Required Coursework to be completed within the first year:

**BMMB 501 Concepts in Biomedical Sciences** (5 crs)
Fall, 1st year

*Description:* Provide the fundamentals of biochemistry, genetics, cellular and molecular biology, and prepares students to enter any laboratory in the department, regardless of their background before coming to Penn State.

**BMMB 509 Ethics in Biomedical Sciences** (1 cr)
Fall, 1st year

*Description:* This course will teach you how to conduct research ethically and visits a number of interesting contemporary topics regarding medical ethics.

**BMMB 602 Orientation and Teaching Assistant training** (misc.)
Fall, 1st year

*Description:* This course meets multiple times each week to provide an orientation to the graduate program, brief research seminars by faculty interested in accepting students and instructions for being an effective teaching assistant.

**BMMB 597A Critical Analysis of the Scientific Literature** (1 cr)
Fall, 1st year

*Description:* Students in this course will learn and practice how to carefully and critically evaluate the scientific literature.

**BMMB 507 Seminar in BMMB** (1 cr)
Spring, 1st year

*Description:* The objective is to help students improve the clarity of their thinking, discussions, lectures, seminars, etc. by providing experience in communicating scientific ideas and results using effective visual aides. Students typically organize and make two presentations during the semester and discuss methods for improving communication with different audiences.

**BMMB 590 BMMB Colloquium**
Spring, 1st year

*Description:* Students attend the weekly BMMB seminar series.

8/12/2010