Natural Resources DTA Running Start Guide

ABOUT NATURAL RESOURCE CAREERS | Natural Resources is a dynamic field that bridges the gap between society and the environment. It focuses on understanding, monitoring, managing, and protecting Earth's natural resources (things like forests, water, and wildlife). Natural Resources professionals are involved in a wide range of activities, from studying ecosystems and assessing environmental impacts to developing sustainable practices and policies.

ABOUT THE NATURAL RESOURCE DTA | 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 to earn the WVC credential.

Running Start students will generally need to make substitutions to the courses outlined to fit the high school requirements. As high school students, they also have different factors they may want to consider. This packet serves to support students, parents, and College Navigators in understanding these elements. The <u>Natural Resources DTA Advisor</u> is also available to assist College Navigators in determining courses that will best prepare students for their goals in the field of Natural Resources.

Inside this Packet

Planning Your Degree	2
English/Writing	2
Science Classes	2
Mathematics	2
Humanities & Social Sciences	2
Electives	2
Equivalency Recommendations WHS	3
Equivalency Recommendations Eastmont	4
Equivalency Recommendations Omak Area Schools	5
Standard Recommendations for Natural Resources DTA (90 Credits)	6
Rational: Standard Recommendations for Natural Resources DTA	7

Developed by Bobbi Johnson, Faculty in Biology & Natural Resources Last Review & Update | Oct. 2024

Planning Your Degree

The information below can help you and your College Navigator develop a plan that works for your interests and needs, while also allowing you to complete your high school and college requirements.

English/Writing

- English Composition (ENGL&101) is required for the DTA at WVC so all students should take this course.
- **Technical Writing (ENGL&235)** is recommended for students. This course will prepare you for writing reports in your science classes, as well as in your career. Most bachelor (4-year degrees) in Natural Resource degrees require ENGL&235. However, ENGL202 and ENGL203 will also work if your high school does not allow ENGL&235.

Science Classes

- The majors biology series (BIOL&211, 212, 213) is part of the <u>standard Natural Resources DTA pathway</u>. However, Running Start students often choose alternative science courses that are aligned with their interests and support development of foundational knowledge for the majors-biology series which they take while attending a 4-year institution or during an additional year at WVC after completing Running Start.
- It is recommended that students take classes in **biology (BIOL)**, **environmental science (ENVS)**, and **chemistry (CHEM)**. Lab courses are strongly recommended.
- Courses that support foundational knowledge for Natural Resources include (* denotes a lab): Intro to Stream Ecology* (ENVS 170), Salmon, Ecosystems, and Society (BIOL103), Environmental Science* (ENVS125), Insects & Ecosystems (BIOL 185), NW Environments (BIOL127), Chemical Concepts (CHEM& 110), Intro to Marine Biology (BIOL106), Intro to Chemistry* (CHEM&121), and Environmental Geology (GEOL 218).

Mathematics

- Most natural resource professionals need a basic understanding of statistics.
- If a Running Start student is ready, they can take **Introduction to Statistics (MATH&146)**, but most Running Start students take **Math in Society (MATH&107)**. Both classes meet the DTA requirements. Some Running Start students may take both, with **MATH&146** counting as a Natural Science or an elective credit in the DTA.

Humanities & Social Sciences

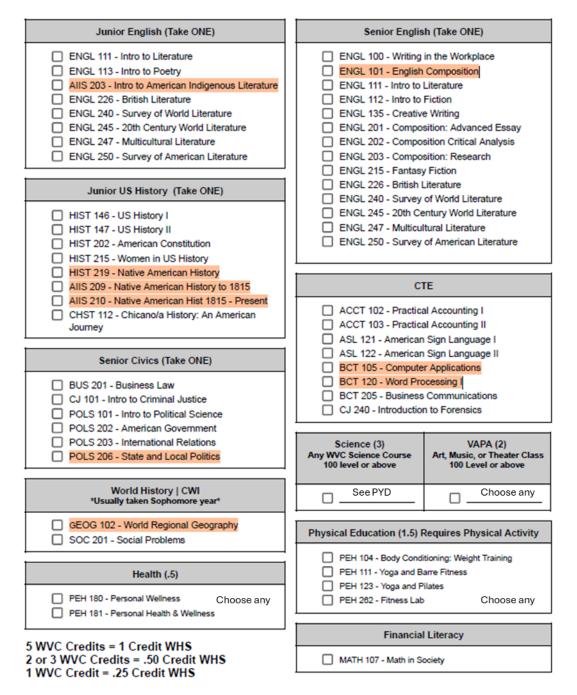
- The <u>standard Natural Resources DTA pathway</u> is mapped to the humanities and social science courses that are generally required/recommended for bachelor's degrees in natural resource fields. However, Running Start students will need to first prioritize their high-school graduation requirements.
- Within the high-school requirements, topics that support natural resource fields include **government**, **Indigenous focused (literature, studies, history)**, **economics**, and **geography**. However, it is okay to select topics that interest you, as these fields of study are supportive in ways that go beyond the specific topics.

