

CANCER BIOLOGY (2017-2018 Winter)

Term: **2017-2018 Winter**
Subject: **CBIO**
Catalog & Section: **101 1**
Course Title: **CANCER BIOLOGY**

Instructor: **Lipsick, Joseph**
Enrollment: **23**
Responses Incl Declines: **19**
Declines: **2**

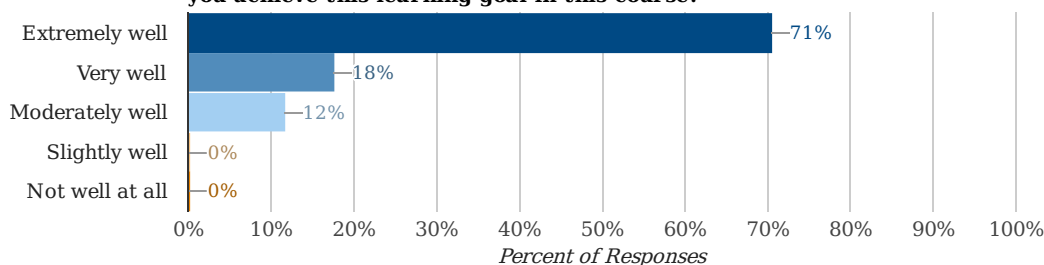
Learning Goals

Students are most likely to say their learning goals have been met when

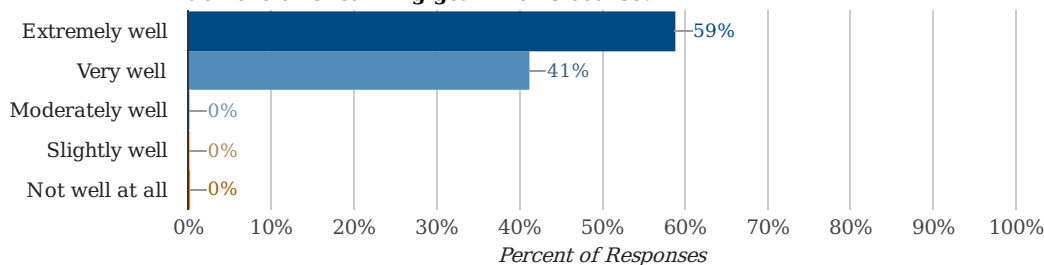
- The goals are clearly articulated in the syllabus and/or directly to students
- There's a clear connection between the goals and the exams, quizzes, and/or assignments in the class
- Students have adequate practice doing work that is relevant to the goals

For information on writing effective learning goals, please see Writing Learning Goals (<https://vptl.stanford.edu/teaching-learning/teaching-practices/evaluation/stanfords-new-course-evaluations/writing-learning>).

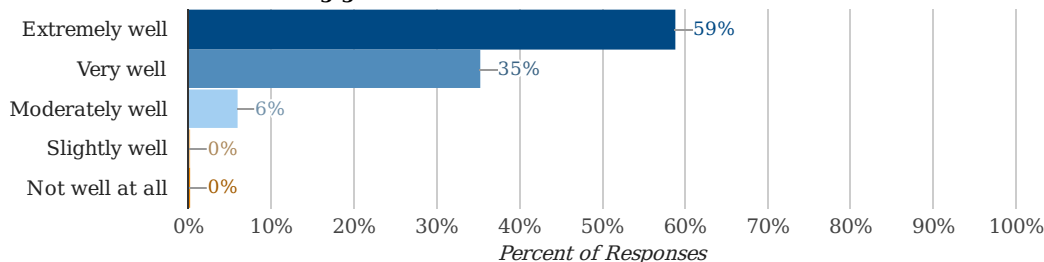
Learning about cancer biology, diagnosis, and treatment How well did you achieve this learning goal in this course?



