General Education Annual Course Assessment Form

Course Number/title Mathematics 100W__ GE Area  Z

Results reported for AY  2010-11   # of sections  1   # of instructors  1

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Department Chair:  Dr. Brad Jackson  College:  Science

Instructions: Each year, the department will prepare a brief (two page maximum) report that documents the assessment of the course during the year. This report will be electronically submitted, by the department chair, to the Office of Undergraduate Studies, with an electronic copy to the home college by September 1 of the following academic year.

Part 1

To be completed by the course coordinator:

(1) What SLO(s) were assessed for the course during the AY?

SLO 2, SLO 3, and other, which includes a great deal of writing, well over the 8000-word requirement. Reading is very broad from poetry (Jabberwocky) to scientific literature. There is also a great deal of analyzing, which involves critical thinking.

(2) What were the results of the assessment of this course? What were the lessons learned from the assessment?

Many of the assignments given to my Mathematics 100W class in the fall semester of 2010 and spring semester of 2011 were geared toward the students producing well-written research papers. We began by reading “What’s in Your Toothpaste?” by D. Bodanis, a mathematician who wrote many books, including E = Mc2. His essay reveals some upsetting ingredients in the product. This led me to ask if they were at all aware of what they put into their bodies. They then chose a product to investigate and began researching it, which produced a wide range of interesting essays.

At the end of the first month, students were required to hand in the topics of their research papers. (At the beginning of the class, I had given them a list of 34 possible topics for their projects, but they also were allowed to choose another one, if they desired.) I sent those topics to Rob Bruce, the mathematics librarian in the MLK Library, and in the middle of the second month, my class met in the library where he dealt with their topics specifically, showing them what websites,
journals, and/or books to use, and so on. The class before that visit was spent going over a
handout on how to begin doing research.

Since many of the mathematics majors in my class will be moving on to graduate school, I
introduced them to writing an abstract for their papers. I explain that abstracts must be written for
a thesis because they are listed in the library, so that people can read a shortened version of the
paper and decide whether to read further. I then explained how to do annotated bibliographies,
which they were told to submit at the end of the second month.

Since Lewis Carroll was one of the topics students could choose for a research project, I had them
read “Jabberwocky.” I then explained that Carroll was a pseudonym for an Aristotelian
mathematician named Francis L. Dodgson, and that “Jabberwocky” is one of the most famous
and most written-about poems in the world. Almost immediately students came to class with
examples of the nonsense poem from their math class textbooks. Almost as quickly, two or three
chose Carroll as a research project.

At the beginning of the third month, my students read an essay given to me by the mathematics
librarian, “How to Write Consistently Boring Scientific Literature.” This assignment inspired a
great deal of debate. The class was divided in half on whether this was true or not and wrote some
fascinating essays in response. Some of them wrote parodies of the article that were particularly
fine. All in all, the essays they wrote on this topic aided them in writing more interesting term
papers.

At the end of the third month, the students presented 10-15 minute oral reports on their research.
Most of these reports were extremely inventive, and their papers proved to be the same.

I have found over the seven years that I have taught this class that mathematics majors are fine
writers who respond well to suggestions and, above all, appreciate a challenge.

(3) What modifications to the course, or its assessment activities or
schedule, are planned for the upcoming year? (If no modifications are
planned, the course coordinator should indicate this.)

No modifications are planned.

Part 2

To be completed by the department chair (with input from course coordinator as
appropriate):

(4) Are all sections of the course still aligned with the area Goals, Student
Learning Objectives (SLOs), Content, Support, and Assessment? If they are
not, what actions are planned?