# **WVC Natural Resources Pathway Guide 2025-2026**

The Natural Resources pathway at WVC equips students with foundational knowledge of aquatic and terrestrial ecosystems, practical field skills, and an understanding of the social aspects of resource management. Course recommendations focus on preparing students for transfer to universities while also ensuring they are competitive for entry-level natural resource technician positions. Students in this pathway earn an Associate of Arts and Sciences (AAS-DTA). The course selections are flexible and can be adapted to a variety of education and career goals.

**Workforce Preparation** | Students in this pathway are competitive for a variety of technician-level positions in Natural Resources and Environmental Science, especially within the local area.

**Transfer Preparation** | Students who generally follow the course recommendations will meet most, if not all, of the general education requirements at four-year institutions and will be major-ready for a wide variety of degrees in ecology, environmental science, environmental studies, natural resources management, and related fields.

The pathway is curated in consultation with local natural resource agencies and organizations.



Explains the rationale for each course recommended

Want more information? Fill out the Natural Resources Interest Form and an advisor will contact you. Scan or click to access. <a href="https://forms.office.com/r/eQxW3TyTdq">https://forms.office.com/r/eQxW3TyTdq</a>

# **ABOUT THIS GUIDE**

This guide is designed to help prospective and current students, Navigators, and Advisors understand the best options to complete a natural resource / environmental studies focused degree at Wenatchee Valley College. Please consult the WVC Catalog (https://catalog.wvc.edu) for the most current degree requirements and course options.

**Are you a Running Start student?** Running Start students can complete the Pathway with a few modifications. More information and pathway-planning resources specifically for Running Start Students are available on the Running Start webpage (wvc.edu/apply/future-students/running-start/equivalencies-and-degrees)

### **INSIDE THIS GUIDE**

# PROGRAM LEARNING OUTCOMES Describes what all students will be able to do upon completion of either program option. PATHWAY GUIDE | Natural Resources AAS-DTA Pathway Outlines recommended coursework PLANNING RESOURCE | WVC Courses by Degree Requirement Lists WVC courses by degree requirements, useful for exploring alternatives to the course recommendations. PLANNING RESOURCE | Practical Guidance for the AAS-DTA Offers advice for prospective and current students PLANNING RESOURCE | Basis of Course Recommendations for DTA Pathway Page 6

**WENATCHEE VALLEY COLLEGE** 

# **PROGRAM LEARNING OUTCOMES**

Program learning outcomes (PLOs) outline the knowledge and skills that students acquire through completion of the pathway. The outcomes are reviewed annually by an advisory group comprised of local professionals representing various natural resource areas and agencies.

Students who complete the AAS-DTA pathway in Natural Resources at WVC will be able to:

- Operate tools and equipment commonly used in the natural resources field work.
- Utilize maps, aerial photographs, and land survey abilities in the management of natural resources, including geographic information systems.
- Understand and apply concepts of ecology, conservation, and management for timber, fish, wildlife, and their habitats.
- Identify important plant and animal species for North Central Washington ecosystem.
- Select and apply appropriate field techniques to sample, measure, and monitor timber, fish, and wildlife species and their habitat(s).
- Identify and model interpersonal skills and professional behavior needed for successful job performance.
- Demonstrate the ability to locate opportunities and prepare application materials for state and federal jobs in natural resources.
- Describe biotic and abiotic processes, including human impacts that influence ecosystems and contribute to ecological change.
- Objectively predict, assess, analyze, synthesize, and evaluate perspectives of diverse stakeholders regarding natural resource problems and issues.
- Understand cultural diversity and describe the impact of the global distribution of people and wealth on natural resource use and valuation.

# **PATHWAY GUIDE | Natural Resources AAS-DTA Pathway**

The Natural Resources DTA pathway is a curated pathway mapped to the existing Associates of Arts and Sciences DTA (AAS-DTA) requirements. Students completing this pathway have significant flexibility in their course selections as they only need to meet the AAS-DTA requirements. The courses designated below were carefully selected to best prepare students to be major- and employment-ready in the field of Natural Resources. An Academic Advisor is available to assist students in selecting alternatives. A selection guide and basis-of-recommendation are available in this packet.