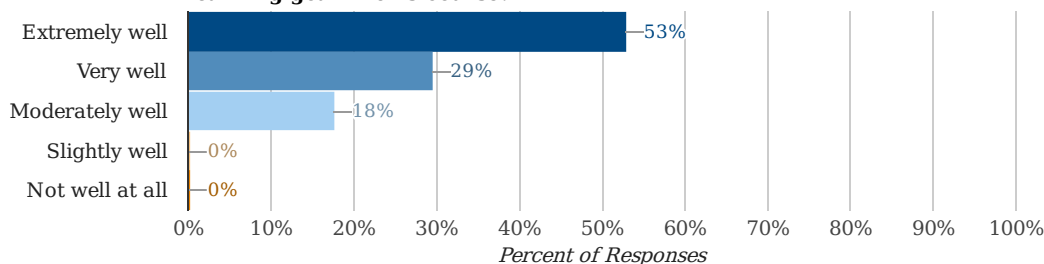
Learning how to read and evaluate scientific papers How well did you achieve this learning goal in this course?

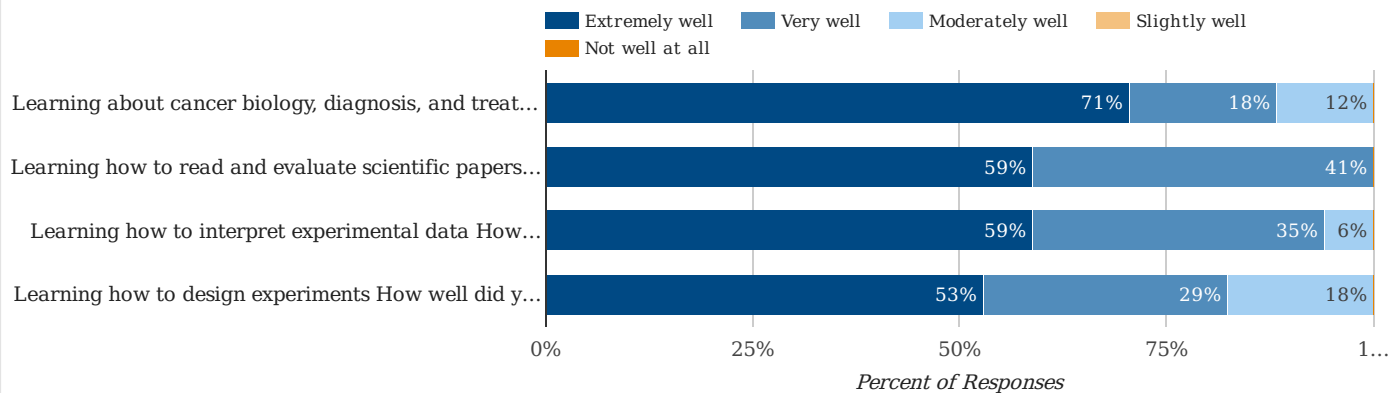


Learning how to interpret experimental data How well did you achieve this learning goal in this course?



Learning how to design experiments How well did you achieve this learning goal in this course?

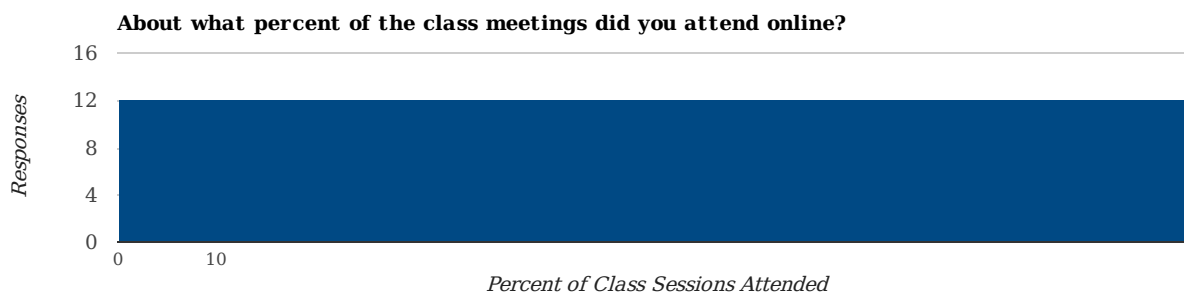
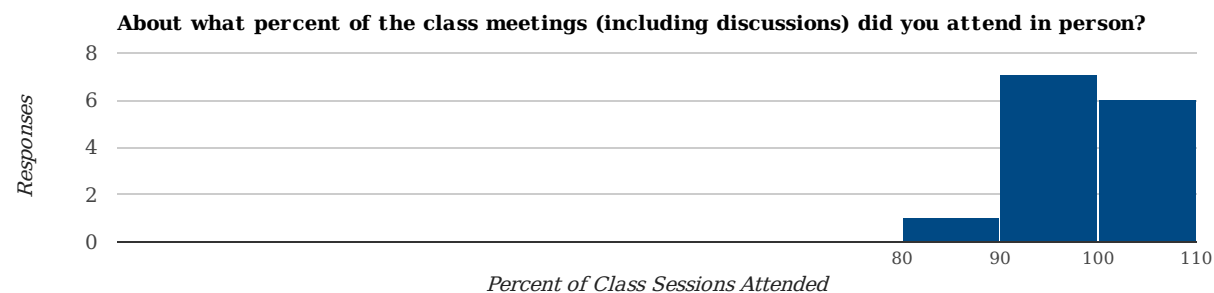




Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
Learning about cancer biology, diagnosis, and treatment How well did you achieve this learning goal in this course?	17	73%	4.6	5	0.7	71%	18%	12%	0%	0%
Learning how to read and evaluate scientific papers How well did you achieve this learning goal in this course?	17	73%	4.6	5	0.5	59%	41%	0%	0%	0%
Learning how to interpret experimental data How well did you achieve this learning goal in this course?	17	73%	4.5	5	0.6	59%	35%	6%	0%	0%
Learning how to design experiments How well did you achieve this learning goal in this course?	17	73%	4.3	5	0.8	53%	29%	18%	0%	0%

Note: 5:Extremely well; 4:Very well; 3:Moderately well; 2:Slightly well; 1:Not well at all;

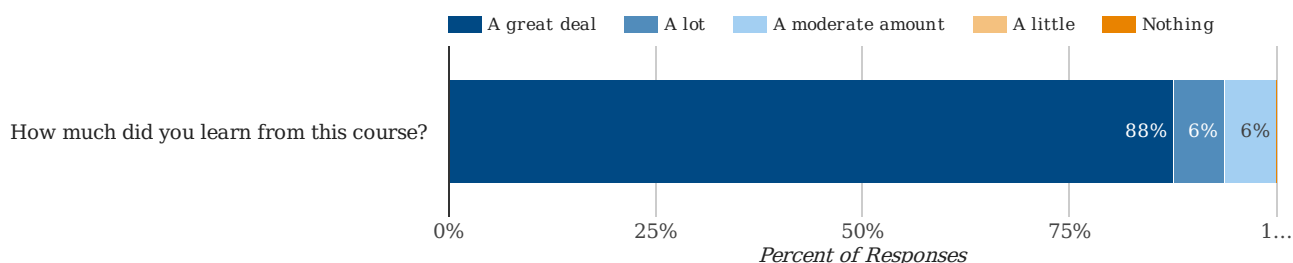
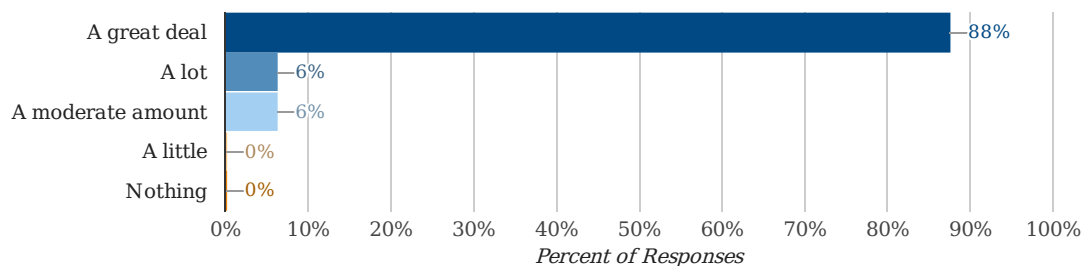
Attendance and Engagement



Student Learning

For information on factors that contribute to students' learning, please see Interpreting Your Course Evaluation Report (<https://vptl.stanford.edu/teaching-learning/teaching-practices/evaluation-feedback/stanfords-new-course-evaluations>).

How much did you learn from this course?



Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How much did you learn from this course?	16	69%	4.8	5	0.5	88%	6%	6%	0%	0%

Note: 5:A great deal; 4:A lot; 3:A moderate amount; 2:A little; 1:Nothing;

(10 comments)

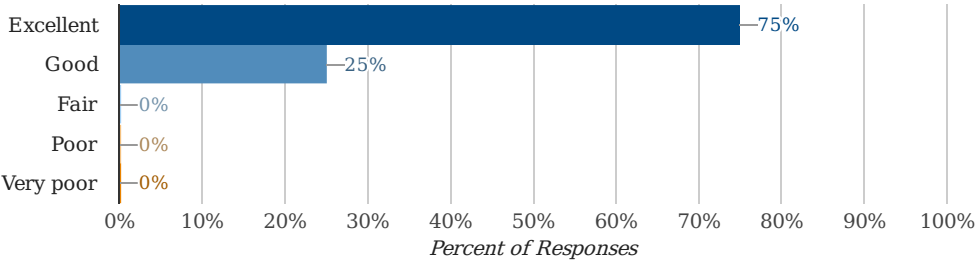
Q: What skills or knowledge did you learn or improve?

- I really appreciated the thorough introduction to cancer from a genetics and experimental approach because I had very little previous exposure that honed so specifically in on cancer. Really enjoyed learning about some of the important discoveries in the field and a chronological presentation of developments and discoveries made by researchers and physicians about mechanism, mutations, treatment, etc.
- Lot of reading papers
- Interpreting and designing experiments, cell processes, cell pathways, cancer history, cancer now
- cancer knowledge, research
- Knowledge of scientific techniques, cancer biology, how to read clinical papers
- General knowledge of cancer bio.
- Scientific papers, getting through them and looking at figures
- I learned to improve on reading scientific papers and analyzing data carefully. I also learned how to think creatively about solving problems in the field.
- How to read a scientific paper. Learning the fundamental concepts of cancer biology.
- How to design experiments. I also learned some older experimental techniques and other techniques that I don't normally use, such as sequencing.

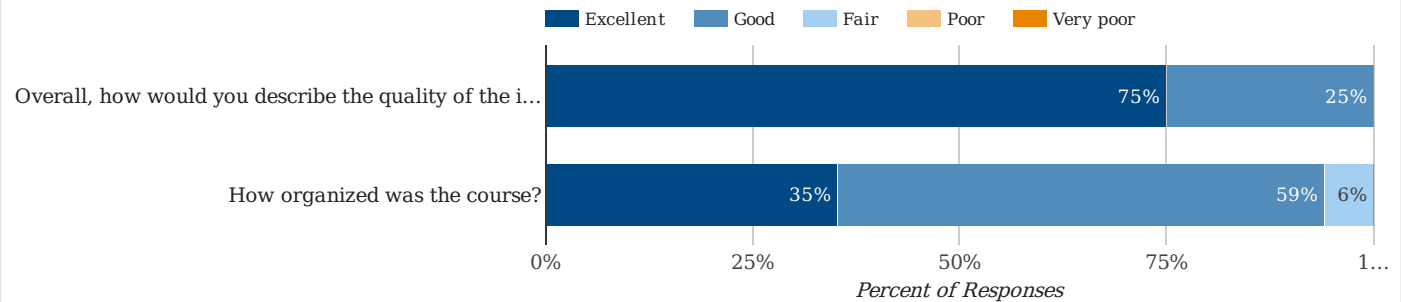
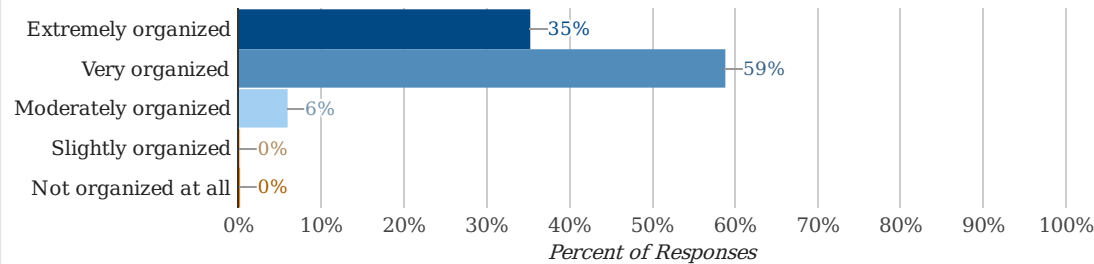
Instruction and Organization

For information about effective teaching in a variety of contexts, please see Teaching Strategies (<https://teachingcommons.stanford.edu/resources/teaching-resources/teaching-strategies>).

