

**Minutes and Evaluation Report for
Audit & Review Follow-up Meeting
University of Wisconsin – Whitewater
Environmental Science Majors and Minors, 2017-2018**

Date: March 2, 2018
Time: 2:00 – 3:00pm
Place: Laurentide 4012

Attended: Provost Susan Elrod; AVC Greg Cook; Dean David Travis; Department Chair Peter Jacobs; Program Coordinator Dale Splinter; faculty and staff in the Environmental Sciences program Stephan Levas, Elisabeth Harrahy, Margo Kleinfeld; Audit & Review Team Chair Andrea Ednie; Audit & Review team members Pascal Letourneau, Joan Littlefield Cook.

1. Call to order & introductions
2. Dale Splinter summarized the strengths of the program including the program's interdisciplinary structure, the requirement that each student complete two HIPs (and many participate in 3 or more), the strong undergraduate research and internship programs, many community-based learning programs, interactions with practitioners, field studies, a committed faculty who interact frequently with the students, and a strong and involved advisory board. It was noted that the program's emphasis on HIPs is good for the university in that it has a positive impact on the region and enhances the reputation of the university. Dale explained that the program has undergone curriculum changes within the past 5 years, but that these changes mostly reflect the suitability/availability of course offerings in other departments. The program enrollment has grown quickly and already surpassed the expectation, at more than 100 students.
3. Discussion of Review Team's evaluation:
 - a. *Assessment: The review team notes that the assessment plan and process are in early stages of development. We see that plans are/were in place for data collection during fall semester 2017 and spring 2018. Based on the self-study, we recommend that some direct measures corresponding to particular SLOs are implemented, and that the program begins to use assessment to plan for programmatic changes. Also, we recommend the program continue to work on tracking graduates.*

The program has developed student learning outcomes, established a program assessment committee, has developed a modified Speaking Well rubric to evaluate presentations in the capstone course, and plans to soon begin work on an alumni survey. The program faculty discussed plans to add new course requirements that would facilitate longitudinal data collection. Also, the group discussed successes and challenges associated with maintaining contact with alumni and collecting alumni survey data. The entire meeting group acknowledged the significant amount of work and dedication it has taken to propose and initiate the program, however, the importance of assessment from a program's initiation was discussed as was the expectation that programs should be collecting assessment data and utilizing assessment results to inform program development.

- b. *Resource needs: The review team members were unclear as to how current faculty, facility, and financial resources will support the program considering the growing enrollment trend. The need for another faculty member is mentioned in the self-study, as are space limitations. Also, the review committee notes that internship, capstone and fieldwork require financial resources and faculty time.*

The meeting group agreed that another faculty member is needed in order to maintain the program's high quality (including the requirement of two HIPs for each student and the faculty time required to review capstone projects). A challenge is that there is not currently a faculty line available to dedicate to the program. Options such as shared assignments with other programs were discussed. The Provost noted that a campus priority is to fund growth; the program noted that it has the potential to draw new students to UW-W (rather than only drawing existing students from other programs on campus). Other budgetary challenges that may arise as student enrollment continues to increase were discussed.

- c. *Goals and objectives: The self-study describes how the program goals have evolved from an earlier focus on curriculum development/changes to include assessment and enrollment. The review team was not clear on how specific and measurable the current program goals are, and wondered if the advisory board would benefit from a process of developing clear program goals. A specific enrollment target may help the program to determine what faculty, facility, and budgetary resources are needed moving forward.*

There was discussion of the need to develop a consistent and systematic process for setting and monitoring program goals. There was discussion of some possible goals (e.g., determine the program's 'carrying capacity,' develop strategies for managing growth without discouraging URM and female students, develop processes for documenting where students get jobs). The program does not want to aggressively seek greater numbers of students, particularly given the time-intensive nature of the HIP requirements and the interdisciplinary nature of the curriculum. However, the group agreed that part of their advisory board work would be to develop more specific and measurable program goals.

