**Environmental Studies Minor Proposal**

Submitted by Amanda Sparkman on behalf of the Environmental Studies Committee:

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**RATIONALE**

Widespread environmental problems such as biodiversity loss, resource depletion, and environmental change and degradation are among the most pressing global issues of our day. They have tremendous scientific, social, and moral dimensions that require a sophisticated, informed, and compassionate response from a range of disciplinary perspectives. We propose an environmental studies minor that will equip students to live and work and serve the world in a fruitful manner amid these challenges. It will be structured so as to advance the following goals:

* Cultivate a deep understanding of individual and corporate connections to the natural world in all its diversity.
* Develop an interdisciplinary knowledge base and set of skills to engage contemporary environmental issues such as biodiversity loss, pollution, resource depletion, climate change, renewable energy, sustainable agriculture, and sustainable development from local to global scales.
* Situate stewardship of the earth in the context of Christian theology and environmental ethics, and recognize the intersections between social and environmental justice.
* Foster an ability to analyze and debate complex environmental problems, and devise constructive, imaginative strategies to address them.

Currently, Westmont students encounter environmental issues in only a limited capacity in their coursework. While 42% of students report having covered environmental issues in at least one of their courses[[1]](#footnote-1), the majority of these refer to General Biology, General Chemistry, and International Politics courses—all of which provide only a brief introduction to the field. While several upper-division Biology courses and the Food Systems course do provide more in-depth treatment of some environmental topics, there are currently no other regularly-offered courses that primarily focus on these issues. By introducing new and revised courses throughout the curriculum to make this minor possible, we hope to serve not only the students who choose to complete the minor, but also the Westmont student body as a whole.

Westmont appears to be one of only a very few colleges that does not currently have either environmental studies or environmental science degrees available. Of 38 schools surveyed (20 secular institutions—primarily premier liberal arts colleges and a few state universities—and 18 Christian liberal arts colleges[[2]](#footnote-2)), 35 had either environmental studies or environmental science majors or both. Only three Christian liberal arts colleges had neither. Of the 15 Christian liberal arts colleges that had environmental programs, 11 had environmental studies majors. Eight of these also offered minors. By initiating a minor in environmental studies, Westmont will be moving in a direction that peer institutions have already gone.

Student surveys suggest that there will be strong interest in the minor and its associated courses.

In a survey of 258 students[[3]](#footnote-3), 83% agreed there should be more coverage of environmental issues across the curriculum. Furthermore 77% expressed strong interest in taking an introductory environmental studies course and 39% said that they would be interested in completing the minor. Furthermore, the vibrant, dedicated constituents of the Westmont Garden Club and Student Environmental Awareness League attest that a good number of students are already eager to engage these issues on a deeper level[[4]](#footnote-4).

**MINOR REQUIREMENTS**

***Comparative Data***

We have designed the environmental studies minor to be competitive with minors at other institutions. Of 38 colleges and universities surveyed, 16 offer minors in environmental studies or the closely related field of sustainability studies. A common feature among minors is a required introductory course or course sequence, and interdisciplinary electives with options from the natural sciences, social sciences, and humanities. Minors at all of the secular institutions surveyed offer an extensive array of courses with an environmental focus in virtually every discipline. Perhaps more relevant to us at this stage, however, is what other schools of our kind are offering. Since most other institutions that have minors also have majors, it is difficult to get a sense of the bare minimum of courses necessary to sustain a minor alone. Nevertheless, a survey of the eight Christian liberal arts colleges with minors can still be instructive:

* 8/8 offer biodiversity and conservation courses
* 8/8 offer environmental ethics and/or environmental philosophy courses
* 7/8 offer a public policy and/or environmental law course
* 6/8 offer an environmental economics/business course
* 6/8 offer environmental science
* 6/8 offer a sociology and environment course
* 5/8 offer environmental chemistry
* 3/8 offer a religion and environment course
* 3/8 offer a GIS course
* 2/8 offer environmental history
* 2/8 offer a communication course
* 1/8 offers an environmental art course

With this comparative data in mind, we have constructed Westmont’s minor requirements as described below:

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| **Requirements for a Minor: 20 units****Required Course: 4 units**ES 001 Introduction to Environmental Studies (4)**Elective Courses: 16 units***Choose at least one course from each of the three areas below. At least two of the four courses must be upper-division. Note that courses with asterisks (\*) have prerequisites. For courses where environmental issues are not the sole focus, students should choose an environment-related issue for any independent project assigned, as approved by the minor advisors.* ***Natural Sciences***BIO 104 Marine Biology\* (4)BIO 108 Animal Diversity\* (4)BIO 125 General Ecology\* (4)BIO 129 Tropical Ecology\* (4)BIO 197 Biology and Faith\* (4)CHM 004 Chemistry, Culture and Society (4)LS 012 Introduction to Life Sciences (4)LS 013 Biology, Values and the Developing World (4) Other natural science courses with a substantive environmental component,  special topics courses, or senior seminars as approved by the minor  advisorsOther natural science environmental courses offered at Au Sable Institute for Environmental Studies or other Westmont-approved off-campus programs (e.g., Environmental Applications in GIS, Biological Agriculture, Conservation Biology\*, Land Resources\*, Restoration Ecology\* Environmental Chemistry\*) ***Social Sciences***AN/KNS 140 Food Systems (4)HIS 010ES Perspectives on World History: Environment (4)SOC XXX Environmental Sociology (4)POL 103 Governing: Doing Public Policy (4) Other social science courses with a substantive environmental component,  special topics courses, or senior seminars as approved by the minor  advisors (e.g., POL 150 Environmental Politics)Other social science environmental courses offered at Au Sable Institute for Environmental Studies or other Westmont-approved off-campus programs (e.g., Environmental Law and Politics, International Development and Environmental Sustainability, Sustainable Community Development)***Humanities***ART XXX Land into Landscape (4)COM 129 Persuasion and Propaganda (4)COM 130 Argumentation and Advocacy (4) ENG 006ES Studies in Literature: Environment (4)ENG 044ES Studies in World Literature: Environment(4) Other humanities courses with a substantive environmental component,  special topics courses, or senior seminars as approved by the minor  advisors (e.g., RS 116 The Apocalypse, RS 134 Gender in Theological  Perspective)Students are encouraged to take up to four units of Environmental Studies Internship (ES 190) and/or research credit, which may be distributed into the three areas above as appropriate. |

***Introductory Course***

The minor that we propose will be comparable that of all other institutions in that we will offer a new **Introduction to Environmental Studies (ES 001)** course that will be required of all majors and satisfy the Thinking Globally GE. This course will take a robust interdisciplinary approach and provide fresh, critical engagement of environmental topics. It will be co-taught by Marianne Robins (History) and Amanda Sparkman (Biology). We envision the following course outcomes:

*Environmental literacy*

* students will develop an interdisciplinary knowledge of the environment and environmental issues in a global context
* students will be able to identify the multiple features, causes and consequences of at least three environmental issues in a global context
* students will begin connecting natural, economic, political and social systems to environmental issues in a global context
* students will start developing a theological and ethical approach to environmental issues

*Environmental skills*

* Students will develop their capacity to analyze and debate complex environmental problems
* students will begin integrating different disciplines to craft creative solutions to local problems
* Students will communicate clearly about environmental issues

*Environmental virtues*

* Students will demonstrate virtues such as respect, humility, and empathy toward the natural world including human beings.

***Interdisciplinary Electives***

The minor will require at least one course from each of the three academic divisions: natural science, social science, and humanities. Since our current on-campus course offerings are extremely limited, this distributional requirement must be supported by both new and revised course offerings[[5]](#footnote-5). Carmen McCain and Paul Willis will be offering special sections of Studies in Literature (ENG 006) and Studies in World Literature (ENG 044) that focus on environmental literature, Marianne Robins will be offering a special section of Perspectives on World History (HIS 010) and Steve Contakes will be increasing the amount of coverage of environmental issues in Chemistry, Culture and Society (CHM 004). Caryn Reeder will be addressing environmental themes in The Apocalypse (RS 116), and has already included both treatment of environmental topics and the option for an environmental focus for independent projects in Gender in Theological Perspective (RS 134). Furthermore, two entirely new courses will be offered by the Sociology and Art departments: Environmental Sociology (Meredith Whitnah) and Land into Landscape (Lisa DeBoer).

Several other courses, such as Tom Knecht’s Public Policy course (POL 103), Deborah Dunn’s Persuasion and Propaganda course (COM 129) and Elizabeth Gardner’s Argumentation and Advocacy course (COM 130) that do not have an exclusive environmental focus, but do provide some treatment of environmental issues as well as a general set of skills important for the field will also count for the minor. In this case, students will be required to conduct any independent projects on environment-related topics. We also invite faculty teaching Special Topics, senior seminars, or other courses with a substantial environmental emphasis to request that their courses be applied for minor credit by student petition (e.g., the English department can envision upper-division environmental literature courses if there is sufficient interest, and Caryn Reeder and Deborah Dunn will have an environmental focus for their 2019 Mayterm course, Peace and Conflict from Jerusalem to Belfast; Chandra Mallampalli is also considering an environmental focus for his Modern South Asia course.)

For courses within the natural science and social science divisions, students may also opt to take courses from Au Sable Institute for Environmental Studies. Westmont currently sends a handful of Biology students each year to Au Sable’s summer programs in Michigan and Washington, but several key courses are offered there that would also be appropriate for non-Biology students.