Overall, how would you describe the quality of the instruction in this course?



How organized was the course?

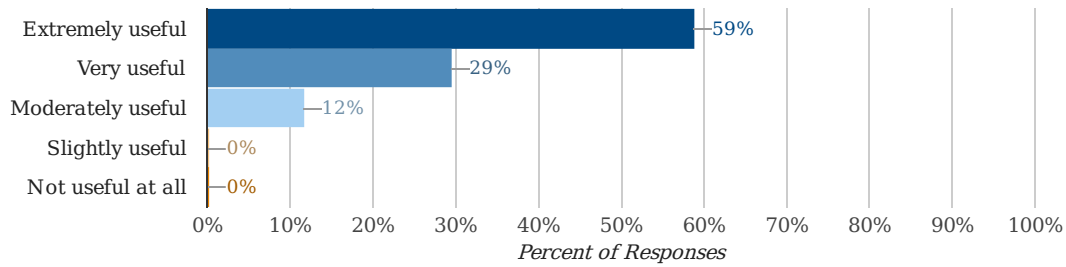


Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
Overall, how would you describe the quality of the instruction in this course?	16	69%	4.8	5	0.4	75%	25%	0%	0%	0%
How organized was the course?	17	73%	4.3	4	0.6	35%	59%	6%	0%	0%

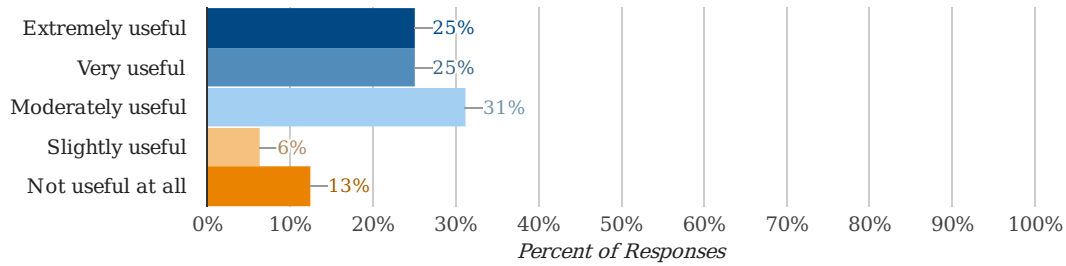
Note: 5:Excellent; 4:Good; 3:Fair; 2:Poor; 1:Very poor;

Course Elements

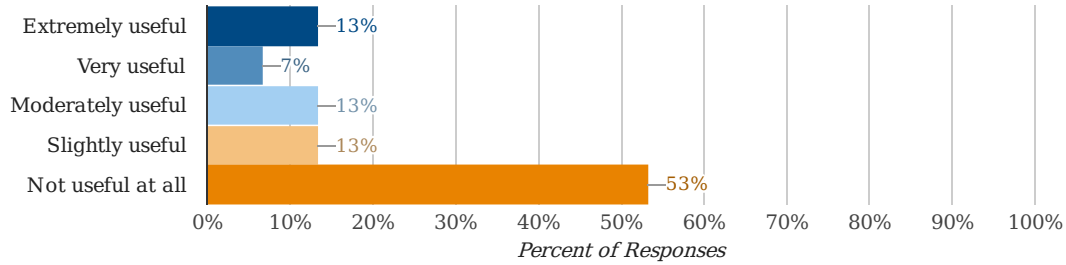
How useful to you were the discussion sections?



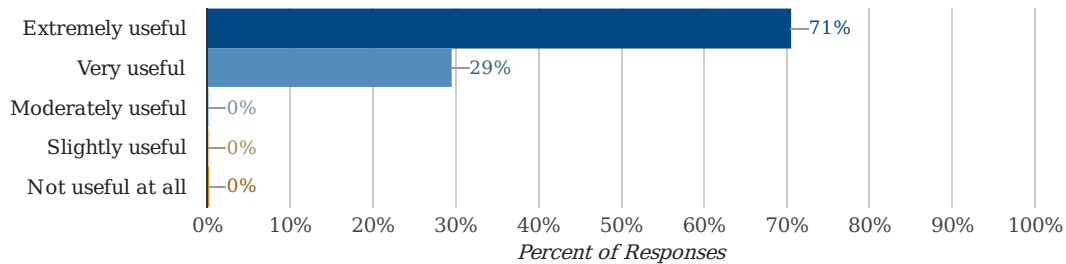
How useful to you was the website?



