

Environmental Studies Assessment Report 2020-21 Academic Year

In accordance with the Environmental Studies (EVST) Student Assessment Plan (SAP), we evaluated EVST Program Learning Goal 2 at the completion of the 2020-21 academic year. This goal states that students should be able to “*recognize ways in which human beings are a part of and interact with the natural world.*” To accomplish this assessment, we utilized two instruments from our 2019-20 SAP, the senior survey (indirect assessment) and the capstone rubric (direct assessment). We also modified an approach we piloted for the 19-20 assessment, which is described below as “Holistic Senior Assessment” (direct assessment). We plan to continue this practice, and so a description of it has been added to an updated version of the EVST SAP document, which is included in the email attachments for this year’s assessment.

Indirect Assessment: Senior Survey

One question on the senior survey specifically addresses EVST Program Learning Goal 2. Students are asked to respond, on a five-point Likert scale, to “*I feel that the Hendrix College Environmental Studies curriculum has taught me to recognize ways in which human beings are a part of and interact with the natural world.*” There were six graduating seniors in 20-21, and unfortunately, only two completed the survey, so the sample size for our assessment this year is small. Thus, we have included the past four years of data below.

Year	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
2017-18	0	0	0	1	4	5
2018-19	1	0	0	3	6	10
2019-20	0	0	0	1	6	7
2020-21	0	0	0	0	2	2

In addition to the Likert scale question (which we ask every year), we also asked students to expand on their response to this question in an open response box. The answers from the two respondents are included below.

- I think the EVST program helped students achieve this learning goal by integrating the application of the things we learned in the various classes that are a part of the curriculum. The focus on how environmental science, policy, sociology, education, and such applies to the other disciplines helped achieve the goal of how humans can interact with the natural world in many different ways and how we leave impacts for future generations of humans and other species. The wide variety of classes was a big role in this understanding.
- My junior year I had a sociology course called "The Urban Community" that really helped me realize what I want to do as a career sometime after Hendrix. I already knew that I was interested in sustainable communities, but that course really opened my eyes to the possibilities of that. And all of the environmental studies courses before informed my realization of [how] all of the knowledge I have acquired can fit under the umbrella of my interests in sustainable communities. The summer after Junior year I ended up having an internship that dealt with an urban community and that class definitely helped with it.

These data support that seniors feel that the program meets Learning Goal 2 well, with all but one respondent in the last four years agreeing or strongly agreeing that the program helped them recognize how humans are a part of and interact with the natural world. Based on the 20-21 student comments, the multiple disciplines represented in our EVST-coded courses and other major courses contribute to achievement of this goal. Clearly, we would like to have all seniors respond to the senior survey so that we can have a more complete picture of our students’ self-assessment. In 21-22, we will work to devise strategies to improve survey completion.

Direct Assessment: Capstone Rubric

This year, due to the COVID-19 pandemic, we limited the student capstone experience to just the thesis option instead of offering students the choice of a thesis or a project. This decision was made to remove any complications that might result from working on a project with a community partner during the pandemic. Six of the seven seniors completed their theses, with one senior taking the 5th year option offered by Hendrix to students who felt extended time would help them achieve their graduation goals.

The thesis-based capstone involves both writing a thesis on the a topic of the student's choosing, which they develop throughout the fall semester of their senior year. They give a presentation on that thesis at the end of the fall semester. For the six students who completed the capstone, faculty who graded the theses and/or presentations completed a rubric that scored the students' achievement of the program's learning goals through the capstone experience. The scores ranged from "not achieved = 1" to "mastery = 5". The scores for these students were averaged for the thesis and presentation separately and the number of individuals meeting each level of achievement for Learning Goal 2 is shown in the table below.

Component	Not achieved	Developing	Competent	Proficient	Mastery
Thesis	0	1	1	3	1
Presentation	0	1	2	3	0

These data suggest that most 2020-21 seniors achieved this learning goal at least at the level of competent with their thesis and presentation. While we would like to see the numbers here shift to the proficient and mastery levels, it is important to note that it is not a requirement of the capstone to meet each programmatic learning goals to the fullest extent. Some thesis topics lend themselves to meeting certain learning goals over others. In 21-22, we will explore having the students consider which program learning goals they hope to meet with their thesis, which could help them articulate the arguments of their thesis more clearly with their targeted learning goals in mind.

