

THE CANCER PROBLEM (2017-2018 Spring)

Term: **2017-2018 Spring**
Subject: **THINK**
Catalog & Section: **23 1**
Course Title: **THE CANCER PROBLEM**

Instructor: **Lipsick, Joseph**
Enrollment: **106**
Responses Incl Declines: **84**
Declines: **3**

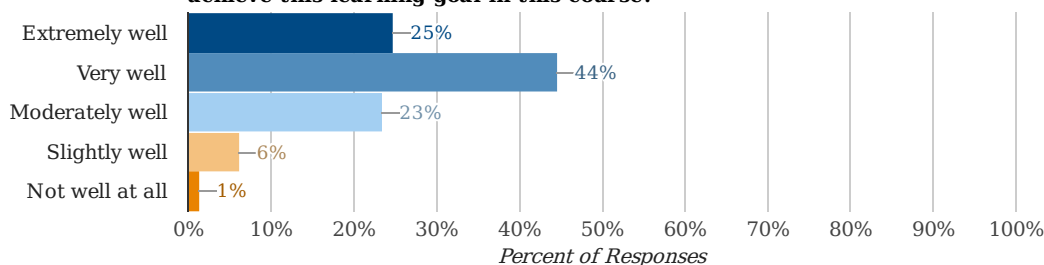
Learning Goals

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

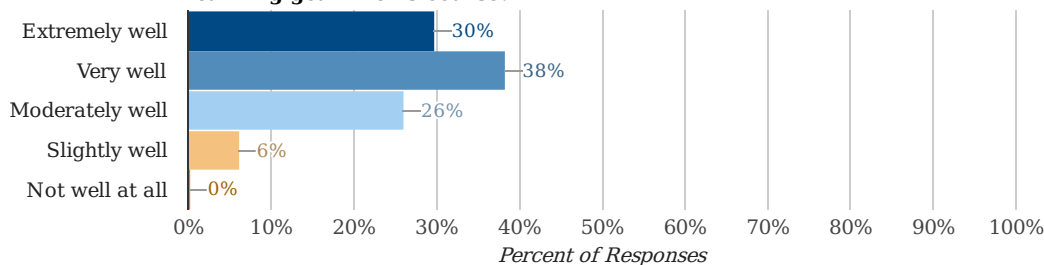
- The goals are clearly articulated in the syllabus and/or directly to students
- There's a clear connection between the goals and the exams, quizzes, and/or assignments in the class
- Students have adequate practice doing work that is relevant to the goals

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>).

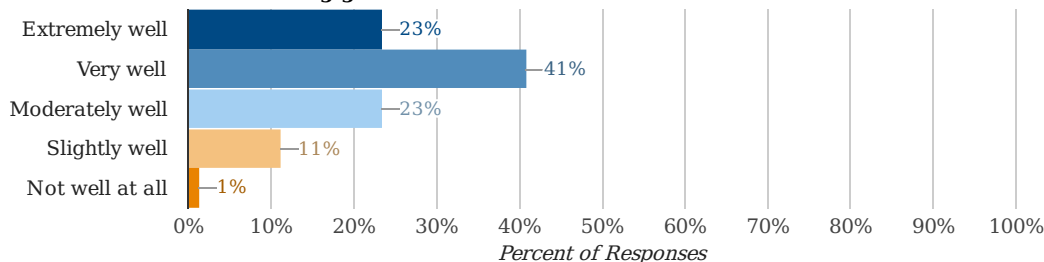
Learn about the value of data collection and analysis How well did you achieve this learning goal in this course?