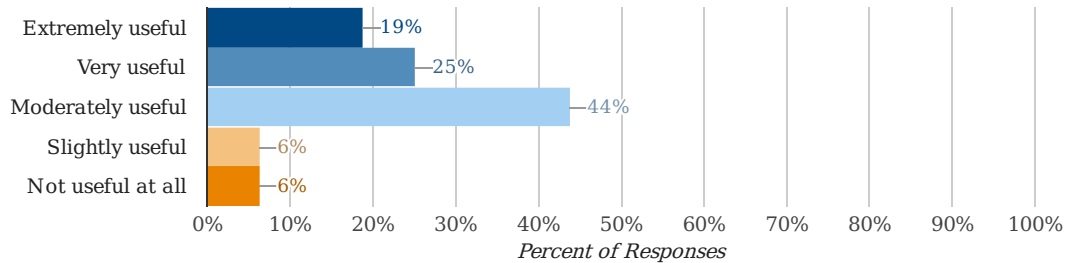
How useful to you was the textbook Weinberg's The Biology of Cancer?

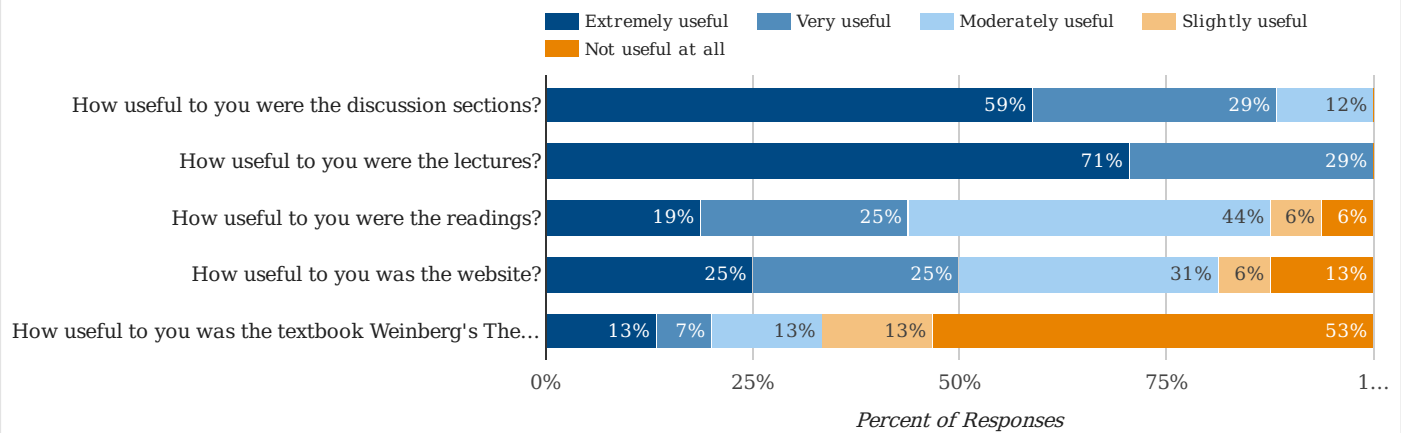


How useful to you were the lectures?



How useful to you were the readings?





Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How useful to you were the discussion sections?	17	73%	4.5	5	0.7	59%	29%	12%	0%	0%
How useful to you were the lectures?	17	73%	4.7	5	0.5	71%	29%	0%	0%	0%
How useful to you were the readings?	16	69%	3.4	3	1.1	19%	25%	44%	6%	6%
How useful to you was the website?	16	69%	3.4	4	1.3	25%	25%	31%	6%	13%
How useful to you was the textbook Weinberg's The Biology of Cancer?	15	65%	2.1	1	1.4	13%	7%	13%	13%	53%

Note: 5:Extremely useful; 4:Very useful; 3:Moderately useful; 2:Slightly useful; 1:Not useful at all;

Additional Student Comments

Answers to this question will be viewable by the Stanford student community four weeks after the release of reports to instructors. If you have a question about a comment, please review the guidelines under "Questions or concerns?" at <http://evals.stanford.edu/results/respond-feedback> (<http://evals.stanford.edu/results/respond-feedback>) and write to VPTLevaluations@stanford.edu (<mailto:vptlevaluations@stanford.edu>).