4. **Recommended Actions:** The evaluation report (page 13) lists 4 recommended actions related to assessment, tracking of graduates, resources, and clarifying goals and objectives.
5. **Recommended Result:** Continuation with minor concerns
 - Please make use of the detailed comments in the evaluation report (below).
 - Progress report due to Dean of College of Letters & Sciences by December 1, 2020, due to A&R Committee by January 1, 2021. The progress report should describe progress toward achieving the first recommended action regarding assessment including: 1) a complete assessment plan including direct assessments; and 2) progress in implementing the assessment plan.
 - Next full self-study will be due to the College Dean by October 1, 2022 and to the A&R Committee by November 1, 2022.
6. Adjournment at 3:00pm.

Submitted by Andrea Ednie

University of Wisconsin-Whitewater
Committee Form: Review of Audit & Review Self-Studies
Undergraduate Programs, 2017-2018
Majors/Minors and Standalone Minors

Date of Evaluation 2/2/18 Short Self Study (SS*) _____
 Program Environmental Science Major X Minor _____

Evaluations submitted by: Andrea Ednie, Paul House, Pascal Letourneau, Joan Littlefield Cook
Review meeting attended by: Andrea Ednie, Paul House, Pascal Letourneau, Joan Littlefield Cook

I. Program Purpose & Overview: A. Centrality

1. The program contributes to the fulfillment of UW-Whitewater's core values, Mission, and Strategic Plan.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. The program supports general education, proficiency, and/or other programs at UW-W.

Sufficient Evidence	1
Some/Partial Evidence	3
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program has achieved or is appropriately working toward achievement of at least two goals of Inclusive Excellence.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. The program has been responsive to actions recommended from the previous Audit and Review Report; Progress Reports have been submitted, if relevant.

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	4

Comments

1. Undergraduate research program seems excellent - great video!

1. The text does not clearly show links between UW-Whitewater's core values, Mission, and Strategic Plan and the Environmental Science program.

2. The answer does not specify the ways in which the course(s) support(s) the goals of the General Education program at UW-W.

2. No mention of how the ENVS program supports other programs at the university... I would think it might be given the interdisciplinary nature?

3. Good examples of diversity concepts within the curriculum.

4. No previous Audit and Review report.

I. Program Purpose & Overview: B. Program Mission, Goals, & Accomplishments

1. The program's mission statement reflects the nature and scope of the program.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Goals and objectives were identified and undertaken to improve or advance the program.

Sufficient Evidence	0
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program has a process for setting and assessing goals, and making decisions about changes to the program goals.

Sufficient Evidence	0
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. The program is considering potential revisions to mission, goals, or objectives; the program has a "vision" for where it wants to be in the future and how to get there.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. The program, faculty/staff, and/or students have earned recognition or awards.

Sufficient Evidence	3
Some/Partial Evidence	0
No/Limited Evidence	1
Not Applicable (explain why in comments below)	0

6. The program has achieved or maintained program-level accreditation or has considered seeking it, where appropriate.

Sufficient Evidence	1
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	3

Comments

- I like the list of specific ways in which the program accomplishes its mission.
- The mission statement seems to be more about what types of program will be provided than topic.
- Recommend developing more specific, detailed, and measurable goals for the next 5 years (it's understandable that fewer were in place for the first 5 years).

3. Monthly meetings seems pretty frequent... I wonder if more specific goals and processes happen with respect to assessment beyond what is mentioned in the self-study.

3. Reviewing goals seems to clearly be the advisory board and in the future they will have necessary assessment data

3. The answer mainly points who oversees the process, but does little at describing the process.

4. Good outline of goals moving forward. Does the program have a vision defining where they want to be in 5 years?

4. The mission was voted recently, and no changes are expected for now.

5. Are there any opportunities for awards/special recognition that the program could seek?

6. The self-study states accreditation is not available.

II. Assessment: A. Curriculum

1. The program has a clearly articulated, efficient, and purposeful curriculum, including options or emphases within the program (if applicable).