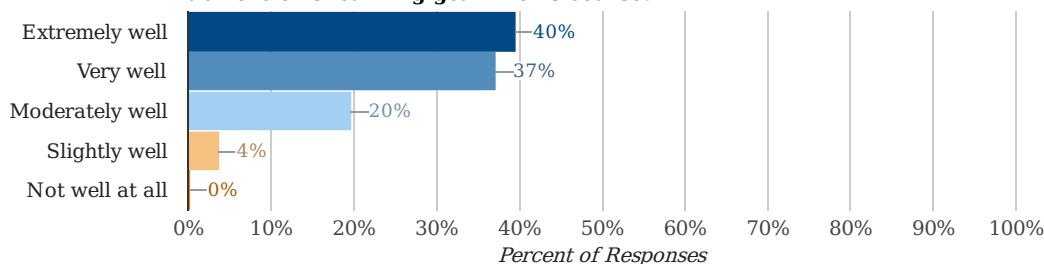
Learn about correlation versus causation How well did you achieve this learning goal in this course?



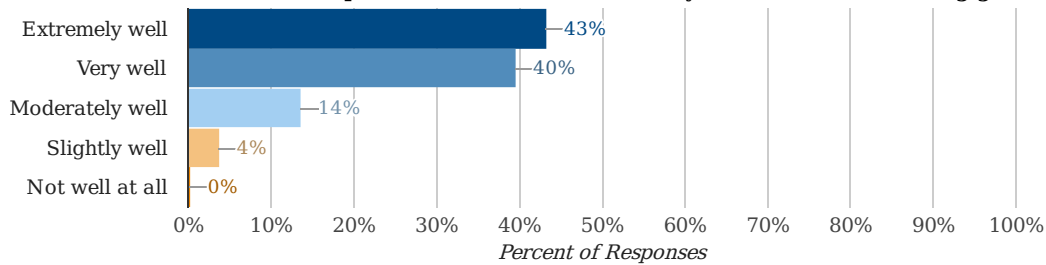
Learn about and apply the scientific method How well did you achieve this learning goal in this course?



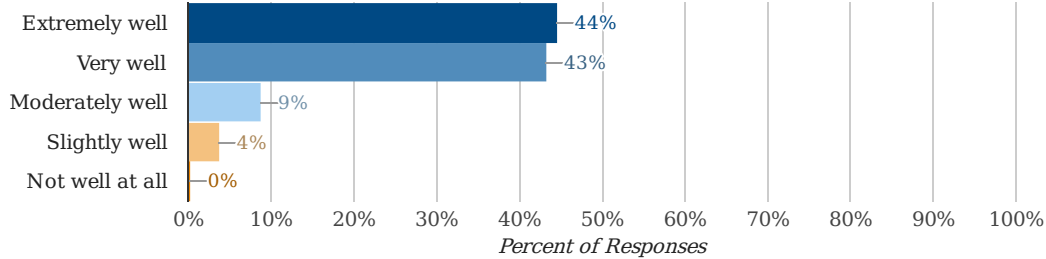
Learn about the use and misuse of scientific skepticism How well did you achieve this learning goal in this course?



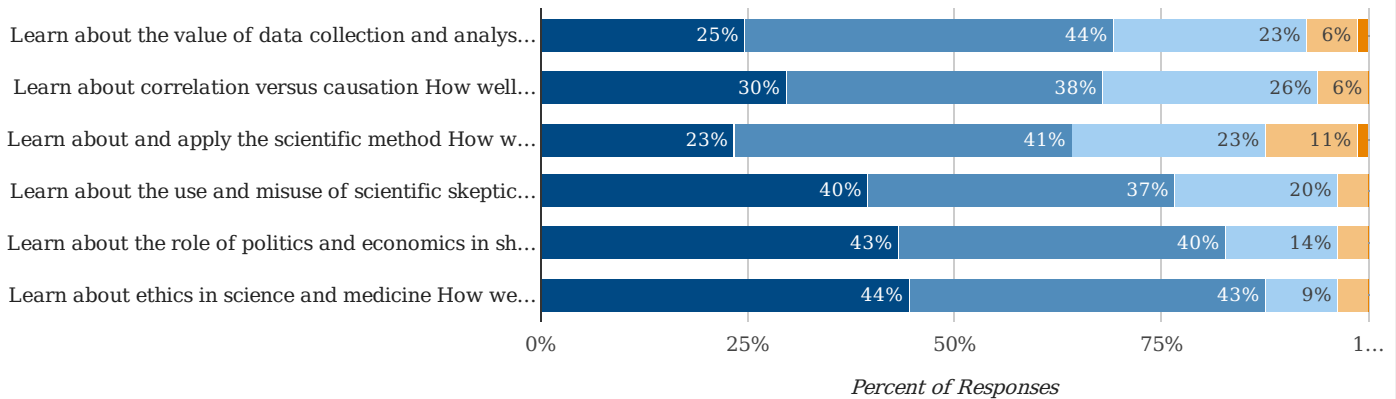
Learn about the role of politics and economics in shaping our knowledge about and response to disease How well did you achieve this learning g...