Electives

- Students should take courses specific to natural resources if possible. These include Intro to Fisheries Sci and Mgmt. (ENVS230), Forest Health and Ecology (NATR160), Intro. to Natural Resources (NATR103), Society & Natural Resources (NATR235), Intro to Stream Ecology (ENVS170), Salmon, Ecosystems, and Society (BIOL103), and Introduction to GIS (GEOG 215).
- Students should select courses that help them develop basic technology skills if needed. These include Word Processing I (BCT 120), Computer Applications (BCT 105), Spreadsheets (BCT130).
- Soft-skills are critical in natural resources. Classes like Interpersonal Communication (CMST&210) and Project Management (BCT284) are recommended.

Equivalency Recommendations | WHS

WHS/WVC Equivalencies Class of 2023 +



Recommendations are highlighted in each category. Refer to <u>Planning Your Degree (PYD)</u> in this packet for detailed information.

Equivalency Recommendations | Eastmont

	Running Start Equivalents	WENATCHEE VALLEY COLLEGE
First Name	Last Name	
Date	Class of	
-		
Junior English	Math (3.0)	CTE/VOC (1.0)
English 101 Comp: General	MATH >	ACCT 102 Pract. Accounting
AND one more	100 Level	AGR 101 Intro Agriculture
English 135 Creative Writing		AGR 108 Intro Horticulture
English 111 Intro to Lit	Science (3.0)	ECED 105 Intro Early Child Ed
English 112 Intro to Fiction	AGRI 261 Plant Science	ECED 107 Health Safety Nutr
English 113 Intro to Poetry	AGRI 263 Soils	ECED 120 Prac: Nurt Relation
Contract Frantish (Tales and)	ASTR 101 Intro Astronomy	ENGR 102 Eng Graphics Des
Senior English (Take one)	PEH 288 Anat Kinesiology	ENGR 105 Comp Aided Des WELD 128 Basic Welding
English 201 Comp: Adv Essay English 202 Comp: Crit Analysis	Biology - See PYD	WELD 128 Basic Welding
English 202 Comp: Crit Analysis English 203 Comp: Research		World Lang. (2.0)
AND one more	Geology	
	Meteorology Physics	
English 215 Fantasy Fiction English 226 British Fiction		
English 240 World Lit	DPE (1.5)	Social Studies
English 250 American Lit		HIST 214 PNW (WA History)
		GEOG 100 Geography
Jr. Soc Stud (Take BOTH)	only	HIST 118 West. Civ 3 (World)
History 146 US Hist 1		
History 147 US Hist 2	Health (.5)	Electives
	NUTR 101 Nutrition	
Senior Soc Stud (Take ONE)	PEH 181 Health & Wellness	ā — — — — — — — — — — — — — — — — — — —
POLS 101 Intro to Poly Sci	PEH 182 🔲 1st Aid: Emergen	
POLS 202 American Govt		ā
AND one more	Fine Art (2.0)	
BUS 101 Intro to Business	Art 🗌	
BUS 201 Business Law	Music	Additional Requirements
ECON 101 Intro to Economics	Theater	HSBP
ECON 201 Micro Economics		Grad Pathway
ECON 202 Macro Economics	NOTES	
POLS 203 🔲 International Relat		
POLS 205 Cont. World Prob		
POLS 206 State & Loc. Govt		
PSYCH 100 General Psychology SOC 101 Intro to Sociology		
SOC 101 Intro to Sociology SOC 201 Social Problems		
History (any)		
	+	
		Version 2/20/2024

Recommendations are highlighted in each category. Refer to <u>Planning Your Degree (PYD)</u> in this packet for detailed information.