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. If program offers dual-listed courses, the expectations of graduate students differ from undergraduate students; otherwise NA

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	4

3. Appropriate assessment data were used in making curricular revisions.

Sufficient Evidence	0
Some/Partial Evidence	3
No/Limited Evidence	1
Not Applicable (explain why in comments below)	0

4. The program provides opportunities for students to learn in ways that extend beyond the classroom, and discussed the extent to which students are involved in these activities and opportunities.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. Online courses are evaluated in ways that ensure effective delivery, continuous improvement, and student learning (if applicable)

Sufficient Evidence	0
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	4

Comments

1. Curriculum seems very clear and includes a significant amount of choice/opportunity for students to specialize in their areas of interest.

1. A good mix of classes. Requiring HIP experiences is nice; is this tracked through AR personalization?

1. It is not explained how the curriculum is both efficient and purposeful.

2. Do not offer dual-listed courses

3. Needs more assessment data used in curricular revisions.

3. Curriculum changes have not been based on assessment data, however, the examples are tweaks representing new curriculum opportunities that are a better fit for the program.

3. The answer specifically mentions that no assessment data was used. The only example mentioned is not well justified. A list of curricular changes would have been nice to have. It is impossible to assess whether the changes made were done after a proper analysis of the little information given.

4. Excellent!

5. Ideally, the program should seek information about the assessment of these electives.

5. The program does not offer online courses.

II. Assessment: B. Assessment of Student Learning**1. The program has a clearly articulated learning outcomes for students, courses are "mapped" to these learning outcomes, and some outcomes received specific attention during the review period.**

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Student learning outcomes are aligned with the LEAP Essential Learning Outcomes in a way that is reasonable and meaningful.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program has an appropriate assessment plan for measuring students' progress in attaining the outcomes.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. The program collected a variety of appropriate assessment data allowing judgments about the extent to which students are achieving learning outcomes.

Sufficient Evidence	1
Some/Partial Evidence	3
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. Program faculty consider assessment data in making changes to the curriculum, students' learning outcomes, and/or other aspects of the program.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

6. Results of assessment efforts have been shared with appropriate internal and external constituencies.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1. I do not see the mapping between SLOs and courses in the program. I think the SLOs are mapped to LEAP ELOs and these LEAP ELOs are mapped to courses in the program. However, this is not 100% clear.
1. SLOs are clear, courses are mapped, but no SLO has received special attention and I don't believe direct assessment data have been collected.
3. The current plan only has the assessment data collection step. It is silent on the complete assessment process.
3. The assessment plan is in place – involves longitudinal assessments, team evaluation using rubrics, and other direct measures. Implementation was to start during fall semester 2017. What's the status of this?
3. New assessment plan looks good. Embedded assessment in ENVSCI 200 and 400 is a good idea.
3. More details are needed on assessment. For example, who will score the embedded assignments? Will a sample be evaluated for interrater reliability? Has the rubric been developed yet?
4. This appears to be in development.
4. Employer internship surveys seem great - good feedback relating directly to the SLOs.
4. Assessment data not dependent on student reflection or employer evaluation will help.
5. Changes seem logical and very reasonable for a new program, but not clearly informed by assessment data.
6. Plans are in place including posting the employer internship survey results to the program webpage.

III. Student Recruitment, Enrollment, Retention, and Graduation: A. Trend Data**1-2. Five-year enrollment and graduation trends reflect program vitality and sustainability.**

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. [MAJORS ONLY] Credits-to-degree show that students can complete the degree in four years, or reasonably efficiently.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

4. Program has strategies to recruit and retain diverse students.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

5. [MAJORS ONLY] Composition of students approximates or exceeds the diversity of students at the University

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

6. Students can enroll in appropriate courses and proceed without delaying graduation.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

7. Claim that the program is oversubscribed, undersubscribed, or at optimum level is justified or supported by examples or data.