(14 comments)

Q: What would you like to say about this course to a student who is considering taking it in the future?

- 1 Great introduction to cancer biology! Professor Lipsick does a good job of presenting interesting and important information regarding scientific discoveries that are central to our present understanding of cancer as a treatable, genetic disease. Definitely learned a lot. Make sure you go to lecture and allot a sizable chunk of time to doing the take-home exams!!
- 2 It's a hard class, make sure you understand all the concepts before the midterm finals
- 3 The optional textbook readings are very optional- you don't need them for any assignments and they won't help you with an assignment, but if you are feeling lost in lecture or like you don't have the proper background for this course, they are an INCREDIBLY valuable resource.
- 4 Very interesting and laid back course. Professor Lipsick is great at narrating the history of cancer and incorporating general scientific skills and lessons
- 5 I would say to pay careful attention in discussion sections and take a lot of notes. Also, really think carefully about the readings in advance so that you can participate in discussions.
- 6 Definitely would recommend. Also go to Joe's office hours - you learn a lot.
- 7 Make sure you do the readings as there is a lot of helpful information within them. Otherwise, the lectures are great and Joe is very funny.
- 8 It was awesome to have a course that actively used all the knowledge from the bio core. You learn a lot but also need to pay attention to a lot of genes and pathways.
- 9 There is a lot of information, but it can be difficult to wade through.
- 10 I believe this is the last year this course is offered by Professor Lipsick but he is a really kind professor who is great at lecturing (though long, he throws in a bunch of cultural references and he explains clearly). I would recommend first having a strong research background or you may struggle with reading papers and interpreting data on the exams because there are a lot of techniques to learn and get comfortable with if you are starting from scratch.
- 11 Take it! It's very interesting. It is graded harder than the majority of upper div bio classes, but if you are interested in cancer then it is definitely worth your time. Also, go to lecture! Even though they aren't mandatory, they are the most interesting part of the course.
- 12 Professor Lipsick is a wonderful lecturer! The paper discussions were challenging for those without a background in biology, but even those majoring in psychology were able to manage.
- 13 Great course.
- 14 it is a really great class and Professor Lipsick is a great lecturer. There is a lot of material in every class so it's really important to stay focused because if you zone out you'll miss a lot.

(1 comments)

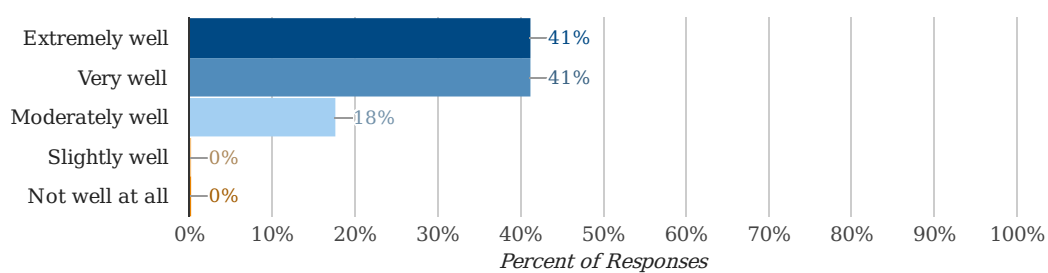
Q: Would you like to provide any other comments about this course?

- 1 Really great course, my favorite lectures every week.

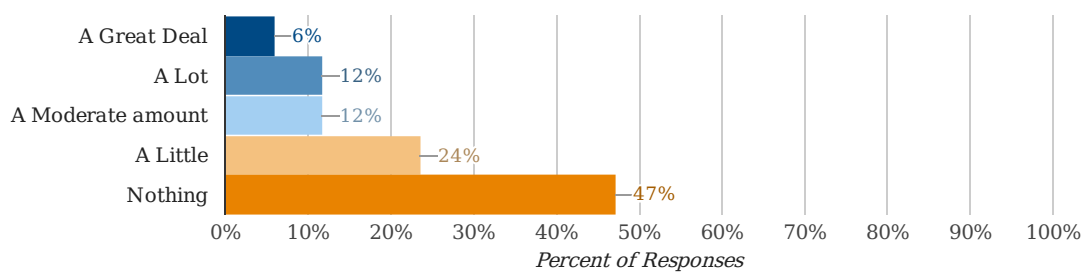
Instructor Added Questions

Close-Ended Questions

How well did your section leaders manage the discussions?



