

## **Doctor of Philosophy in Mathematics**

### **Program Goals**

The Doctor of Philosophy in Mathematics aims to establish a student in a research level mathematics career, within academia or industry. To that end the student should demonstrate:

- 1) An ability to undertake original research level mathematical investigation.
- 2) Mathematical breadth and sophistication in the foundational subject areas of analysis, algebra and topology.
- 3) An understanding of the field of specialization, its context, structure, and literature.
- 4) An ability to write, discuss and lecture at a research level.

### **Student Learning Outcomes**

- 1) An ability to undertake original research level mathematical investigation.
- 2) Mathematical breadth and sophistication in the foundational subject areas of analysis, algebra and topology.
- 3) An understanding of the field of specialization, its context, structure, and literature.
- 4) An ability to write, discuss and lecture at a research level.

### **Process for Assessing each Student Learning Outcome**

#### **1. Timeline for assessment and analysis**

Continual.

#### **2. Means of assessment and desired level of student achievement**

The Ph.D. program is aimed squarely at these outcomes. Our graduating Ph.D. students, by passing their qualifying exams and producing a thesis demonstrate outcomes (1-4), and this is assessed continually by our Departmental Graduate Committee, our faculty, and our peers.

#### **3. Reporting of results**

Results will be reported annually to the Dean of Fulbright College.