of 2.0 dered for admission if you have a 2	Any BSC units of , 355, 37 14 cre (21 Cree mistry sa ge. informo nts: C with o a cumulo 2.0 or hig