

## SCIENCE, DIVERSITY, AND COMMUNITY: REVITALIZING INTRODUCTORY CURRICULA

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The University of Wisconsin System Women's Studies Consortium's Women and Science program is a five-semester, National Science Foundation-funded program to address the under-representation of women and minorities in science and engineering. The program seeks to reach students who, though qualified to do science, choose another major. The program's goal is the reform of aspects of introductory science courses—content, climate and pedagogy—that discourage capable students from further study of science.

The Women and Science Program seeks to reverse female and minority attrition from science at a point at which it is most acute: introductory courses of the undergraduate science program. A 1987 National Science Foundation study found that of students entering college intending a career in science or engineering, nearly half drop out of the sciences after a single year of introductory courses. Another 23% defect before graduation.

The Women and Science Program is designed to revitalize introductory curricula and increase female and minority representation in science by a) increasing faculty expertise in gender and science scholarship and training; b) providing role models of professional women scientists; c) improving classroom and campus climate; and d) creating "science communities" that will promote effective learning. Since these innovations have been shown to be attractive to white men as well as to women and people of color, this project should gradually effect an increase in the total number of students majoring in the sciences.

The Women and Science Program will bring together students and faculty at UW System institutions with Distinguished Visiting Professors (from inside and outside Wisconsin) who have successfully implemented teaching innovations at their home campuses. Each Distinguished Visiting Professor will teach a model introductory science course; or a course in gender, race and science; or biology and women's issues; or the history and sociology of women and minorities in science. Distinguished Visiting Professors will hold seminars with host faculty on the incorporation of the race- and gender-conscious content and instruction into introductory science teaching. Distinguished Visiting Professors will also work closely with Faculty Fellows in host departments to develop new or revised courses that foster female and minority science students. Distinguished Visiting Professors' and Faculty Fellows' courses will benefit students immediately, and wide host faculty involvement will contribute to institutionalizing race- and gender-conscious education in UW System science departments.

The program includes:

- An introductory conference attended by over 150 people representing all 15 UW institutions.
- Semester-long Distinguished Visiting Professorships at 5 or more UW System institutions in 1993–1994.

- 10 or more Faculty Fellowships at host institutions.
- 15 or more new and revised courses that may reach thousands of students in the near future.
- Ongoing evaluation of all parts of the program to determine which strategies most effectively promote the retention of female and minority students.
- A concluding conference in the fall of 1994.
- Published evaluation of results.

“Science, Diversity, and Community: Revitalizing Introductory Curricula” is sponsored and administered by the University of Wisconsin System Women’s Studies Consortium, which serves as a formal organization of the Women’s Studies Programs of all 26 degree-granting institutions and UW Extension. The Consortium has identified curricular reform as one of its primary goals and, because of the challenges presented by the sciences, has designated Women and Science as a focus area within that goal. With its ability to promote successful collaborative efforts System-wide, the Consortium is confident that the objectives of the program can be accomplished. As a result, this project should serve as a model for attracting women and minorities to the sciences in the UW System and nation wide.

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