Sufficient Evidence	2
Some/Partial Evidence	0
No/Limited Evidence	2
Not Applicable (explain why in comments below)	0

Comments

1. Wow - enrollment is growing quickly!
3. I do not see an explanation for the average of 130 credits for graduation.
3. Credits to degree are 130, but most students complete in 4 years.
5. Describe any initiative or strategies that the program uses to assist diverse students.
7. Is optimum enrollment based on instructors to teach courses? Is it also facilities? Please explain the reasoning here a bit more thoroughly.
7. That answer should be made by considering both the resources available to students and the employment perspectives for those graduating. The number presented is not justified.

III. Student Recruitment, Enrollment, Retention, and Graduation: B. Demand for Graduates

1. [MAJORS ONLY] Placement information indicates that program graduates find employment or continue their education.

Sufficient Evidence	0
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Data suggests that employment opportunities for graduates of this program will remain strong.

Sufficient Evidence	4
Some/Partial Evidence	0

No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. The program systematically tracks graduates of the program.

Sufficient Evidence	0
Some/Partial Evidence	4
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1. Have many examples of where students are employed and a plan to implement an alumni survey.

1. More information on graduates would help.

1. Do you have any information on starting salaries for the program graduates? I know this can be very difficult to get, but it would be informative.

3. The program plans to conduct an alumni survey during spring 2018.

III. Student Recruitment, Enrollment, Retention, and Graduation: C. Comparative Advantage(s)

1. The program has unique features that distinguish it from competing programs--giving it a competitive edge

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1. Is curriculum unique in breadth and depth? Is skills requirement unique?

1. Material from their program proposal is still relevant, and undergraduate research program has proven to be successful. Collaborations with other campuses are impressive as is D. Splinter's participation in the UW System Environmental Science collaborative.

IV. Resource Availability & Development: A. Faculty Characteristics

1-2. Information is provided about the composition of the department faculty & instructional academic staff (e.g., gender, ethnicity, expertise, academic rank, etc.)

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3-4. The program has identified staffing changes and anticipated areas of potential future need.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

3-4. Mentioned that Environmental Resource Management needs more courses and expertise, and that it would benefit from a full-time faculty member.

4. An additional person in environmental policy/management seems needed.

IV. Resource Availability & Development: B. Teaching & Learning Enhancement

1-2. Faculty & instructional academic staff are engaged in activities to enhance teaching and advising.

Sufficient Evidence	3
Some/Partial Evidence	1
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1-2. Activities don't all address teaching improvement.

1-2. In what ways does/can the program encourage participation in workshops, other teaching & advising improvement activities? This may be more difficult for interdisciplinary programs, but it should be happening in the faculty members' home departments.

IV. Resource Availability & Development: C. Research & other Scholarly/Creative Activities

1-2. Faculty (and staff, if relevant) are active in research and/or scholarly/creative activities.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

Research and scholarly activity looks very good.

IV. Resource Availability & Development: D. External Funding

1-2. Faculty and staff (if relevant) pursue funding through grants, contract, and/or gifts.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

Faculty are active in seeking external funding—impressive!

IV. Resource Availability & Development: E. Professional & Public Service

1-2. Faculty (and staff, if relevant) are active in professional and public service, beyond the department.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

The faculty are active in professional and public service.

IV. Resource Availability & Development: F. Resources for Students in the Program

1. The program has adequate personnel, student help, and service and supplies to serve its undergraduate students.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1. The process/situation is described, but no conclusions are drawn as to whether the program has adequate personnel and resources. I would think that balancing 106 students is tough, especially considering the experiential and credit-intense nature of the program.

IV. Resource Availability & Development: G. Facilities, Equipment, & Library Holdings

1. The program has adequate facilities, equipment, and technological resources to effectively serve its students.

Sufficient Evidence	2
Some/Partial Evidence	2
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

1. Appears that a collaborative and creative system is in place... and it is working!

1. The facilities seem sufficient for now.

1. The self-study mentions the need for additional space, particularly if/as the program grows. It's not completely clear from the self-study whether the Summer 2017 classroom remodel for the GIS lab is going to be enough to meet the program's needs.

