

We live in an environmentally-aware age and are proposing the addition of this option to meet current and future demands for scientists in this important area. Although we teach several courses that are either directly focused on the chemistry of the environment (Ch 371 Environmental Chemistry) or have a significant environmental component (Ch 412 Advanced Inorganic Chemistry and Ch 310 Geochemistry), students do not have the ability to design a program of chemistry and courses in other sciences providing an environmental concentration to their traditional chemistry foundation within the confines of our current major and its options. There are significant employment opportunities in the Pacific Northwest and the country as a whole for which students completing the proposed program would be well qualified to fill. Currently, there is no other formal programs in the environmental sciences offered within the Division of Natural Sciences and Mathematics. Since there are a large number of environmental laboratories located in Portland and the Willamette Valley, we believe that this proposed programmatic option would be beneficial to both Western students and the Pacific Northwest region. In addition to preparing students to work as environmental chemists, this program would provide a strong background for students wishing to pursue careers in related areas such as environmental law, a specialty in which a strong scientific background is necessary. We have had students with the goal of a career in environmental law major in chemistry. This proposed program would provide a broader understanding of the science component of environmental issues. Although there is an Environmental Studies Minor available to Western students, it does not provide the scientific background needed by scientists seeking careers in environmental areas.

The popularity of our other subject-focused options give us reason to believe that this proposed program would draw new students to Western. Students who otherwise might not choose Western as their college of choice have been attracted to our campus by the uniqueness of our Forensic Chemistry program.

The demographics of our current programs show an average of 5-6 graduates per year equally divided between the traditional and Forensic Chemistry programs (the Medicinal Chemistry option will not have its first graduates until next year.) This new program also will increase the number of students enrolled in other areas of science and mathematics due to requirements within the option in those areas.