How often did you read the assignments in the Weinberg textbook?



Open-Ended Questions (41 comments)

Q: Which section were you in (Friday or Monday)?

- 1 Monday
- 2 Friday
- 3 Friday
- 4 Friday
- 5 Monday
- 6 Friday
- 7 Friday
- 8 Monday
- 9 Friday
- 10 monday
- 11 Monday
- 12 Friday
- 13 Friday
- 14 Monday
- 15 Monday
- 16 Friday

Q: How could this course be improved?

- 1 maybe a little more clarity in where the material comes from- there were a lot of different suggested and required readings each week (so much so that it was definitely impractical to accomplish it all) which made it difficult to figure out which resource to use. also it would be nice if it was clearer which information is most important (i.e. review sessions or actually talking about lecture in discussion section) because the lectures are a little long and sometimes not super easy to follow if you don't have the background

- 2 The course was actually really difficult for me- sections could stand to review some of the concepts discussed in class, and I would highly recommend adding a review session or two in preparation for the midterm finals.
- 3 More integration of discussion and lecture
- 4 More complex discussion papers, optional problem sets to help practice what we learned in lecture
- 5 I think the course could be improved if the lectures had less content but we went through the content more slowly. More participation from the class would also improve the lectures. I feel kind of rushed in my understanding sometimes during the lectures. Adding a second discussion section where we exclusively discuss lecture content that was covered quickly would be helpful to our understanding of the course material.
- 6 A stronger emphasis on more modern concepts would be nice, although I did enjoy learning about the historical perspective as well. I think you need both to truly understand cancer.
- 7 I think smaller discussion sections are crucial to make sure everyone has the opportunity to partake.
- 8 They improved a lot after our feedback session. I would have the feedback maybe at week 2 instead of so much later.
- 9 smaller sections
- 10 Lectures that have a clearer goal.
- 11 More emphasis on interpreting data and designing experiments in lecture, maybe a lecture dedicated to going over those details
- 12 More background info would have been helpful. Not everyone knows the same amount about experiments coming into the class, so it felt like some students got left behind at times.
- 13 I loved the social anecdotes. I realize this is a biology class, but these tidbits informed us how disease is shaped by society, especially since cancer is such a fascinating subject for the public.
- 14 Sometimes there was too much information stuffed into each lecture so it went by too fast for me to take everything in.
- 15 I think i would have gained talking in section more about why certain techniques were used. I would also have liked more practice designing my own experiments.

Q: Anything else you'd like to say about the course?

- 1 This is a great course and I really enjoyed learning about Cancer Biology.
- 2 I learned a lot, but a lot of the material was difficult to apply to the exam
- 3 Weinberg textbook was so helpful for lectures if you were unfamiliar with the background information.
- 4 One of my favorite courses I've taken.
- 5 A wider variety of techniques in the papers would've been interesting
- 6 I learned a lot, despite having to find the goal a little on my own sometimes.
- 7 So interesting! I feel like I learned a lot in the lectures and definitely improved my skills interpreting scientific data through section.
- 8 Overall, I thought this was an excellent course and I learned more from this course than I did from the whole bio core series. It did a fabulous job of introducing me to experimental studies in the field and taught me how to read scientific papers well.
- 9 Really enjoyed the lectures and sections and feel like I gained a lot of knowledge from this class.
- 10 This course was one of my favorite courses at Stanford. Joe is an amazing professor who truly cares for his students.

Interpreting these results and deciding what changes you might want to make in your course can benefit greatly from a conversation with a colleague and/or a teaching consultant. To discuss your course evaluation feedback with a consultant in the Office of the Vice Provost for Teaching and Learning, please click here: VPTL Consultation Request Form (https://jfe.qualtrics.com/form/SV_78KTbL61cIEWsO9)