Expected Outcomes:

- In-depth study of methods and techniques relevant the student's focus area
- Increase written and oral communication skills
- Hands-on experience on specific techniques or methodologies
- Present results in a formal venue: detailed written reports, scientific meeting communication, peer-reviewed publication, etc...

Assessment methods

Method:

Student and faculty evaluation on Special Problems (FISH 8960) Faculty who taught Special Problems provided informal feedback to the curriculum committee chair Students were asked to respond to a questionnaire with the following questions: 1. You took special problems as: undergraduate, MS, or PhD 2. Did you find special problems a useful course? (scored as 5= extremely useful; 1= not useful at all) 3. What was the main learning outcome of the course? 4. Did the course satisfy your expectations? (scored as 5, it totally did; 1, not at all) 5. Was your professor engaged in your learning experience? Yes/No 6. Do you think special problems was a good complement to regular courses? (5, excellent complement; 1, did not make a difference) 7. Please, provide us with any comments that would help us to improve the quality of our courses (not just Special Problems) and programs.

Findings:

Two PhD students took a Special Problems in Genomics under the direction of one of our faculty. The faculty member found that the Special Problems was a positive learning experience for students. The students replied that the class was very valuable in improving skills in critical evaluation, discussions, writing, and public presentations. The value of a Special Problems class was felt to be that it allowed a more in-depth discussion that was possible in a normal classroom setting. Fifteen students received the survey and 11 replied (4 undergrads, 5 MS, and 2 PhDs). The PhD students scored the Special Problems as being extremely useful and that the professor was very active and helpful in the class. Main learning outcomes were: improve critical thinking, improve oral and written communication skills, increase experience in searching and reading scientific literature.

How did you use findings for improvement?

The importance of discussion as part of learning was made by our MS & PhD International students. Faculty will be encouraged to allow more time for discussion in the formal classes. Since Special Problems courses are not subjected to student evaluations we don't have a common method to assess these courses. We plan to develop a normalized evaluation form for Special Problems that the students as well as the instructor will complete at the end of the course.

Additional comments:

None