

**Diversity Statement:  
Policies and procedures to continue enhancing diversity  
Department of Mathematics  
Purdue University**

The Purdue University Mathematics Department is highly committed to diversity among its faculty, staff, and students. In an increasingly global community, diversity helps to strengthen and invigorate all activities of a highly ranked department. Historically, the Department has sought to address areas of under-representation by making diversity a high priority in all of its activities, including its decision-making processes. The effectiveness of this approach is borne out in the current atmosphere of the Department, as well as in its long history of working to recruit women and underrepresented minority faculty. Some of these efforts have been recognized outside of the Department and University. For example, the report of the 2008 departmental external review panel praised the Department for its efforts and noted its uniqueness among Group One mathematics departments nationwide in that the Head and Associate Head at the time both belonged to underrepresented groups. Thus, the Department views this diversity statement as a codification of existing policies and procedures, and as a plan for future progress.

The Department is committed to ensuring equal opportunity and equal access for faculty, students, and staff regardless of ethnicity, gender, national origin, race, religion, sexual orientation, political affiliation, or disabilities. The Department is further committed to widening the applicant pools for faculty and staff hiring and graduate program admissions, and to being as inclusive as university regulations permit in the distribution of available undergraduate scholarships.

**1. The Department's faculty recruiting and retention policies include the following concrete practices.**

- **Open tenure track and postdoctoral faculty searches.** All positions have traditionally been openly advertised to the extent allowed by University policies. Announcements have broadly defined the applicant's field of expertise, thus allowing any qualified member of the mathematical community to apply for these positions. This "open process" has facilitated offers to many outstanding women and underrepresented minority candidates over the years and has led to several appointments. This practice has also resulted in several postdoctoral appointments of women and underrepresented minorities. The Department is committed to continuing the practice of open advertisement as a vital mechanism for increasing the diversity of its faculty.
- **Advertisement of positions.** Positions are advertised in publications of major professional organizations, including those primarily targeting populations of women and underrepresented minorities in the mathematics and other sciences, such as the SACNAS publications. The Department is committed to continue these practices.
- **Inclusion of minority and women in the decision-making process.** The primary decision making committees in the Department are: the Personnel Committee, which makes decisions on hiring and advises the Head on policy issues affecting the employment and educational environment of all who work

and study in the Department; the Promotions Subcommittee, which advises the Primary Committee and the Head on faculty promotion and retention cases; and the Graduate Committee, which oversees the graduate program, including recruiting and retention and the Ph.D. qualifying examinations. For many years, women and underrepresented minority faculty have served regularly on these committees. It is expected that this pattern will continue, especially as the diversity of the faculty continues to increase. The Department fosters an open decision-making process—these committees welcome faculty input, and faculty are encouraged to express their opinions on issues whether they are currently serving on the relevant committee or not.

- **Active participation of faculty in recruitment efforts.** Mathematics Department faculty actively participate in meetings and other activities that specifically target minority populations. These activities include, but are not limited to, the Conferences for African-American Researchers in the Mathematical Sciences (CAARMS), the Blackwell-Tapia Prize Conferences, the Tapia Diversity in Computer Science Conferences, and the national conference of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). Several members of the Purdue Mathematics Department faculty have national reputations for their efforts to increase the participation of women and underrepresented minorities in mathematics. This national exposure has been, and will continue to be, utilized to identify and invite mathematicians from minority populations to present seminars and colloquia at Purdue. In addition to scientific interactions, such visits help advance the Department's efforts to increase its faculty diversity. The Department views these activities as one of the best ways to enlarge the pool of applicants for faculty positions at all levels, including postdoctoral positions. The Department is committed to enhancing these activities by making available (through the Department itself or by working with others in the College of Science or University) the financial resources needed to participate in such meetings and by continuing to invite speakers to campus.
- **Women in Mathematics Day.** During the academic year 2007-08, the Department initiated an annual "*Women in Mathematics Day*" to celebrate the achievements and contributions of women mathematicians and to provide a special opportunity for women faculty and graduate students in the Department to discuss concerns of access and climate. The day's activities culminate with the Jean Rubin Memorial Lecture presented by a prominent female mathematician. While the Department is committed to the continuation of Women in Mathematics Day and the Jean Rubin Memorial Lecture, our goal is to identify a donor who will endow these activities and financially secure their future.
- **Identification of special opportunities.** The Department actively works to identify special opportunities for hiring women and underrepresented minority faculty, including the use of special resources for such hires from the College of Science and the University. This has been a standard practice in the Department for many years. This approach is now part of the culture of the Department and will continue in the future.