V. Conclusions and Recommendations from the Department or Program 1. Program strengths are discussed.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

2. Areas of improvement and continued progress are discussed.

Sufficient Evidence	4
Some/Partial Evidence	0
No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

3. Recommendations and resources are discussed.

Sufficient Evidence	4
Some/Partial Evidence	0

No/Limited Evidence	0
Not Applicable (explain why in comments below)	0

Comments

The program has so many strengths - especially the HIPs including travel studies, undergraduate research, internships, and various community and fieldwork opportunities.

It appears students have a significant amount of interaction with faculty.

The areas for improvement outlined in the self-study could be reformatted into program goals. They include SLO assessment, hiring a new faculty member, developing a 1 credit intro course, and increasing internship opportunities.

2. The points mentioned are right on point.

VI. Reviewer Conclusions

1. Strengths of the Program

- HIPS including internships, travel study opportunities, community-based learning opportunities, undergraduate research, interaction with practitioners, field studies, many active clubs related to the major, etc.
- Requiring at least 2 HIPs is a nice feature.
- Committed faculty who interact a lot with the students.
- Coursework that incorporates diversity.
- Facilities and research equipment.
- The program has a well-designed curriculum that provides a good mix of depth and breadth.
- The focus on HIPs and experiential learning keeps students engaged and has them involved with the local community.
- Instructors are productive researchers and active in professional and community service.
- The advisory board overseeing the program is a great strength. We recognize that it must be a lot of work to make sure the faculty meet regularly.
- I believe the program is well-managed, and actions are taken to improve the quality of the education provided and better serve the students.
- This is a great example of an interdisciplinary program, meeting a community and industry need as well as student interests.
- The work-based learning connections to local/regional communities and industry are commendable.
- The assessment measure for internship supervisor's to complete looks great.

2. Areas for Work or Improvement

- Assessment! Direct measures and implementing the alumni survey.
- Improved assessment and using that information to shape curriculum.
- It seems like a good idea to add someone in environmental policy/management.
- Better tracking of graduates.
- The assessment process is not well documented. More indirect data should be collected to make better decisions.
- An assessment plan should be created to make sure the process is documented and followed.
- The advisory board should consciously document all changes to the program. This will make the next audit & review much easier.
- Identify a goal/vision for program enrollment. How big do you want the program to be?

3. Other comments/questions

- Does the program have sufficient resources to support components such as the capstone experience, where students partner with community groups on environmental issues?
- Are the students placed in internships, or do they find their internships themselves? How manageable is the placement process and will this become an issue if student numbers continue to grow?
- What is the target market for career employment for these students?
- Who is going to score the assessment data?
- How significant are resource concerns, especially space?

4. Recommended Actions

1. Assessment.
 - a. Continue to develop and implement the assessment plan, and collect direct data.
 - b. Document the process of how data are being used for programmatic decisions.
2. Continue to work on tracking graduates.
 - a. Continue the good work you are doing.
 - b. Work towards developing a more systematic process, working with campus offices as needed and useful.
3. Resources.
 - a. Consider program growth and work with the college to make sure the program has the needed resources to move forward.
4. 5-year goals, objectives and vision.
 - a. Continue to develop more specific, detailed, and measurable program goals for the next 5 years.

5. Recommended Result*

Continuation without qualification	
Continuation with minor concerns. Progress report may be required at the discretion of the A&R Review Team.	X*
Continuation with major concerns in one or more of the four areas; submit annual progress report to the College Dean & Associate Vice Chancellor for Academic Affairs on progress addressing the major concerns	
Withhold recommendation for continuation, place on probation, and require another complete Audit & Review self-study within 1-3 years, at the Committee's discretion.	
Withhold recommendation for continuation, place on probation, recommend placing in receivership within the college, and require another complete Audit & Review self-study within 1-3 years at the Committee's discretion.	
Non-continuation of the program.	
Insufficient Information in the self-study to make a determination; revise self-study & resubmit.	

***Progress report on Recommended Actions due to Dean by December 1, 2020, due to A&R Committee by January 1, 2021 (see page 1 for specific details to be addressed in the progress report). Next full self-study due to College Dean by October 1, 2022 and to the A&R Committee by Nov 1, 2022.**