Equivalency Recommendations | Omak Area Schools

Subject	Brewster	Lake Roosevelt	Liberty Bell	Okanogan	Omak	Oroville	Pateros	Tonasket 2023 GRAD	2024 GRAD
English 11		Eng 101	101	Eng 101	Eng 101		Eng 101	Eng 101	ENGL 101 & ENGL 250 or HUM 101
English 12	Eng 201, 202,203 or 235	Eng 201, 202 or 203	Eng 201 or Eng 202 & <u>one</u> of these three: Eng 111, 112, 203	Eng 201, 202 or 203	Eng 201, 202 or 203	any other ENG	Eng 201, 202, or 203	Eng 201, 202 or 203	ENGL 201 or 202 & ENGL 112 or ENGL 203
US History WA History (214)	H ist 146 or 147 se any	Hist 146 or 147 & Pols 202,203,206	Hist 146 or 147 or Pols 202	Hist 146 or 147	Hist 214 & Hist 146 or 147	Hist 146 or 147	Hist 146 or 147	Hist 146 or 147	Hist 146 or 147 or POLS 202
Science See PYD	Lab class	Lab class	Lab Class	Lab class	Lab class	Lab class	Lab class	Lab class	Bio 100 <mark>or</mark> Chem 121
		Future Liv: ^{PYD} Soc 101, 135 Pol 202, 206 or any Anthro	ANY TWO: Anth 100, Econ 101,Geog 100, Psyc 245, Pols 203, Phil 211, Soc 201	any Pols 101, 202, 206	Pols 202 <mark>or</mark> 206	Pols 202, 206 or any 2: Econ 101, 201 Pols 203,Geog 100, Anthro 100	POLS 101 or higher	Pols 202, 203 or 206	Any two: Anth 100, Econ 101, Econ 201, Pols 203,
Occupational Ed _{See PYD}	Must be approved by BHS (Bus, Agri, BCT)	BCT 105 or Bus	SDS 101 required & BCT, Psyc 100, 200 or SOC 201	BCT or Acct & Econ 101 (req.)	BCT, Bus or Acct	any Acct, Bus, or Bct		BCT, Acct, Bus	BCT 105 & SDS 101 (1st year)
Choose any Health	PEH 180 or 181	PEH 180 or 181	PEH 180, 181 <mark>or</mark> Nutr 101	PEH 180 or 181	PEH 180	PEH 181	PEH 181	PEH 180	PEH 180 or PEH 181 or Nutri 101
PE Choose any	any performance: 101-162	any PEH		any PEH (5 cr)	Any PEH Activity	Any PEH	any PEH	PEH 181	
Math	Math 107 or above	Math 107 or above		Math 107 or above or Acct	Math 107 <mark>or</mark> above	Math 107 or above	Math 107 or above	Math 107 or above	
Arts Choose any	any performance Art	any Art	any Art, Mus <mark>or</mark> Theater	any Art or Drama	any Art <mark>or</mark> Theater	any Art or Drama	any Art	any Art, Music, Theater	any Art, Music, Theater
	4/30/2021	6/8/2021	3/21/2019	11/2/2021	4/27/2021	6/8/2021	4/28/2021	approved 5/	/5/22

Recommendations are highlighted in each category. Refer to <u>Planning Your Degree (PYD)</u> in this packet for detailed information.

Standard Recommendations for Natural Resources DTA (90 Credits)

WRITING and QUANTITATIVE SKILLS | 15 Credits

WRITING (10 credits)

ENGL& 101: Composition

ENGL& 235: Technical Writing (recommended)

-or- ENGL 202 (Analysis) or ENGL 203 (Research)

HUMANITIES & SOCIAL SCIENCES | 30 Credits

QUANTITATIVE/SYMBOLIC (5 credits)

MATH& 146: Intro to Statistics (recommended)

-or- MATH& 107: Math in Society

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

HUMANITIES (15 credits)				
CMST& 210: Interpersonal Communication	Students may select any courses here that meet the			
PHIL& 115: Critical Thinking (recommended)	humanities requirements for an AAS-DTA. The courses listed			
-or- other humanities from AAS-DTA requirements	 here provides the best match to the knowledge, skills, & abilities a natural resource professional needs as well as those 			
AIIS 203: Introduction to AIIS Literature [D]	classes that will best prepare a student for transfer to a natural			
-or- other humanities from AAS-DTA requirements	resource related major at a four-year institution.			
SOCIAL SCIENCES (15 credits)				
GEOG 215: Introduction to GIS	Students may select any courses here that meet the social			
-or- other Soc. Sci from AAS-DTA requirements	science requirements for an AAS-DTA. The courses listed here			
ECON 202: Macro Economics	provide the best match to the knowledge, skills, & abilities a			
-or- other Soc. Sci from AAS-DTA requirements	natural resource professional needs as well as those classes			
AIIS 103: The Indigenous Pacific Northwest [D]	that will best prepare a student for transfer to a natural			
-or- ANTH 220: Cross-Cultural Studies	resource related major at a four-year institution.			
-or- SOC& 101: Introduction to Sociology				
-or- other Soc. Sci from AAS-DTA requirements				

