BIOL 200 BN
Introductory Biology
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: H
Responses: 18/20 (90% very high)

Taught by: Elizabeth Warfield, Lea Savolainen, Matthew George
Instructor Evaluated: Matthew George-Predoc TA

Overall Summative Rating represents the combined responses of students to the four global summative items and is presented to provide an overall index of the class's quality:

Combined Median	Adjusted Combined Median
4.4	4.5

(0=lowest; 5=highest)

Challenge and Engagement Index (CEI) combines student responses to several *IASystem* items relating to how academically challenging students found the course to be and how engaged they were:

CEI: 4.9
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Adjusted Median
The lab section as a whole was:	18	56%	33%	11%				4.6	4.7
The content of the lab section was:	18	39%	56%	6%				4.3	4.4
The lab instructor's contribution to the course was:	18	44%	44%	6%	6%			4.4	4.5
The lab instructor's effectiveness in teaching the subject matter was:	18	44%	44%	6%	6%			4.4	4.5

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median
Do you expect your grade in this course to be:	18		17%	22%	39%	17%	6%		4.2
The intellectual challenge presented was:	18	6%	50%	22%	22%				5.6
The amount of effort you put into this course was:	18	6%	22%	44%	22%	6%			5.0
The amount of effort to succeed in this course was:	18	11%	39%	28%	22%				5.5
Your involvement in course (doing assignments, attending classes, etc.) was:	18	22%	17%	33%	22%	6%			5.2

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?

Class median: 7.5 (N=18)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	17%	17%	17%	11%	11%	6%	6%	11%	6%		

From the total average hours above, how many do you consider were valuable in advancing your education?

Class median: 5.5 (N=18)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
6%	22%	22%	6%	6%	11%	17%	11%				

What grade do you expect in this course?

Class median: 3.0 (N=17)

A (3.9-4.0)	A- (3.5-3.8)	B+ (3.2-3.4)	B (2.9-3.1)	B- (2.5-2.8)	C+ (2.2-2.4)	C (1.9-2.1)	C- (1.5-1.8)	D+ (1.2-1.4)	D (0.9-1.1)	D- (0.7-0.8)	F (0.0)	Pass	Credit	No Credit
6%	24%	6%	29%	18%	18%									

In regard to your academic program, is this course best described as:

(N=18)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
78%	11%				11%

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Relative Rank
Explanations by the lab instructor were:	18	44%	44%	6%	6%			4.4	9
Lab instructor's preparedness for lab sessions was:	18	56%	28%	17%				4.6	8
Quality of questions or problems raised by the lab instructor was:	18	39%	50%	11%				4.3	13
Lab instructor's enthusiasm was:	18	28%	39%	33%				3.9	18
Student confidence in lab instructor's knowledge was:	18	44%	50%	6%				4.4	16
Lab instructor's ability to solve unexpected problems was:	18	44%	44%	11%				4.4	15
Answers to student questions were:	18	50%	44%		6%			4.5	4
Interest level of lab sessions was:	18	39%	50%	6%	6%			4.3	2
Communication and enforcement of safety procedures were:	18	56%	39%	6%				4.6	5
Lab instructor's ability to deal with student difficulties was:	18	39%	56%		6%			4.3	14
Availability of extra help when needed was:	18	44%	44%	6%	6%			4.4	12
Use of lab section time was:	18	39%	50%	11%				4.3	10
Lab instructor's interest in whether students learned was:	18	39%	39%	17%	6%			4.2	17
Amount you learned in the lab sections was:	18	44%	39%	11%	6%			4.4	6
Relevance and usefulness of lab section content were:	18	50%	44%		6%			4.5	3
Coordination between lectures and lab activities was:	18	44%	28%	28%				4.3	7
Reasonableness of assigned work for lab section was:	18	61%	33%		6%			4.7	1
Clarity of student responsibilities and requirements was:	18	44%	39%	17%				4.4	11

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STANDARD OPEN-ENDED QUESTIONS

Was this class intellectually stimulating? Did it stretch your thinking? Why or why not?

1. It was because it linked with lecture and allowed me to think about the topics hands-on with other students.
2. It was really interesting but the course was pretty hard! The lab section wasn't very difficult but the exams were difficult, as was getting the maximum points for reading quizzes and polling.
3. Yes it was intellectually stimulating because it forced us to apply our knowledge in a laboratory setting, which is more realistic to the real world.
4. yes it did, I got to be hands out with a lot of things I have never done before
5. Yes. I think one of the major purposes of this course is to encourage you to think as much as you can and to always seek for alternative explanations.
6. Yes lots of cool stuff.
7. This class was very intellectually stimulating and so relevant to humans and current issues in medicine.
8. Yes, because many of the labs connected to what we were learning in lecture.
9. Yes, this lab was intellectually stimulating because I was forced to think and to demonstrate new knowledge that I have learned throughout the quarter,
10. Yes to both because it was structured to make us formulate our own answers and argue the rationale.
11. Lab was pretty good, I found the Cellular Respiration lab especially helpful.
12. Yes- I would not have learned this information anywhere else.

What aspects of this class contributed most to your learning?

