

BIOL 180 BC
Introductory Biology
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: H
Responses: 15/23 (65% high)

Taught by: John Parks, 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
4.2	4.3
(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: 5.4
(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:	15	27%	73%					4.2	4.3
The content of the lab section was:	15	27%	73%					4.2	4.3
The lab instructor's contribution to the course was:	15	40%	47%	13%				4.3	4.4
The lab instructor's effectiveness in teaching the subject matter was:	15	40%	47%	13%				4.3	4.4

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:	14		21%	29%	50%				4.5
The intellectual challenge presented was:	14	21%	43%	29%	7%				5.8
The amount of effort you put into this course was:	14	29%	14%	50%	7%				5.4
The amount of effort to succeed in this course was:	14	21%	57%	21%					6.0
Your involvement in course (doing assignments, attending classes, etc.) was:	14	43%	36%	21%					6.3

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: 8.5 (N=14)

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
	21%	7%	14%	14%	7%	7%	7%	7%		7%	7%

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

Class median: 7.5 (N=14)

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
	29%	7%	14%	14%	14%		7%	7%			7%

What grade do you expect in this course?

Class median: 3.1 (N=14)

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
	21%	29%	21%	21%	7%									

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

(N=14)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
57%	21%	7%		7%	7%

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:	15	40%	47%	13%				4.3	6
Lab instructor's preparedness for lab sessions was:	15	60%	40%					4.7	1
Quality of questions or problems raised by the lab instructor was:	15	47%	47%	7%				4.4	3
Lab instructor's enthusiasm was:	15	40%	40%	7%	13%			4.2	16
Student confidence in lab instructor's knowledge was:	15	53%	33%	13%				4.6	9
Lab instructor's ability to solve unexpected problems was:	15	47%	47%	7%				4.4	5
Answers to student questions were:	15	40%	53%		7%			4.3	11
Interest level of lab sessions was:	15	33%	47%	13%	7%			4.1	4
Communication and enforcement of safety procedures were:	15	40%	40%	20%				4.2	17
Lab instructor's ability to deal with student difficulties was:	15	33%	53%	13%				4.2	15
Availability of extra help when needed was:	15	47%	27%	27%				4.4	8
Use of lab section time was:	14	43%	57%					4.4	2
Lab instructor's interest in whether students learned was:	15	40%	53%	7%				4.3	13
Amount you learned in the lab sections was:	15	33%	53%	13%				4.2	12
Relevance and usefulness of lab section content were:	15	20%	60%	20%				4.0	18
Coordination between lectures and lab activities was:	15	33%	53%	7%		7%		4.2	7
Reasonableness of assigned work for lab section was:	15	33%	53%	13%				4.2	14
Clarity of student responsibilities and requirements was:	15	40%	53%	7%				4.3	10

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STANDARD OPEN-ENDED QUESTIONS

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

1. Yes, very difficult course with how assignments are constructed
2. Yes the lab section was really helpful for asking questions and you were really prepared so it was helpful
3. I learned a lot during this class that i didn't expect to. I took biology in high school, but this class went over a lot more information in a lot more detail.
4. The lab did make me stretch my thinking a little, especially in the beginning of the quarter when I didn't quite understand the material yet
5. This class forced me to really learn how to think like a biologist. It was hard to get out of the habit of memorizing information and regurgitating it because there wasn't information to really memorize. It was all application within the lab. I also learned a lot more about excel which was nice.
6. Yes I felt that the lab section allowed hands on work for the class, I felt that it made me think of questions in lecture and made them more applicable. It was a good way to supplement my learning.
7. yes it was intellectually stimulating. It was pretty different from past biology classes i have taken
8. yes
9. Yes, it definitely made us think about topics during lab. Especially since our lab section was before the lecture.
10. Yes, it helped reinforce ideas from lecture and the reading, while also giving us a way to apply what we are learning for real-world purposes.
11. Yes, I like the structure of the lab group since it helps to stimulate discussion and help me to understand the course content better.
12. Labs are always intellectually stimulating because they are real life examples and it makes us really think and act like scientists
13. Yes. The test questions were made to make you think outside the box and test your critical thinking skills. The test questions were often quite difficult to understand, and you had to say some specific wording in order to receive credit on exams.
14. Yes, it forced me to think of topics in ways that I never thought I would.

What aspects of this class contributed most to your learning?

1. all
2. Talking about the problems and that one with the phylogenies that had their own stories. Also the crossing over section, since we talked about it
3. Being involved in class and not just sitting and taking notes helped a lot because you could talk with your peers and hear other opinions. Also the Monday practice exams and weekly study questions were very helpful.
4. Working together with the people at my table was very helpful
5. Matt was really helpful and patient when answering/asking questions. He knew how to ask questions that forced me to think about different things that still related to the course.
6. I think working hands on really helped me understand the topics the best.
7. lecture usually and reading. lab section was helpful to put the information into action. the mini lectures by Matt were helpful too
8. all
9. The simplicity of how the information needed is conveyed.
10. I enjoyed the presentations and the questions that Matt proposed to the class.
11. I like the answers by the TA especially when he threw the questions back at us to make us answer them ourselves.
12. Relating the lab to course material/real life
13. The lab sections. I really enjoyed them and felt like I learned the most there than in lecture.
14. Polling questions, discussing with partners.

What aspects of this class detracted from your learning?

1. none
2. Nothing
3. Probably some of the labs seemed unnecessary for the class and quite boring.
4. In the beginning of the lab I was very confused and it would have been more helpful if there had been more comments on the marked up labs on where we had gone wrong and how we could improve instead of just taking off points.
5. Nothing
6. Nothing from lab really detracted, I felt that I learned a lot as a whole.

8. none
10. The low energy of the class.
11. Nothing much
12. N/A
13. Not much, I felt like everything ran smoothly
14. Many of the reading quiz answer couldn't be found in the assigned readings.

What suggestions do you have for improving the class?

1. none
2. Maybe spend more time talking about hypothesis and prediction in lab since we always have problems with it later in course
4. I honestly think it would be nicer if you graded a little less harshly on the first few labs. It was discouraging to get such low scores on the very first lab. Reviewing a little more of lecture content would also be helpful
5. Nothing, the class is well structured and I had a great TA
6. Continue what has been working
8. none
10. In order to get people involved, maybe implement a random call list for every class. Matt had great questions for groups, but most people just shied away from answering and the question was left up in the air. I liked when we were doing presentations and you said that everyone would lose points if no one asked the presenters a question.
11. It works pretty smoothly
12. N/A
13. Not much. Thanks Matt :)
14. Make reading quizzes more relevant to course material.

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.