

Department of Biological Sciences - Indiana University South Bend

2007 Summary of Senior and Alumni Survey

**SUMMARY of SENIOR SURVEY (Spring 2007)**

1. What year did you start the program? range 1999 – 2003;  
(5 started in 2003, 3 in 2002, 1 in 2001, 1 in 2000, 1 in 1999)
2. If you transferred to IU-South Bend, what school did you transfer from?  
2 transfers (Holy Cross, Southwestern Michigan)
3. What Biology courses have you taken at IUSB? All courses represented

Table 1. Results of 2007 survey of Senior Biology students. Each student was asked to rank how well he or she had mastered departmental learning goals; 11 of 15 students completed the survey. The scale was 1 = fully mastered, 2 = quite well, 3 = average, 4 = below average.

<b>Educational Goals</b>	<b>Mean (<math>\pm</math> 1 standard deviation)</b>
<b>A. Discipline specific knowledge and skills</b>	
Mastery of biological concepts	2.3 (0.47)
Mastery of biological techniques	2.0 (0.45)
Developed skills necessary to pursue career in life sciences	2.2 (0.75)
<b>B. Basic academic skills</b>	
Developed writing and speaking skills necessary to communicate effectively	2.1 (0.83)
Developed appreciation for learning in different disciplines	1.8 (0.87)
<b>C. Higher order thinking skills</b>	
Developed high level cognitive thinking (including observation and experimentation, collection and analysis of data, synthesis of information, and ability to understand and interpret information and data from scientific literature)	1.5 (0.69)
Developed the ability to learn independently	2.0 (0.78)
Developed skills to think critically about scientific information and issues	1.8 (0.75)
<b>D. Academic values in biology and general education</b>	
Awareness of the importance of ethical principles in academics and in biology	2.3 (1.01)
Developed skills at working in groups and in collaboration with Colleagues	1.8 (0.98)
Improved citizenship skills (e.g. participating in community events, government)	2.7 (1.19)

5. What aspects of your education and/or experiences with faculty helped you achieve these goals?

**Accessibility of Faculty (5 of 15 comments – appreciate being able to talk to faculty)**

**Small class size**

- The faculty here at IUSB have been great an instrumental in my development as a scientist and future physician. Furthermore, the class sizes, as they were small allowed me to be more interactive with professors and others in the classroom environment. Interaction with faculty was directly associated to my being involved with my research interests.

**Social interactions in labs and extracurricular**

- Honestly, I don't believe it was my experience with faculty in the traditional sense (classroom setting) that helped me the most, but my extracurricular experiences. It was through these experiences that I fostered relationships with faculty members that encouraged my academic and personal growth.
- Taking labs really helped with group work, as well as homework. You get into a "new group of friends" at school who all share the same academic biology interests which helps expand your knowledge.
- For questions A-D: Achieving goal(s) quite well rather than fully are of my own doing, not because of the faculty. I believe I was given more than enough information and opportunity to fulfill these, the inability to do so lies in my abilities. I would gladly recommend the biology program to others interested.

**6. What suggestions do you have for ways the department could better help a student achieve these goals?**

**More information and guidance on Careers**

- Shadowing program for pre-professional programs
- Lab career options
- Need to make students more aware of Independent Study options

**Formalize a Biology Study Hub**

- volunteer tutors and SI's.
- place for students to study in groups

**Advising and Class Offerings**

- Need to encourage students to seek advice from all faculty. For example, encourage students to seek advice from faculty or area employers who have experience working in industry.
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- Increase course offerings: once a semester a faculty member offered a 1-credit directed reading in which students interested in that faculty member's field could pick a topic(s) and read papers on it.
- Hard to schedule classes that are offered every other year.
- Offer electives at different times in different semesters would help get a more diverse population of students able to take classes.

**Handicap accessibility**

- If they could have at least one or tow lower benches/working surfaces and sinks for the physically handicapped students.
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**SUMMARY OF COMMENTS ON ALUMNI SURVEY**  
**(Results from SUMMER 2007)**

**1. Skills most important in job**

- communication (speaking and writing)
- people skills
- personal drive and willingness to learn
- professional demeanor
- problem solving skills

**2. Independent research, labs, and techniques**

- need to make students more aware of research opportunities
- lab work too canned, need to solve problems
- learning techniques very important (molecular, histology)

**3. Job mentoring (Concern about transition into jobs)**

- stronger in grad school/med school
- weaker in other types of jobs
- target juniors
- encourage students to build resumes while in school
- mock interview and presentation skills practice
- do not treat students interested in careers other than med school and graduate school as lesser students

**4. Advising**

- Current centralized advising structure works well in providing consistent information to students, but some type of distributed advising model would help spread the work load among faculty.
- need better pre-med advising

**5. Other**

- Stats class did not prepare person well for graduate school
- IUSB has good faculty, need to advertise more