1. The visualizations and the microscope work contributed the most.
2. Lab was very helpful, reading quizzes also helped even though they were tedious at times. The lab was paced well so that even when we had to wait for part of the lab there was always a different part that we could work on, and there wasn't much down time. Even though there wasn't really extra time it didn't feel rushed either like some chem labs I've done. The TA was very helpful and did a pretty great job.
3. The use of equipment and being able to see lab work up close and participate in it was very beneficial to my experiential learning.
4. Going through individual steps of processes that aren't covered in class
5. Attending the lectures.
6. Studying
7. Learning about how much there is undiscovered about the human and how our generation needs to be the next steps forward in medicine.
8. Doing labs
9. The demonstrations that you do in the beginning, and how you would do a little review of the material in the beginning as well.
10. Lecture and lab
11. Not much wasted time, very well structured.
12. The labs were so cool! I loved dissecting and doing more hands on learning.
13. The instructors enthusiasum for the subject

What aspects of this class detracted from your learning?

1. Nothing detracted.
2. Nothing really in the lab section.
3. I felt that the handouts and questions we needed to fill out often detracted rather than added to the lab experience. I would prefer more time being allocated to lab procedures and techniques since there are few other places to gain that experience.
4. Some of the worksheets
5. Sometimes I spent too much time on the reading quizzes because they require a thorough understanding of the materials.
6. People
7. The public exam has not been my favorite method of trying to learn. I think that going off of the public exam can often throw people off.
8. Nothing
9. Nothing!

10. Reading quizzes and exams, but i understand they are necessary evils

11. Cant think of much

13. The pace was a little fast to keep up with

What suggestions do you have for improving the class?

1. No suggestions.

2. Not sure for the lab section specifically.

3. I would suggest shortening the required in-lab worksheets and instead trying to include a variety of lab techniques and perhaps integrate more quantitative data collection and analysis to make it more applicable.

4. Let students know how many polling points they exactly need, RQ should have 2 attempts.

6. Nothing

7. Study guides, I'd rather learn everything I possibly need to know about then potentially study the wrong thing.

8. Nohing

9. Nothing! I thoroughly enjoyed this lab.

10. Maybe adjust point distribution to make labs and lecture worth more

11. Cant think of much

13. The RQs can be more relatable to the assigned readings

IASystem Course Summary Reports summarize student ratings of a particular course or combination of courses. They provide a rich perspective on student views by reporting responses in three ways: as frequency distributions, average ratings, and either comparative or adjusted ratings. Remember in interpreting results that it is important to keep in mind the number of students who evaluated the course relative to the total course enrollment as shown on the upper right-hand corner of the report.

Frequency distributions. The percentage of students who selected each response choice is displayed for each item. Percentages are based on the number of students who answered the respective item rather than the number of students who evaluated the course because individual item response is optional.

Median ratings. *IASystem* reports average ratings in the form of item medians. Although means are a more familiar type of average than medians, they are less accurate in summarizing student ratings. This is because ratings distributions tend to be strongly skewed. That is, most of the ratings are at the high end of the scale and trail off to the low end.

The median indicates the point on the rating scale at which half of the students selected higher ratings, and half selected lower. Medians are computed to one decimal place by interpolation.[1] In general, higher medians reflect more favorable ratings. To interpret median ratings, compare the value of each median to the respective response scale: *Very Poor, Poor, Fair, Good, Very Good, Excellent (0-5); Never/None/Much Lower, About Half/Average, Always/Great/Much Higher (1-7); Slight, Moderate, Considerable, Extensive (1-4).*

Comparative ratings. *IASystem* provides a normative comparison for each item by reporting the decile rank of the item median. Decile ranks compare the median rating of a particular item to ratings of the same item over the previous two academic years in all classes at the institution and within the college, school, or division. Decile ranks are shown only for items with sufficient normative data.

Decile ranks range from 0 (lowest) to 9 (highest). For all items, higher medians yield higher decile ranks. The 0 decile rank indicates an item median in the lowest 10% of all scores. A decile rank of 1 indicates a median above the bottom 10% and below the top 80%. A decile rank of 9 indicates a median in the top 10% of all scores. Because average ratings tend to be high, a rating of "good" or "average" may have a low decile rank.

Adjusted ratings. Research has shown that student ratings may be somewhat influenced by factors such as class size, expected grade, and reason for enrollment. To correct for this, *IASystem* reports **adjusted medians** for summative items (items #1-4 and their combined global rating) based on regression analyses of ratings over the previous two academic years in all classes at the respective institution. If large classes at the institution tend to be rated lower than small classes, for example, the adjusted medians for large classes will be slightly higher than their unadjusted medians.

When adjusted ratings are displayed for summative items, **relative rank** is displayed for the more specific (formative) items. Rankings serve as a guide in directing instructional improvement efforts. The top ranked items (1, 2, 3, etc.) represent areas that are going well from a student perspective; whereas the bottom ranked items (18, 17, 16, etc.) represent areas in which the instructor may want to make changes. Relative ranks are computed by first standardizing each item (subtracting the overall institutional average from the item rating for the particular course, then dividing by the standard deviation of the ratings across all courses) and then ranking those standardized scores.

Challenge and Engagement Index (CEI). Several *IASystem* items ask students how academically challenging they found the course to be. *IASystem* calculates the average of these items and reports them as a single index. *The Challenge and Engagement Index (CEI)* correlates only modestly with the global rating (median of items 1-4).

Optional Items. Student responses to instructor-supplied items are summarized at the end of the evaluation report. Median responses should be interpreted in light of the specific item text and response scale used (response values 1-6 on paper evaluation forms).

[1] For the specific method, see, for example, Guilford, J.P. (1965). Fundamental statistics in psychology and education. New York: McGraw-Hill Book Company, pp. 49-53.