### WRITING and QUANTITATIVE SKILLS | 15 Credits

WRITING (10 credits)
ENGL& 101: Composition (required)
ENGL& 235: Technical Writing (strongly recommended)
-or- ENGL 201, 202, or 203

### QUANTITATIVE/SYMBOLIC (5 credits)

MATH& 146: Intro to Statistics (recommended)

-or- MATH& 107: Math in Society (recommended)

-or- other quant./sym. course from AAS-DTA requirements

# **HUMANITIES & SOCIAL SCIENCES** | 30 Credits

HUMANITIES (15 credits)
CMST& 210: Interpersonal Comm. (strongly recommended)
-or- other humanities from AAS-DTA requirements
PHIL& 115: Critical Thinking
-or- other humanities from AAS-DTA requirements
AllS 203: Introduction to AllS Literature [Di]
-or- other humanities from AAS-DTA requirements

Students may select any courses here that meet the humanities requirements for an AAS-DTA. The courses listed here provide the best match to the knowledge, skills, & abilities a natural resource professional needs as well as those classes that will best prepare a student for transfer to a natural resource related major at a four-year institution.

SOCIAL SCIENCES (15 credits)
GEOG 215: Introduction to GIS (strongly recommended)
-or- other Soc. Sci from AAS-DTA requirements
ECON 202: Macro Economics (ECON is strongly recommended)
-or- other Soc. Sci from AAS-DTA requirements
AIIS 103: The Indigenous PNW [Di]
-or- other Soc. Sci from AAS-DTA requirements

Students may select any courses here that meet the social science requirements for an AAS-DTA. The courses listed here provide the best match to the knowledge, skills, & abilities a natural resource professional needs as well as those classes that will best prepare a student for transfer to a natural resource related major at a four-year institution.

# **NATURAL SCIENCES & ELECTIVES (45 Credits)**

NATURAL SCIENCES (15 credits)				
BIOL& 211: Majors Cellular	The DTA requires 15 credits of natural sciences from three			
BIOL& 212: Majors Plants	different areas. At least one must have a lab. The BIOL series is			
BIOL& 213: Majors Animals	recommended, but other classes may be selected here.			

BIC	OL& 213: Majors Animals	mmended, but other classes may be selected here.							
ELE(	ELECTIVES: Select 30 credits								
	BIOL 103: Salmon and Society [Di]								
	ENVS 170: Intro Stream Ecology	Electives are very flexible. The courses listed here							
	ENVS 230: Fisheries Science and Management	provide the best match to the knowledge, skills, &							
pua	NATR 160, 220, 240 (all [R]), or other ENVS course(s)	abilities natural resource professionals need as well as							
Ĕ	-or- NATR 198/298: Field Skills in Natural Resources [R] (5 Cr.)	classes that will best prepare a student for transfer to a							
00	-or- CWE 196/296 Coop. Work Experience [R] (5 Cr.)	natural resource related major at a four-year institution.							
	-or- NATR 108 (3 Cr.) + NATR 198/298 (2+ Cr.)								
gly	BIOL 125: Environmental Science								
ro	NATR 235: Society & Nat. Res. [R] -or- GEOG& 200: Intro to Human G	eog							
St	BIOL 217: Intro. to Ornithology	taken.							
Ot	her Recommended Options	The DTA requires at least five gradits from diversity							
BIOL& 221: Majors Ecology/Evolution									
GEOG 150: Intro to Sustainability [Di]									
CI	HEM& 121: Intro to Chemor- CHEM& 110: Chem Concepts								
В	CT 284: Project Mgmt [R] -or- BCT 130: Spreadsheets [R]	Tot more information.							
Strongly Recommend	NATR 160, 220, 240 (all [R]), or other ENVS course(s)  -or- NATR 198/298: Field Skills in Natural Resources [R] (5 Cr.)  -or- CWE 196/296 Coop. Work Experience [R] (5 Cr.)  -or- NATR 108 (3 Cr.) + NATR 198/298 (2+ Cr.)  BIOL 125: Environmental Science  NATR 235: Society & Nat. Res. [R] -or- GEOG& 200: Intro to Human G BIOL 217: Intro. to Ornithology  her Recommended Options  IOL& 221: Majors Ecology/Evolution  EOG 150: Intro to Sustainability [Di]  HEM& 121: Intro to Chemor- CHEM& 110: Chem Concepts	abilities natural resource professionals need as classes that will best prepare a student for transnatural resource related major at a four-year in  By AAS-DTA requirements, no more than 15 cre							

# PLANNING RESOURCE | WVC Courses by Degree Requirement

### WRITING 10 credits

A grade of C (2.0) or higher in ENGL 201, 202, 203, or 235 is required for graduation.