Direct Assessment: Holistic Senior Assessment

As mentioned above, we further developed our approach to assessing seniors in a manner that is more holistic than the capstone rubric, which only assesses students during their senior year. To accomplish this task, we discussed our seniors' achievement of learning goals through their duration in the EVST program during our annual assessment meeting on May 12, 2021, during which nine of ten faculty were present. We discussed each senior's progress towards each learning goal in their classes, internship experience, and capstone work, coming to a consensus on their level of achievement. The results of this discussion as they pertain to Learning Goal 2 are presented in the table below.

	Not achieved	Developing	Competent	Proficient	Mastery
Recognize ways in which human beings are a part of and interact with the natural world	0	0	2	2	2

These results indicate that all of our seniors demonstrated at least competency in meeting learning goal 2; however, since this assessment focuses on the achievement of program learning goals throughout the entire duration of a student's time in the program, it is clear we need to devise approaches for moving more students into the proficient and mastered categories. In 21-22, we will consider new strategies across the program to help students move closer to mastery of this learning goal by the end of their time at Hendrix.

Program Learning Goals:

The Environmental Studies Program is designed to provide an integrated and interdisciplinary approach to studying the environment. As such, it both complements and embodies the liberal arts aim of combining strengths of the natural sciences, social sciences, and humanities to prepare students to be well-equipped citizens in an increasingly globalized world. Upon successful completion of the requirements for the Environmental Studies major, students will be able to:

- Explain the structure and dynamics of the natural world
- Recognize ways in which human beings are a part of and interact with the natural world
- Describe world views and values that guide humans as they interact with the natural world
- Discuss forms of sustainable community life
- Synthesize methods of inquiry from the natural sciences, social sciences, and humanities

Curriculum Mapping:

Below is a curriculum map, which was performed in spring 2020 based on the program's learning goals and new EVST major requirements that were introduced in the 2019-20 catalog. We have marked whether the department learning goal is Introduced (I), Developed (D), or Mastered (M) in each of the courses.

	<i>Explain the structure and dynamics of the natural world</i>	<i>Recognize ways in which human beings are a part of and interact with the natural world</i>	<i>Describe world views and values that guide humans as they interact with the natural world</i>	<i>Discuss forms of sustainable community life</i>	<i>Synthesize methods of inquiry from the natural sciences, social sciences, and humanities</i>
EVST 110	I	I	I	I	.
EVST 310	D	M	D	D	D
EVST 497	.	M	M	.	M
EVST 496	D	D	D	D	D
BIOL 104	D	D	I	D	I
CHEM 101	I	I	I	I	.
ECON 200	.	.	.	.	D
ECON 340	.	D	I	I	M
POLI 235	.	.	I	I	D
POLI 315	D	D	M	D	D
POLI 455	.	.	I	I	D
PHIL 308	I	M	M	D	D
PHIL 315	.	.	M	D	D
PHIL 316	.	D	M	D	D
ANTH 312	.	I	M	D	.

ANTH 330	.	M	D	.	.
HIST 308	D	M	M	D	D
HIST 309	D	M	M	D	D
SOCI 375	.	D	M	M	.
ANTH 300	.	.	.	.	M
ANTH 335	.	I	.	.	M
BUSI 250	.	.	.	.	D
CHEM 280	I	.	.	.	M
MATH 215	.	.	.	.	D
SOCI 210	.	.	.	.	M
SOCI 335	.	.	.	.	M

Plans for Gathering Information:

Each year, the EVST program assesses our five program-wide learning goals directly and indirectly with the following tools:

- Direct: Capstone Thesis Rubric (Appendix A)
- Direct: Holistic Seniors Assessment (Appendix B)
- Indirect: Senior Survey (Appendix C)

While we collect data to assess each learning goal every year using these tools, we plan to closely examine one learning goal each year to determine if changes should be made to the program. Our planned assessment cycle follows.

