### **Mathematics Department**

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Degree Program(s) Assessed	Assessment Methods	Number of Individuals Assessed
BS in Mathematics and Math Ed.	Grades in Core Courses Exit Survey	24 11
Phd in Mathematics	Results of Comprehensive Examinations and minor theses	10

# **Analysis and Findings**

### For the BS degree:

Exit survey: Two of the respondents graduated within 3 years of high school graduation and four more with in 4 years. Only 2 started OSU as mathematics majors the rest transferred to math during their sophomore or junior years. Five are planning to go to graduate school and one is unsure. Four are planning to teach. When asked to rate their experience with their advisor the averages out of 5 possible were: Advisor accessibility, 4.4; Career information, 4; Knowledge of University regulations, 4.3; Help in find appropriate math courses, 4.3; Being friendly and interested, 4.5. When asked if their GPA was a true reflection of their knowledge of mathematics, nine said yes and 1 no. No student complained about the availability of the faculty for help outside of class. When asked which courses taught them the most about applying math most mentioned courses that we normally think of as applied math courses, Math modeling, Differential equations, Calculus, but some mentioned courses that we normally think of as theoretical, Number theory, Intro. to analysis, Groups and representations. When asked which courses taught them how to write, listen and talk mathematics most listed the algebra, analysis, or geometry courses but one student said math modeling. When asked which courses taught them the most about "Mathematical Reasoning" most again mentioned the algebra, analysis and geometry courses but 3 mentioned combinatorics and one mathematical modeling. The overall feeling you get from reading the surveys is that the students were happy with their experience at OSU and with what they learned in their classes.

Grades in Core Courses: In the two core courses Math 3613 and Math 4023 this years math and math education graduates had 15 A's, 17 B's and 4 C's and eight students needed to repeat one or both of the courses. In our beginning masters level courses four students attempted Math 4143 and one 4153 making 1 A, 3 B's and a W, four attempted math 4613 and 5013 making 2 A's and 4 B's and one student attempted 5023 making a B.

#### For the MS degree:

New assessment methods are being developed for the MS degree since Comprehensive Examinations are no longer required. Seven students received their MS degree this year.

#### For the PhD degree:

Comprehensive examinations were given in Real Analysis, Complex Analysis, Algebra and Topology over the two examination periods. Real Analysis had 1 pass, 0 failures: Complex Analysis had 0 passes and 4 failures: Algebra had 0 passes and 1 failure: and Topology had 1 pass and 0 failures. So for 9 attempts we had 2 passes for a 22% pass rate. In our last revision of the program we allowed students to write a minor thesis to replace one of the examinations. This year 2 students attempted minor theses and both passed. We had one student complete the PhD degree this year.

## **Uses of Assessment Results**

Year before last we made changes in the examination procedures for the PhD degree and added an applied option to the PhD degree. We also added a Mathematics Education option to the Masters degree program.

The results of last years assessment were given to the department head for distribution to the graduate and undergraduate directors but no changes were made in the programs.