English (ENGL) 101 required English (ENGL) 201, 202, 203, or 235

### QUANTITATIVE/SYMBOLIC

5 credits

Mathematics (MATH) 107, 140, 141, 142, 146, 148, 151, 152, 153, 173, 200, 211, 238, 254
Philosophy (PHIL) 120

### HUMANITIES

L5 cred

Courses must be from 3 different subject areas. Subject areas appear in **bold**. No more than 5 credits of Performance courses, which are underlined below and World Languages.

Amer. Indian Indig. Studies (AIIS) 170 , 203

Art (ART) 100, 106, 107, 110, 111, 113, 116, 117, 130, 131, 132, 133, 134, 135, 137, 138, 139, 141, 142, 143, 150, 151, 152, 154, 155, 201, 202, 203, 204, 206, 208, 210, 211, 212, 213, 217, 218, 219, 220, 222, 224, 225, 233, 234, 235, 236, 250, 256 Chicano Studies (CHST) 120 Communications (CMST) 101, 130, 210, 220

Drama (DRMA) 101
English (ENGL) 111, 112, 113, 135, 215, 226, 240, 247 , 250, 255 , 275, 276
Humanities (HUMN) 101, 116, 117, 118, 141, 201, 202, 206, 207, 242 

Journalism (JOUR) 101
Music (MUS) 100, 105, 110, 111, 112, 113, 114, 116, 120, 121, 122, 123, 125, 131, 132, 133, 161, 170, 172, 173, 174, 175, 177, 210, 211, 212, 221, 241, 242, 243, 261, 270, 272, 273, 274, 275, 277
Philosophy (PHIL) 101, 105, 115, 120, 201,

Theater Arts (THRT) <u>165</u>, 170, <u>265</u> World Languages

202, 203, 210, 211, 275

American Sign Language (ASL) 121, 122, 123, 131, 221, 222, 223 Japanese (JAPN) 121, 122, 123, 221, 222, 223 Native American Languages (NAL) 101,

Native American Languages (NAL) 101, 102, 103, 111, 112, 113, 121, 122, 123, 204, 205, 206, 214, 215, 216, 224, 225, 226

Spanish (SPAN) 121, 122, 123, 221, 222, 223, 231, 232, 233

### NATURAL SCIENCES 15 credits

Courses must be from 3 different subject areas. Subject areas appear in **bold**. At least 1 course must include a lab, which are <u>underlined</u> below.

Anthropology (ANTH) 205 Astronomy (ASTR) 101 Biology General (BIOL) 100, 126, 185, 211, 218, 260 Botany Biology (BIOL) 186, 212, 216, 230 Chemistry (CHEM) 106, 110, 121, 131, 161, 162, 163, 261, 262, 263 Computer Science (CSC) 142 Environment Biology (BIOL) 103 0, 106, 125, 127, 221; (ENVS) 170 Oceanography (OCEA) 100 Geology (GEOL) 101, 107, 208, 218 Mathematics (MATH) 107, 140, 141, 142, 146, 148, 151, 152, 153, 200, 211, 238, 254 Meteorology (METR) 110, 210 Nutrition (NUTR) 101, 105, 106, 107, 202 Physical Education (PEH) 286, 288 Physics (PHYS) 100, 114, 115, 116, 221, Science/Engineering/Technology/Math (STEM) 201, 203 Zoology Biology (BIOL) 213, 217, 241, 242

### SOCIAL SCIENCES

15 credits

Courses must be from 3 different subject areas. Subject areas appear in **bold**.