	Learning Goals				
Year	<i>Explain the structure and dynamics of the natural world</i>	<i>Recognize ways in which human beings are a part of and interact with the natural world</i>	<i>Describe world views and values that guide humans as they interact with the natural world</i>	<i>Discuss forms of sustainable community life</i>	<i>Synthesize methods of inquiry from the natural sciences, social sciences, and humanities</i>
19-20	X				
20-21		X			
21-22			X		
22-23				X	
23-24					X
24-25	X				
25-26		X			
26-27			X		
27-28				X	
28-29					X

Appendix A

Environmental Studies Capstone Thesis Grading Rubric 2020/2021

Student Name:

Faculty Evaluator Name:

Category	Basic	Competent	Exemplary	Score
Thesis Statement & Title	<ul style="list-style-type: none"> Topic is not identifiable, statement is vague, does not take a position, is too broad, or is not debatable. Title does not identify or agree with the thesis statement. 	<ul style="list-style-type: none"> Thesis statement is clearly identifiable but may be too broad or does not take a position on the topic. 	<ul style="list-style-type: none"> Thesis statement is clearly identifiable, debatable, specific, and takes a clear position on the topic. The title identifies the thesis statement. 	/5
Abstract	<ul style="list-style-type: none"> No abstract present or does not provide insight into thesis, argument or methodology Significantly exceeds word limit. 	<ul style="list-style-type: none"> Abstract present yet and provides basic overview of the topic. Abstract missing one of the following: thesis (purpose), argument (context), or methodology (content). 	<ul style="list-style-type: none"> Concisely answers the “what?” “why?” “how?” and “to what end?” Describes context, purpose, and content. Engages the reader. <250 words. 	/10
Introduction & Background	<ul style="list-style-type: none"> The problem is not clearly articulated. Does not connect to the “big picture.” Too technical for lay reader to follow. Does not define critical terms. Is incompletely and/or inaccurately referenced. 	<ul style="list-style-type: none"> Problem is identified, but not supported by context or significance. Ambiguous or brief understanding of the “big picture” demonstrated. Most fundamental concepts and critical terms are described. Mostly accurate and complete referencing. 	<ul style="list-style-type: none"> States the problem, and its context and significance. Demonstrates complete, clear and accurate understanding of the “big picture.” Includes well-organized description of basic knowledge necessary to follow content and arguments within the thesis. Critical terms and abbreviations are defined. Completely and accurately referenced. 	/10
Analysis	<ul style="list-style-type: none"> No synthesis or analysis of information presented. Supporting information is noticeably one-sided. Evidence is not presented to support major claims/arguments. 	<ul style="list-style-type: none"> Some synthesis and analysis of information from multiple sources and perspectives is evident. Evidence is presented to support major claims/arguments, but is not critically assessed. 	<ul style="list-style-type: none"> Creatively synthesizes and compares/contrasts relevant information from multiple primary sources. Critically and accurately assesses information presented. Evidence/data from primary literature is used to support major claims/arguments. 	/10

