Mentored Teaching Seminar Course, Department of Biology

A number of Biology Department faculty have had the good fortune to participate in IU’s Freshman Learning Project (FLP), an intensive, two-week seminar in which faculty learn about a number of issues that affect student learning. Each participant also chooses a “bottleneck,” which is a concept or thinking process that students find difficult. Participants then design classroom lessons to help students through those bottlenecks, practice these lessons on one another, and then implement them in their own courses.

The idea of the Mentored Teaching graduate seminar is to set up an FLP-like experience for graduate students. I have consulted Biology department FLP alumni, and have also met with some of the talented and insightful people who run FLP for IU. The course is based upon what Biology faculty found most valuable in their FLP experiences and on the advice of the teaching pros. I have found that the course is suitable for both students without prior teaching experience and for students with prior experience. You do not have to be working as an AI in the semester you participate in the course.

In this course, students:

1. Read about and discuss issues related to teaching in general and to science and science teaching. Some of these classes (for example, one on misconceptions in science) will be led by guest lecturers.

2. Make field trips to observe effective teachers

3. Interview students and teaching assistants of introductory courses about bottlenecks

4. Choose a bottleneck and design a lesson to address it

5. Practice the bottleneck lesson on peers

6. Teach the lesson to a group of students enrolled in Biology L113, the introductory biology laboratory course

7. Write regular, brief reflections on the readings, class meetings, and the bottleneck lessons

8. Attend and provide feedback for bottleneck practice talks and presentations