Amer. Indian Indig. Studies (AIIS) 1020, 103 0, 150 0, 202 0, 209 0, 210 0, 240 0 Anthropology (ANTH) 100 , 204, 206 , 207, 217, 2200 Chicano Studies (CHST) 112 0, 1150 Early Childhood Education (ECED) 105 Economics (ECON) 101, 201, 202 Education (EDUC) 115 Geography (GEOG) 100 , 102 , 150 , 150 , 207 O. 215 History (HIST) 116, 117, 118, 146, 147 , 202**0**, 214, 215**0**, 219, 230**0**, 238, 240**0**, 260 **Q**, 261 **Q**, 271, 274, 275 Political Science (POLS) 101, 202, 203 . 205 O . 206 O Psychology (PSYC) 100, 102, 105, 200, 202, 203, 204, 205, 215, 220, 245 Sociology (SOC) 101, 110, 1350, 1510,

### Diversity Requirement:

201, 203, 225

Students seeking an AAS-DTA degree from WVC need to take at least one diversity course as part of the 90 credits required to graduate. The diversity classes are identified by the symbol. Visit <a href="https://www.wvc.edu/DR">www.wvc.edu/DR</a> for more information.

### ELECTIVES

30 credit

There are 2 types of electives: General & Restricted.

General Electives are normally accepted at 4year institutions whether or not an AAS degree is earned. In addition to the list below, all courses listed in the areas of writing, quantitative/symbolic, humanities, natural sciences, and social sciences may be used as general electives. No more than 3 Physical Education (PEH/PEHR) activity credits are allowed in this degree.

Accounting (ACCT) 201, 202, 203 Agriculture (AGRI) 101, 108 Business (BUS) 101, 201, 240, 241 Chemical Dependency Studies (CDS) 101 Computer Science (CSC) 110, 141, 210, 215, 243 Criminal Justice (CJ) 101, 105, 106, 110 Education (EDUC) 204, 210 Engineering (ENGR) 214 Environmental Science (ENVS) 230, 231 Mathematics (MATH) 171, 172, 195 Music (MUS) 145, 146 Physical Education Activities (PEH) 101, 102, 103, 104, 110, 111, 112, 114, 115, 116, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 130, 133, 134, 142, 143, 150, 155, 161, 162, 226, 261, 262 Physical Education Recreation Activities (PEHR) 105, 106, 107, 144 Physical Education Professional (PEH) 180, 181, 182, 189, 250, 283, 284, 285, 287, 289 Physical Education Recreation (PEHR) 201, 202, 204

Restricted Electives do not normally transfer to 4-year institutions unless they are included in the AAS degree. No more than 15 restricted credits can be included in the AAS degree. Restricted electives are credit courses numbered 100 or higher that are not listed elsewhere on this page and that come from the following departments.

ACCT, AGRI, AUTO, BCT, BTEC, BUS, BUSA, CDS, CJ, CMAA, CSC, CTS, CULI, CWE, ECE, ECED&, EDAPP, EDUC, EDUC&, ELEC, ELTRO, EMT, ENGR, ESLI, ESRT, FS, HCA, HLTH, INDT, LIBR, MA, MACH, MANU, MATH, MLT, NATR, NURS, NUTR, OCED, PCOL, PEHR, PHARM, RADT, RCLS, READ, SDS, TGM, WELD

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# **PLANNING RESOURCE | Practical Guidance for Students**

# **Course Selections**

The AAS-DTA pathway is very flexible\* and you may want to make some alternative selections. Here are some things to consider as you apply this map to your own goals.

Natural resource professionals use scientific knowledge in their work and need a broad understanding of many concepts such as ecology, biology, basic chemistry, and more. Many natural resource professionals eventually develop an area of specialization (fisheries, wildlife, habitat, etc.), but it is usually not necessary to define that while you are in college. Instead, focus on gaining broad skills and experience (summer internships or seasonal jobs can be a great way to gain experience) and developing a sense of your own interests.

The biology series (BIOL& 211, 212, 213) is strongly recommended for all students. This will transfer directly to four-year institutions and fulfill the year of major-level biology that is required for most natural resource related majors. It is also a common requirement for entry-level employment at state and federal agencies. You should take BIOL&211 in your first year if possible. It is generally offered every quarter.