***Internships and Research***

In collaboration with the Career Development and Calling office we have begun to identify local organizations that would be interested in supporting the minor through internship opportunities for academic credit.[[6]](#footnote-6) Currently, Westmont students primarily engage in environment-related internships through the Biology Department’s Environmental Practicum (BIO 191) at institutions such as the Santa Barbara Museum of Natural History and the Marine Mammals Rescue and Rehabilitation Center. Westmont in San Francisco also has a number of existing relationships that we will encourage our minors to explore (e.g., Interfaith Power and Light, Sierra Club—SF Bay Area Chapter, California Environment Associates; San Francisco Bay Keeper, etc.). Furthermore, we have internships available at our own Westmont Garden. We intend to build on these existing relationships, and foster new ones in a wide range of environment-related fields, including environmental advocacy, communication, art, or writing; resource or habitat/wildlife management (including restoration projects); sustainable agriculture; green business; and wilderness therapy and nature literacy.

We will also encourage students to do academic research on environment-related topics for credit towards the minor. Currently, Steve Contakes and Amanda Sparkman offer research opportunities to majors in this area.

***Other Curricular Considerations***

Three key areas are noticeably absent from our list of proposed electives: environmental ethics, and environmental economics/business. The absence of environmental ethics is the most critical, particularly as all other institutions surveyed offer this course. We also believe an environmental economics/business course would be extremely important, and the majority of Christian liberal arts colleges offer this course. At this stage, teaching these courses would require funds to hire an adjunct on a regular basis. Stephen Zylstra (currently adjunct in the Philosophy department) might be available to teach environmental ethics. A potential adjunct has yet to be identified for an EB course.

Another weakness of the curriculum as it stands is the lack of lower-division courses on ecology, biodiversity and/or conservation. Introduction to Life Sciences (LS 012) does cover these topics at an introductory level, but they are not the exclusive focus (note, however, that other topics covered in this course, such as cellular biology and genetics are also important for environmental fields, making it an important component of the list of electives in the natural sciences). At this stage, due to the heavy prerequisite requirement for upper-division Biology courses, only science majors will be likely to receive any in-depth coverage of these issues. In future, we hope that there will be ways to offer at least one specialized ecology/biodiversity/conservation course for students from other majors.

Though courses on religion and the environment do not appear to be common at other Christian liberal arts colleges, we believe this is a critical area for colleges such as ours to engage. We hope that at some stage the Religious Studies department will be able to offer a course on this topic in addition to Caryn Reeder’s upper-division courses. Sandy Richter has both the interest and the expertise, and will be considering whether she can offer a course in this area in the future.

We do currently have a number of adjunct professors with expertise in other environment-related fields that could potentially offer Special Topic courses that, should they ever be offered, would certainly count towards the minor. Kate Bryant is already offering an Environmental Politics course, and Kelsey Lahr would gladly teach an Environmental Communication course. Theresa Covich and Robert Speiser are also prepared to teach on environmental literature. Amanda Lequieu also has expertise in environmental sociology.

**RESOURCES AND SUPERVISION**

As it currently stands, this minor can be achieved through alterations in full-time faculty courses—either revising existing courses, alternating new courses with existing courses, or dropping an existing course to replace it with a new one. That said, it would be worthwhile to consider employing adjuncts either to teach additional electives, or relieve a full-time faculty member of a course so that they can teach an elective for the minor (see *Other Curricular Considerations* above).

We have begun conversations with the library regarding support of the minor with relevant resources. We will be working with Theresa Covich, whose expertise in the area of environmental studies will be helpful in this endeavor.

Financial support of the minor will primarily involve a budget for field trips for the introductory course, books purchase and conference/workshop attendance costs as needed for those developing new courses, and funding for special speakers for the Sustainability Speaker Series.

In addition to co-teaching the Introduction to Environmental Studies course, Amanda Sparkman and Marianne Robins will be responsible for advising all Environmental Studies minors. On-going oversight of the minor will be provided via the Environmental Studies Committee.

**TIMELINE**

We plan to launch the minor in Fall 2019, and teach the Introduction to Environmental Studies course for the first time during that semester. The majority of electives should be available at some point within the 2019-2020 to 2020-2021 school years. The new course proposal for Introduction to Environmental Studies will be submitted in time to make it into the 2019-2020 catalogue. New course proposals for Land into Landscape and Environmental Sociology will not be submitted until the following year; however, Marianne Robins and Amanda Sparkman will advise students interested in the minor that these courses will be upcoming.

1. For more details on this student survey see Appendix 1. [↑](#footnote-ref-1)
2. For more details on the colleges and universities surveyed, see Appendix 2. [↑](#footnote-ref-2)
3. For more details on this student survey see Appendix 1. [↑](#footnote-ref-3)
4. See Appendix 3 for letters of support from both clubs. [↑](#footnote-ref-4)
5. For additional details regarding each course see Appendix 4. [↑](#footnote-ref-5)
6. For a preliminary list of organizations that have expressed interest in providing internships to Westmont students, see Appendix 5. [↑](#footnote-ref-6)