Ongoing Improvement Progress Report

Instructions and Report Template

As part of the protocols outlined in Western's Institutional Quality Assurance Process (IQAP), to facilitate the continuous improvement of academic programs between review cycles, in connection with the Final Assessment Report (FAR) and Implementation Plan, a monitoring process will include an Ongoing Improvement Progress Report. The outcomes of this report will be considered as part of the program's next cyclical review.

The purpose of this report is to provide an update on the operationalization of the implementation plan following a Cyclical Program Review (or the review of a New Program). This should include a brief summary of actions taken by the Program and the Dean's Office since the completion of the review (usually about three years), as well as an update on the stage of implementation for all applicable items. These include:

- whether the action item(s) are in progress, complete or no longer applicable (with a brief explanation);
- the timelines of each item and how they are progressing or expected to progress, particularly if they are diverting from original timelines in the FAR and Implementation Plan, and;
- a short description of any other program developments and improvements that have taken place following the review.
- For new programs only, an evaluation of the initial administration and resourcing of the program.

The following report template has been created for the program to report on progress made regarding recommendations presented in the Implementation Plan, and any other relevant program developments and enhancements.

- The program will complete the template and submit it to the faculty Dean's Office for sign-off.
- The program will then submit the completed Ongoing Improvement and Progress Report to the Office of Academic Quality and Enhancement (OAQE). Reports are due by June 30.
    - The OAQE will present all Ongoing Improvement and Progress Reports to SUPR-U/G for approval. Approvals, or any follow-up questions/concerns, will be communicated to the program and Dean's Office by the OAQE.
    - It should be noted that as per the requirements of the province's Quality Council, progress reports will be posted on the reports page of the OAQE website.

Ongoing Improvement Progress Report

Environmental Science, BSc / Faculty of Science

Program	Environmental Science, BSc	**Faculty / Affiliated University College**	Faculty of Science
Approval Dates of the Review	SUPR-U: February 24, 2021 SCAPA: March 3, 2021 Senate: March 12, 2021	**Year of the Next Review**	2027-2028
Link to the Programs Final Assessment Report (FAR)	*https://www.uwo.ca/pvp/vpacademic/iqap/academic_programs/iqap_reports/science_undergrad/2020%20Environmental%20Science%20Program%20Review.pdf*		
If applicable, submission of follow-up report(s)	*2023*		

	Name	**Signature**	**Date**
Program Chair/Director	Prof. Desmond Moser		30 Jun 2023
Dean (or delegate)	Ken Yeung, Associate Dean, Academic, Faculty of Science		2023-07-04

Progress Update on the Implementation Plan

Recommendation #1	Proposed Action and Follow-up	Responsibility	Timeline
Core course in 2nd year	Develop a required 2nd year course for the program. Potentially include some of the content from ENV3300F and revise the 3rd year course. Follow-up next program review.	UG Chair/Department	2 years

Recommendation Implemented

☐ Yes ☐ No **X** Partially

If no, or partially, is implementation on schedule with the timeline? **X** Yes ☐ No

Progress

What specific actions have been taken?

ENV3300F has historically been taught by two LD's. This has been changed for the upcoming year to a single LD with a wealth of experience in the program.

Next Steps (if applicable)

What actions remain? Is there further follow-up?

The DES Chair is working with the new LD for course re-design, and EPC application to move to a second year position in the progression stream will take place this Fall. It is hoped that the transition / recommendation will be fulfilled by 2024-25.

Additional Comments

If applicable

Recommendation #2	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**
Undergraduate student space	Designate space for undergraduate students. Recognizing the difficulty of obtaining new space this could take the form of sharing space currently allocated to Earth Science students. Follow-up discussion if UG chair with chair of Earth Sciences.	Chair/Department	2021-22 academic year

Recommendation Implemented

X Yes ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No

Progress

What specific actions have been taken?

Room BGS 1084 was re-purposed from teaching space and is now a combined lounge and workroom, available to all students in both the Environmental Science and Earth Science programs. The room is well-used and, according to the students, is a huge improvement on the space previously made available to them.

Next Steps (if applicable)

No additional work needed.

Additional Comments

If applicable

Recommendation #3	Proposed Action and Follow-up	Responsibility	Timeline
Update course listings	Update and rationalize course listings across the program. Eliminate out of date courses. Follow-up at next program review	UG Chair	By Sept 2021

Recommendation Implemented

☐ Yes ☐ No **X Partially**

If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No

Progress

What specific actions have been taken?

A major review of Environmental Science course listings was undertaken over the summer of 2022. This involved the removal of a number of redundant or less relevant courses, removal of courses that have not been offered for many years, and the addition of some newly-offered courses.