If you know where you want to transfer, review the specific requirements and factor those requirements into your course selections at WVC. The program advisor can help you with this. You should also consider your own interests; college helps prepare you for work, but it is also an opportunity to grow in personally meaningful ways as well.

# **Experience Matters**

**Experience is critical for natural resource professionals.** You can gain a lot of transferable (soft skills) through any job, but you will want to get some applied experience as well. Many students work as technicians during the summer. If you are not able to secure applied employment, consider volunteering with a professional – even if it is just for a few days. The program advisor(s) have network connections you can use and often share student-focused opportunities for internships and employment.

# We are Here to Help!

WVC has a variety of resources to support you while you are a student. These include financial aid and scholarships, academic supports (Math Center), support programs (TRiO SSS, MESA), and more. You can find more information on the WVC website, the Natural Resources Advising Canvas group, or by talking with a program advisor.

# **PLANNING RESOURCE | Basis of Course Recommendations for Pathway**

		Degree Requirement/Area	Rational for Recommendation				
	Recommended Course Selection		Career-Focused Knowledge, Skill, Ability (KSA)	Identified as High- Value KSA?	Major Ready for Transfer		
Writing	ENGL& 101: Composition (required)				Х		
	ENGL& 235: Technical Writing (strongly recommended)	Writing	Х	Yes	Х		
	-or- ENGL 201, 202, or 203						
Quantitative	MATH& 146: Intro to Statistics (recommended)	- Quantitative	Х		Х		
-	-or- MATH& 107: Math in Society (recommended)		Χ				
Humanities	CMST& 210: Interpersonal Comm (strongly recommended)	Humanities   Communications	Х	Yes	Х		
	PHIL& 115: Critical Thinking (recommended)	Humanities   Philosophy	Х				
	AllS 203: Introduction to AllS Literature [Di]	Humanities   AIIS	X				
Social	GEOG 215: Introduction to GIS (strongly recommended)	Soc-Sci   Geography	Х	Yes			
Sciences	ECON 202: Macro Economics (ECON is strongly recommended)	Soc-Sci   Economics			Х		
00.0	AIIS 103: The Indigenous PNW [Di]	Soc-Sci   AIIS	Х	Yes			
Natural	BIOL& 211: Majors Cellular	Nat-Sci   General   Lab	Х		Х		
Sciences	BIOL& 212: Majors Plants	Nat-Sci   Botany   Lab	Х		Х		
00.0	BIOL& 213: Majors Animals	Nat-Sci   Zoology   Lab	Х		Х		
Electives	Strongly Recommended Options						
	BIOL 103: Salmon and Society [Di]	Nat-Sci   Enviro   Diversity	Х	Yes			
	ENVS 170: Intro Stream Ecology	Nat-Sci   Enviro   Lab	Х	Yes			
	ENVS 230: Fisheries Sci and Mgmt	Elective	Х	Yes			
	NATR 198/298: Field Skills in Natural Resources [R] (2-5 cr)	Restricted Elective	Х	Yes			
	BIOL 125: Environmental Science	Nat-Sci   Environment   Lab	Х	Yes			
	NATR 235: Society & Nat Res [R] -or- GEOG& 200: Intro to Human Geog	Elective -or- Social Science	Х	Yes			
	BIOL 217: Intro. to Ornithology	Nat-Sci   Zoology   Lab	X	Yes			
	NATR 108 (3 cr), 160, 220, 240 (all are [R]) or other ENVS course	Elective or Restrict Elective	X	Varies			
	Additional Recommendations						
	BIOL& 221: Majors Ecology/Evolution	Nat-Sci   Environment   Lab	X				
	GEOG 150: Intro to Sustainability [Di]	Soc-Sci   Geog   Diversity	Х				
	CHEM& 121: Intro to Chemor- CHEM& 110: Chem Concepts	Nat-Sci   Chem   121 has Lab			Х		
	BCT 284: Project Mgmt [R] -or- BCT 130: Spreadsheets [R]	Restricted Elective	X	Yes			

Knowledge, Skills, and Abilities (KSAs) were identified in data-based needs assessment for Natural Resources profession and are reviewed by a Program Advisory Group made up of local industry professionals. High-Value designation was based on local employer data for KSAs identified.