

FRESHMAN MATHEMATICS IN THE HIGH SCHOOLS

An all too familiar comment received by our freshman mathematics instructors goes something like this: "I took Precalculus (or Calculus) in high school and did really well, but this course is totally different." This distressing situation may be caused by the student's high school courses offering a very different emphasis or because their level of mastery of the material is not up to that expected at the UW. Last year, in one effort to address this sort of situation, an experimental collaboration was begun between UW Educational Outreach (UWEO) and the Mathematics Department, offering UW credit for certain mathematics courses taught in western Washington high schools. The program started under the oversight of Ken Plochinski and involved two schools and two particular mathematics courses: Math 120 Precalculus at South Kitsap High School in Bremerton and Math 127 Calculus I at JFK High School in Burien. This year, under the oversight of David Collingwood in the Mathematics Department, the experiment is continuing.

The UWEO program for the 2000-01 academic year involves four teachers, three high schools, three of our freshman level courses and approximately 100 students. Two teachers, Kim Schjelderup and Lynn Adsit at Mercer Island High School, are teaching one section of Math 120 Precalculus and one section of Math 124 Calculus I. Paul McMillen at JFK High School in Burien will be participating for his second year in the program, teaching one section of Math 127 Calculus I. Finally, Teri Hughes at South Kitsap High School in Bremerton will be teaching one section of Math 120 Precalculus.

One shared concern over such a program is the extent to which courses will be comparable to equivalent offerings at the UW. For this reason, fairly careful monitoring of the courses will take place. This began with a day-long workshop in mid-August at which all the teachers involved were exposed to the materials used in our classes, their emphasis and the level of understanding we expect. The courses taught in the high schools will use the same textbooks (in some cases augmented by a second text). Professor Collingwood is meeting regularly with each of the teachers, on site, collecting course materials that will be available for interested members of the department to peruse and assess the course level. At the end of the year, on a Saturday afternoon in early June, these 100 high school students will sit for the same common final exam offered on the UW campus. Students will receive a UW grade and credit for the course, which will be in addition to (and not necessarily the same as) their high school grade.

It is our hope that exposing a core group of high school teachers to our freshman level courses will begin a larger dialog that improves the high school mathematics preparation of freshman entering the UW.

SPRING PICNIC

Sunny weather for our spring picnic was masterfully arranged (along with other details) by Ginger Warfield. The graduate students challenged the faculty to a match in the sport of their choice, which, by default, was ultimate frisbee—no one remembered to bring the gear for any other sport. The graduate students have pledged to redeem themselves next year after an 11-0 trouncing by their more senior colleagues. We wish them well in their attempt.

NEW PLAQUES IN THE LOUNGE

The Mathematics Department lounge now has four attractive cherry plaques hanging on its north wall. The plaques bear the names of the recipients of recent student awards. One lists the names of the students who have done best in the Putnam Mathematical Competition, another lists the names of students who have received awards for their performance in the honors calculus sequences, a third lists the recipients of the Gullicksen Memorial Award, and the fourth lists the TAs who have been given awards for excellence in their teaching.

The plaques were made by our colleague Hart Smith, to whom we extend our thanks for his efforts.

DEPARTMENTAL EXCELLENCE AWARDS

We are pleased to announce the first annual Mathematics Department Excellence Awards. After careful review of each faculty member in the department by the personnel committee and the Chair, the following three associate professors and one assistant professor were chosen to receive the first round of awards for their outstanding research:

Chris Hoffman, Steffen Rohde, Tatiana Toro, and James Zhang.

Chris Hoffman is noted for his work in dynamical systems. Steffen Rohde is a well known classical analyst. Tatiana Toro contributes actively to the field of geometric analysis. James Zhang is a leader in the rapidly developing subject of noncommutative algebraic geometry.

These \$4000 awards can be used during the period September 16, 2000, through September 15, 2001, at the discretion of the recipient (subject to state regulations) for research support including, but not limited to, travel, visitor support, books, equipment, and summer salary. These awards, which are expected to be the first of a series of annual awards, were provided in part from private resources and in part from the resources made available by the College of Arts and Sciences.

NEW COURSE IN MATHEMATICAL COMMUNICATION

As reported in last year's Newsletter, the Departments of Mathematics, Applied Mathematics and Statistics have jointly received a VIGRE grant to fund new mathematical activities. One of the initiatives funded by the VIGRE grant is the development of a course intended to develop the writing and speaking skills of students in the mathematical sciences. After some experimentation over the past two years, two such courses have now been established, one for undergraduates and one for graduate students, both offered jointly by Mathematics, Applied Mathematics, and Statistics. The undergraduate course has been developed mostly by Professor Gerald Folland of the Mathematics Department. It is concerned with the writing of good mathematical prose, from the grammar of mathematical symbols to the construction of a logical argument to the organization of a paper; some attention is also given to oral presentations. The plan is to offer it once a year, to a class of about fifteen students. A graduate-level course with the same goals has been offered by Professor Peter Guttorp of the Statistics Department.