The Environmental Science Course List is now divided into three themes: Environmental Life Sciences, Environmental Physical Sciences, and Environment and Society. This grouping helps students to identify and choose courses that fulfil their particular interests.

Next Steps (if applicable)

Additional Comments

If applicable.

Given that courses evolve over time, it is to be expected that the Environmental Science course list will continue to evolve as some courses cease to be offered, and new ones are created.

Recommendation #4	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**
Add Indigenous content	Include Indigenous perspective of the environment in course offerings. This could be accomplished at the same time as the development of the new 2nd year course. Follow-up next program review.	UG Chair/Department	2 years

Recommendation Implemented

X Yes ☐ No ☐ Partially

If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No

Progress

What specific actions have been taken?

A major step towards the inclusion of Indigenous Content involves the introduction of a new course that is cross-listed as Indigenous Studies IS4023, Geography 3001, and Earth Sciences 3023Y). This course is co-instructed by Clint Jacobs of the Walpole Island First Nations Heritage Centre, Nin.Da.Waab.Jig, and Dr Desmond Moser (Earth Sciences). This field course in land healing and responsibility immerses students in Indigenous peoples' perspectives on reciprocity, restoration, invasive species remediation, land stewardship, and connections and responsibilities to, land and water. Instruction will primarily be by community leaders and elders based at Bkejwanong Territory (Walpole Island First Nation) on campus lands covered by an Academic Land Use Agreement between Western, and an Indigenous and non-Indigenous team of knowledge holders led by Jacobs and Moser.

The current Chair has also begun a dialogue with the Indigenous Studies program regarding coordination and advertisement of a double major in IS and Environmental Science.

A proposal from DES has been submitted to the Acting Director of IS as part of consultation on the latter unit's new strategic plan (ES Chair Des Moser has recently been invited to sit on the IS Advisory Committee). It Is hoped that this will attract students to both programs, and place Indigenous Studies at the 'headwaters' of the sustainability education, feeding the different technical streams outlined above. Students will move from the headwaters in the direction that best enables them to reach their goals at Western.

An additional development has been the successful proposal by DES to the Faculty of Science to establish an Indigenous Connector Environmental Science staff position. After much dialogue, a neighbouring First Nation has agreed to partner with us in the crafting of the job description. It is hoped that this person will be a liaison connecting community-identified needs in capacity building in technical environmental skills with existing UWO courses, or drive the development of new courses for Indigenous and non-Indigenous students.

Next Steps (if applicable)
Much remains to be done in building these different relationships but we are on a good path so far.
Additional Comments *If applicable*

Recommendation #5	**Proposed Action and Follow-up**	**Responsibility**	**Timeline**
Sample Pathways and External Partnerships	Develop sample pathways for students with different interests. Include external partners including alumni to show students career options that relate to different pathways. Follow-up next program review	UG Chair/Contributing Faculty Members and Staff	September 2021 with possible evolution over time
Recommendation Implemented ☐ Yes **No** **X** Partially If no, or partially, is implementation on schedule with the timeline? ☐ Yes ☐ No			

Progress

What specific actions have been taken?

To some extent, this issue has already been addressed through the provision of the three Environmental Science 'streams' noted above. Given the great diversity of courses available, and the equally diverse interests of students (not to mention the inevitable time table conflicts that arise between faculties and departments) the creation of 'sample pathways' would be a complex, and perhaps unnecessary process.

It would be a major undertaking to recruit alumni to help outline career paths. Nevertheless, DES supported the Environmental Students Association in hosting the first "Environmental Pathways" career night at the Hutchison Geoscience Suite in March 2023. A panel of mostly alumni and some academics gave advice to a full room (35?) Environmental Science students to discuss what was most helpful to them in their professional lives.

Next Steps (if applicable)

What actions remain? Is there further follow-up?

We will do the career night again. It was extremely informative and the DES Chair made copious notes. The feedback received, at the event and by unsolicited feedback from current students, is guiding the re-design of the Environmental Sciences program.

Additional Comments

If applicable

Note: The total number of expandable text boxes will be dependent on the number of prioritized recommendations appearing in the program's most recent Final Assessment Report (FAR).

Continuous Program Enhancement
What additional initiatives or changes has the program been working on in relation to continuous program improvement? Additional initiatives will be the further interconnection of Earth Sciences instructors and courses with the Environmental Sciences program. These include; Sedimentary and modern sedimentary environment instruction by new hire Dr. Shchepetkina, a new Geomicrobiology course by new hire Dr. Jeremiah Schuster with environmental science applications such as mitigation of mine tailings hazards.