- **Mentoring of junior faculty.** Mentoring is intrinsic to the profession and culture of mathematics. The mentoring of young faculty, including postdocs, by senior faculty has been a standard practice in the Department for many years. Following the recommendation of the College of Science Faculty Council, the Department formalized its mentoring practices by incorporating them as policies and procedures in the Department's "*Statement of Promotion and Retention Policy*" document.
- **Challenges.** The Department recognizes that in a competitive job market, the recruitment and retention of outstanding faculty—especially outstanding women and underrepresented minority faculty—will remain a challenge. Over the years the Department has approached, and made offers to, several outstanding women and underrepresented minority mathematicians. Such individuals are highly sought after by other mathematics departments of comparable or higher national rankings than ours, and the rate of success has been disappointingly low. Nevertheless, the Department is committed to working with the higher administration to secure competitive offers and to looking for creative ways, as described above, to increase the number of women and underrepresented minority faculty.

## **2. The Department's graduate student recruiting and retention policies include the following concrete steps.**

- **Outreach.** The Department regularly participates in events sponsored by organizations around the country serving underrepresented populations and utilizes Department and University resources to support faculty and current graduate students to attend events aimed at encouraging undergraduates to pursue graduate degrees and careers in mathematics.
- **Faculty support.** The Department devotes resources to faculty engaged in developing and applying for grants from funding agencies to support graduate education for women and underrepresented minorities.
- **Faculty Contacts.** The Department encourages faculty to maintain contact with colleagues at minority serving institutions and to actively develop these contacts and relationships by inviting faculty from these institutions to visit Purdue and encouraging Purdue faculty to visit their departments. Over the years these contacts have been an excellent graduate student recruiting tool. The Department is committed to the continuation of this practice.
- **Challenges.** The Department recognizes that despite its many efforts and good intentions, the number of U.S. female graduate students, and students from underrepresented groups, is very low. The Department recognizes the importance of improving its retention rate for domestic graduate students and of decreasing the time to degree for all of its graduate students. The Department understands the need to further improve its mentoring and advising programs so that all students, from the very beginning, are nurtured and guided toward their degree goals. For these reasons, the Department formed a *Recruiting Committee* that coordinates, in conjunction with the *Graduate Committee*, recruiting and retention efforts.

### 3. The Department seeks to diversify the population of undergraduate mathematics majors in several ways.

- **K-12.** The Department partners with the College of Science to engage in K-12 outreach programs to promote the mathematical sciences among school children.
- **Coordination of efforts.** The Department coordinates efforts with the College of Science Diversity Office and participates in efforts to bring pre-college underrepresented students to campus for special programs that prepare them for college.
- **Mentoring.** The Department has recently created and will maintain a mentoring program to enhance efforts to retain and graduate mathematics majors. It encourages faculty to work with students in summer “*Research Experiences for Undergraduates*.” Special funds are available from the University to support underrepresented minority students in these activities. Mathematics faculty regularly serve as mentors for Purdue’s Horizons program, which serves first generation college students who express interest in majoring in mathematics and related fields. These practices will continue and will be enhanced whenever possible.
- **Student Organizations.** Department faculty have served as faculty advisors for campus wide minority student organizations, especially those whose members have considerable interactions with mathematics faculty through their required coursework—for example, the Society of Hispanic Professional Engineers (SHPE).
- **Math is Key Public Lectures.** During the academic year 2007-08, the Department initiated its “*Math is Key*” public lecture. A world renowned mathematician who also has a great reputation for his/her lecturing skills is invited to deliver a lecture highlighting the importance of mathematics in our society. These lectures, open to the public at large, are designed for a general scientific audience. Many groups of students, including high school students interested in science and mathematics, are especially invited to attend. The Department will ensure that invited lecturers include distinguished mathematicians from underrepresented groups.
- **Challenges.** As part of its goal to increase the number of women and minority students majoring in mathematics, the Department recognizes the need to have more faculty involved with the advising and mentoring of undergraduate mathematics majors. While the “star” undergraduate mathematics majors receive a lot of special attention from faculty, many students do not receive the advising and encouragement they need (and deserve) from the faculty. The Department needs to introduce more efficient mechanisms to provide easy access of undergraduate majors to faculty for mentoring, nurturing, and practical advice on course work. The Chair of the Undergraduate Majors Committee, the Director of the Actuarial Science Program, and the Math Club faculty advisor have started working, in collaboration with the Department’s Associate Head, to create such mechanisms.

**4. Staff.** All open Department staff positions are advertised as widely as University policies allow to ensure as diverse an applicant pool as possible.

**5. University Policies and Procedures.** The Department coordinates its diversity efforts with those of the College of Science and the University. For information on these policies and procedures, please consult the [College of Science Strategic Plan](#) and [Purdue's Diversity Resource Office](#).