NATURAL RESOURCES, NATURAL SCIENCES, & ELECTIVES | 45 Credits

BIOL& 211: Majors Cellular**	Natural Resources is a science-based field of study.
BIOL& 212: Majors Plants**	Accordingly, the course selections here exceed the natural
BIOL& 213: Majors Animals**	sciences requirement for the AAS-DTA.
ENVS 170: Intro to Stream Ecology**	The courses listed here provide the best match to the
-or- BIOL& 221: Majors Ecology/Evolution*	knowledge, skills, & abilities a natural resource professional
BIOL 103: Salmon, Ecosystems, and Society [D]	needs as well as those classes that will best prepare a student
ENVS 230: Intro to Fisheries Sci and Mgmt.	for transfer to a natural resource related major at a four-year
-or- NATR 160: Forest Health and Ecology (RE)	institution.
CHEM& 121: Introduction to Chemistry (recommended)	
-or- CHEM& 110: Chemical Concepts	from three different areas and at least one must have a lab.
NATR 235: Society and Natural Resources (RE)	Courses designated with the * are natural sciences, ** are
BIOL 125: Environmental Science** (recommended)	natural sciences with a lab.
-or- BCT 284: Project Management (RE)	
-or- BCT 130: Spreadsheets (RE)	By AAS-DTA requirements, no more than 15 credits of courses
-or- other BIOL, ENVS, NATR or MATH course	designated as restricted electives (RE) should be taken.
-or- other course related to career/major goal	

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 to earn the WVC credential.

Running Start students will generally need to make substitutions to the courses outlined to fit the high school requirements. As high school students, they also have different factors they may want to consider and should work closely with their College Navigator to make a plan that fits their individual needs.

Rational: Standard Recommendations for Natural Resources DTA

	Course Recommendation	Degree Requirement(s)	Rational for Recommendation	
Writing	ENGL& 101: Composition			
	ENGL& 235: Technical Writing (recommended)	Writing	Required for all DTA degrees	
	-or- ENGL 202 (Analysis) or ENGL 203 (Research)			
Quantitative	MATH& 146: Intro to Statistics		High-value KSA, Major-ready for transfer	
•	-or- MATH& 107: Math in Society	Quantitative	KSA	
	-or- other quant./sym. from AAS-DTA requirements			
Humanities	CMST& 210: Interpersonal Communication	Humanities	High-value KSA, Major-ready for transfer	
	PHIL& 115: Critical Thinking (recommended)	Humanities - Philosophy	KSA - Soft Skills	
	-or- other humanities from AAS-DTA requirements	Humanities - Area varies by course		
	AIIS 203: Introduction to AIIS Literature [D]	Humanities - AIIS	KSA	
	-or- other humanities from AAS-DTA requirements	Humanities - Area varies by course		
Social	GEOG 215: Introduction to GIS	Social Science - Geography	High-value KSA	
Science	ECON& 202: Macro Economics (recommended)	Social Science - Economics	KSA, Major-ready for transfer	
	-or- other Soc. Sci. from AAS-DTA requirements	Social Science - Area varies by course		
	AIIS 103: The Indigenous Pacific Northwest [D]	Social Science - AIIS; Diversity	KSA	
	-or- ANTH 220: Cross-Cultural Studies	Social Science – Anthropology	KSA	
	-or- SOC& 101: Introduction to Sociology	Social Science - Sociology	KSA	
	-or- other Soc. Sci. from AAS-DTA requirements	Social Science - Area varies by course		
Natural	BIOL& 211: Majors Cellular	Natural Science - General - Lab	KSA, Major-ready for transfer	
Science &	BIOL& 212: Majors Plants	Natural Science - Botany - Lab	High-value KSA, Major-ready for transfer	
Electives	BIOL& 213: Majors Animals	Natural Science - Zoology - Lab	High-value KSA, Major-ready for transfer	
	ENVS 170: Introduction to Stream Ecology	Natural Science - Environment	High-value KSA	
	BIOL 103: Salmon, Ecosystems, and Society [D]	Natural Science - Environment; Diversity	High-value KSA, Diversity requirement	
	ENVS 230: Intro to Fisheries Sci and Mgmt.	Elective	High-value KSA	
	-or- NATR 160: Forest Health and Ecology (RE)	Restricted Elective	High-value KSA	
	CHEM& 121: Introduction to Chemistry (recommended)	Natural Science Chemistry Lab	High-value KSA, Major-ready for transfer	
	-or- CHEM& 110: Chemical Concepts	Natural Science - Chemistry - Lab	KSA	
	NATR 235: Society and Natural Resources (RE)	Restricted Elective	High-value KSA	
	BIOL 125: Environmental Science** (recommended)	Natural Science - Environment - Lab	High-value KSA	
	-or- BCT 284: Project Management (RE)			
	-or- BCT 130: Spreadsheets (RE)	Restricted Elective		
	-or- other BIOL, ENVS, NATR or MATH course		KSA depending on course selection	
	-or- other course related to career/major goal	Varies by course selection		

KSA = Knowledge, Skill, and/or Ability

The Natural Resources DTA is a curated pathway mapped to the existing Associate of Arts & Sciences Direct Transfer Agreement (DTA) requirements. Students completing this pathway have significant flexibility in their course selection, as they only need to meet the general DTA requirements.