Argument & Reasoning	<ul style="list-style-type: none"> Arguments are not supported by evidence/data. Argument does not support the thesis statement and/or conclusions presented. Argument contains false information. The conclusion of the argument does not agree with the goal of the argument. 	<ul style="list-style-type: none"> Most arguments are sensible and support the thesis statement, but do not completely convince the reader due to lack of evidence to support claims. 	<ul style="list-style-type: none"> Major arguments presented are supported by evidence/data. All arguments are accurate and support the thesis statement. The conclusion of the argument is relevant to the goal of the argument. 	/10
Summary & Conclusions	<ul style="list-style-type: none"> Conclusions are unoriginal and/or are not supported by the arguments and evidence presented in the paper. Limitations, significance, and feasibility of position presented not addressed. 	<ul style="list-style-type: none"> Conclusions are not novel, yet provide additional insight on the topic based on a reasoned assessment of the information presented. Feasibility of individual contribution and future directions not fully addressed. 	<ul style="list-style-type: none"> Creates and defends a new position based on a reasoned assessment of the information presented. Presents significance and limitations of conclusions. Presents future directions that are salient, plausible and insightful. 	/10
Writing Clarity & Organization	<ul style="list-style-type: none"> Paper contains excessively long sentences or paragraphs, undefined obscure terms or concepts, confusing sentences, erratic paragraphs, and/or no headings/subheadings. Few transitions used to aid information flow from one point to another. Organization exhibits consequences of inadequate active planning for the clarity and organization of the presented material. 	<ul style="list-style-type: none"> Most key concepts and terms are clearly defined. Organization is somewhat choppy, but not erratic. Most sections differentiated by headings/subheadings and connected by transitional statements. Some active organizational planning is evident. 	<ul style="list-style-type: none"> Carefully edited and proof-read. Sentence and paragraph structure clear and well-organized. Informative subheadings that aid comprehension and organization. An organizational strategy illustrating evidence of active planning for presenting information clearly and effectively Effective transitions to aid flow of information between main points. All key concepts and disciplinary language are clearly defined. 	/10
Writing Mechanics & Grammar	<ul style="list-style-type: none"> Paper does not meet specifications of required formatting. Many grammar and spelling errors. Paper does not meet the minimum required number of pages (20). References not cited in correct format. 	<ul style="list-style-type: none"> Most formatting requirements are met. Only a few grammar or spelling mistakes observed. Some references show inconsistencies in referencing style. 	<ul style="list-style-type: none"> Double spaced, 12 pt font, 1 in. margins, page #s. Correct grammar and spelling Meets paper length requirements (≥ 20pgs). References cited correctly in Chicago style (in-text and bibliography). 	/10

Multidisciplinarity & Accessibility	<ul style="list-style-type: none"> The argument is based on a single disciplinary perspective. Is only accessible to disciplinary experts. 	<ul style="list-style-type: none"> A few different disciplinary perspectives are used to support the thesis. Is accessible to most readers. 	<ul style="list-style-type: none"> The argument includes scientific, sociocultural, economic and political perspectives. Is accessible to all readers 	/5
Originality & Creativity	<ul style="list-style-type: none"> The topic, thesis, idea, or central argument is not original nor creative and is exactly the same as views discussed in sources. 	<ul style="list-style-type: none"> A few ideas and arguments are original, but many are similar to views discussed in sources. 	<ul style="list-style-type: none"> The topic, thesis, idea, or central argument is original and creative, and thus differs significantly from views discussed in sources. 	/5
Individual Growth & Work with Mentors	<ul style="list-style-type: none"> Student did not advance any skills throughout writing and communication process Did not work with mentor and/or did not keep appointments 	<ul style="list-style-type: none"> Student showed some advancements in writing and communication during the thesis process Incorporated mentor feedback but rarely engaged with mentor 	<ul style="list-style-type: none"> Student exhibited tremendous growth in writing, professional, and/or communication skills Worked closely with mentor, attended regular meetings, incorporated feedback 	/15
SubTotal				/100
Late Penalty	10%/week		Thesis presentation will not be scheduled unless final paper has been submitted.	- %
Total				/100

Comments to Author:

Briefly identify the strengths of the thesis:

Briefly identify the weaknesses of the thesis:

The below assessment serves the purpose of assessing the EVST program learning goals and should not be factored into the capstone thesis grade. Please identify the extent to which you feel this thesis **demonstrates** that the student has achieved each of the following EVST Program Learning Goals.

1 = Has not achieved and 5 = Achieved to a high degree, ND = I cannot determine from the information presented in the thesis.

Learning Goal	1	2	3	4	5	ND
Explain the structure and dynamics of the natural world						
Recognize ways in which human beings are a part of and interact with the natural world						
Describe worldviews and values that guide humans as they interact with the natural world						
Discuss forms of sustainable community life						
Synthesize methods of inquiry from the natural sciences, social sciences, and humanities						

Appendix B

During the spring assessment meeting each year, the EVST faculty will discuss and reach a consensus on the extent (based on the scale below) to which we feel each student achieved the following EVST Program Learning Goals throughout the course of their degree. Evidence will come from experiences in coursework, internships, and the capstone.

