Department of Astronomy

Assessment Update 2009

The undergraduate major in Astronomy-Physics primarily serves two populations of students. The first are those who use the degree as an entry into the general workforce, and the second are those who go on to graduate school in Astronomy or a related field. To date, most of our assessment activity has been focused on this second group, which makes up the majority of our majors. The primary question is: how well are our students prepared to enter and succeed in graduate programs in astronomy? In the assessment of the undergraduate program we recognized that we did not have a forum in which the majors could interact with each other in an environment outside of the formality of the classroom. In response to this we re-introduced a new course, Astronomy 460, which is designed to give our students a broad perspective on what a professional career in astronomy entails and create an environment in which the students collaborate with each other. This year, for example, the students gained the real-world experience of observing with the Arecibo radio telescope, the largest such instrument in the world. In the process, these students discovered a new galaxy and will be gathering more data this summer. We also now recognize that our program does not systematically prepare students for computational astrophysics. Specifically, we do not have formal training in programming. We proposed a new course in computational astrophysics that was initially designed for our graduate students, but may be a course that is also open to the upper level undergraduate. Our assessment of the program also shows that while the department has a strong outreach presence, our undergraduate majors have not historically taken part in a way that prepares them for career that calls for frequent interaction with the general population. For the past two years we have had undergraduate volunteers help with the public observing nights at UW Space Place and this year we will a number of "undergraduate only" sessions of the popular Universe in the Park (UitP) program.