1 = Not achieved

2 = Developing

3 = Competent

4 = Proficiency

5 = Mastery

			EVST Learning Goals		
Student Name	Explain the structure and dynamics of the natural world	Recognize ways in which human beings are a part of and interact with the natural world	Describe world views and values that guide humans as they interact with the natural world	Discuss forms of sustainable community life	Synthesize methods of inquiry from the natural sciences, social sciences, and humanities
Student A					
Student B					
Student C					

Appendix C

Hendrix College EVST Graduate Survey

Question 1

Thank you for taking the time to complete this survey. While we know that your last semester at Hendrix has been different than what you imagined, we hope that the majority of your time in the EVST program has been rewarding and prepared you for pursuits after Hendrix. Your responses to these questions will help us assess how we are doing in these regards, and we appreciate your help in assessing what we are doing well and what we could do to improve.

Drs. Dow, Gess, Hancock, Haden Chomphosy, Hatch, Hill, McClung, Moran, Sprunger, and Schneider

Question 2

Did you enter Hendrix as a fresher?

[Answer no if you were considered a transfer student when you started here.]

- ☐ (1) Yes
- ☐ (2) No

• Do Not Calculate Mean/Std.

Question 3

Did you come to Hendrix planning to major in Environmental Studies?

- ☐ (1) Yes
- ☐ (2) No

• Do Not Calculate Mean/Std.

Question 4

If you answered “no” to the previous question, enter your intended major in the designated space.

Question 5

Do you have a second major or a minor? If so, what is it?

Question 6

If you have an Environmental Studies concentration, what is it?

- ☐ (1) Chemistry
- ☐ (2) Biology
- ☐ (3) Sociocultural
- ☐ (4) N/A

Question 7

What area of specialization within Environmental Studies describes you best?

- ☐ (1) Environmental Science
- ☐ (2) Environmental Policy
- ☐ (3) Sustainable Communities
- ☐ (4) Environmental Health
- ☐ (5) Environmental Education

If none of those
options match your
plans, please enter a
response below.

Question 8

What are your immediate plans after graduation?

- ☐ (1) Unsure
- ☐ (2) Get a job using my EVST education
- ☐ (3) Get a job outside of EVST
- ☐ (4) Go on to graduate school in EVST
- ☐ (5) Go on to a professional school that utilizes my EVST education
- ☐ (6) Go on to a professional program unrelated to my EVST education

If none of those options match your plans, please enter a response below.

Question 9

What are your long-term career plans after graduation?

- ☐ (1) Unsure
- ☐ (2) Get a job using my EVST education
- ☐ (3) Get a job outside of EVST
- ☐ (4) Go on to graduate school in EVST
- ☐ (5) Go on to a professional school that utilizes my EVST education
- ☐ (6) Go on to a professional program unrelated to my EVST education

If none of these options match your plans, please enter a response below.

Question 10

I feel that the Hendrix College Environmental Studies curriculum has taught me to:

	(1) strongly disagree	(2) disagree	(3) neutral	(4) agree	(5) strongly agree	(6) not applicable
Search and read the primary literature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critically evaluate popular and scholarly articles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluate scholarly information from disparate sources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write effectively about environmental studies issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate effectively in poster and/or oral format.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work well in a group.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 11

I feel that the Hendrix College Environmental Studies curriculum has taught me to:

	(1) strongly disagree	(2) disagree	(3) neutral	(4) agree	(5) strongly agree	(6) not applicable
Explain the structure and dynamics of the natural world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize ways in which human beings are a part of and interact with the natural world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describe world views and values that guide humans as they interact with the natural world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discuss forms of sustainable community life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Synthesize methods of inquiry from the natural sciences, social sciences, and humanities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question 12

Each year, the program closely assesses achievement of one target learning goal. This year's learning goal is "Recognize ways in which human beings are a part of and interact with the natural world." In the space below, please expand on your response for this learning goal in the previous question.

Question 13

I perceive the strength(s) of the overall program to be:

Question 14

I would suggest the following improvements to the overall program:

Question 15

I gained the following insights from the overall program:

Question 16

We enjoy keeping up with our alumni throughout the years. To facilitate this effort, please share a non-Hendrix email address that we may use for this purpose.