Learn about ethics in science and medicine How well did you achieve this learning goal in this course?



Extremely well Very well Moderately well Slightly well Not well at all



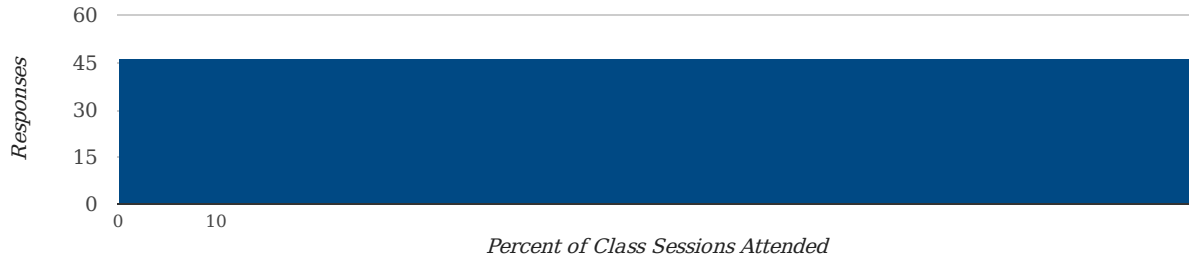
Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
Learn about the value of data collection and analysis How well did you achieve this learning goal in this course?	81	76%	3.9	4	0.9	25%	44%	23%	6%	1%
Learn about correlation versus causation How well did you achieve this learning goal in this course?	81	76%	3.9	4	0.9	30%	38%	26%	6%	0%
Learn about and apply the scientific method How well did you achieve this learning goal in this course?	81	76%	3.7	4	1.0	23%	41%	23%	11%	1%
Learn about the use and misuse of scientific skepticism How well did you achieve this learning goal in this course?	81	76%	4.1	4	0.8	40%	37%	20%	4%	0%
Learn about the role of politics and economics in shaping our knowledge about and response to disease How well did you achieve this learning goal in this course?	81	76%	4.2	4	0.8	43%	40%	14%	4%	0%
Learn about ethics in science and medicine How well did you achieve this learning goal in this course?	81	76%	4.3	4	0.8	44%	43%	9%	4%	0%

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

About what percent of the class meetings (including discussions) did you attend in person?



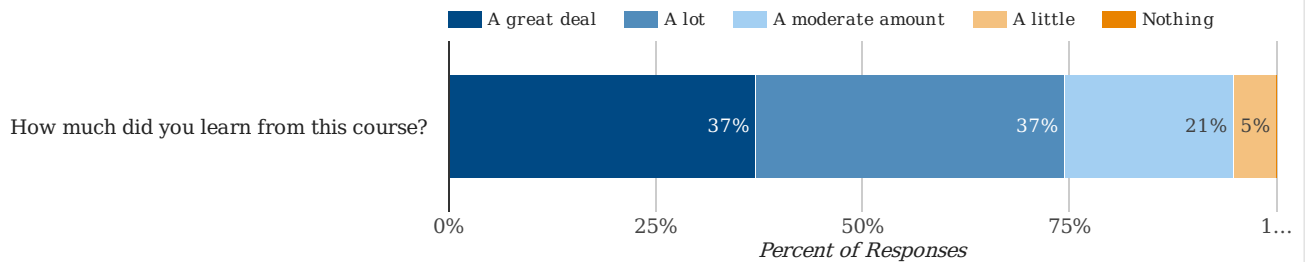
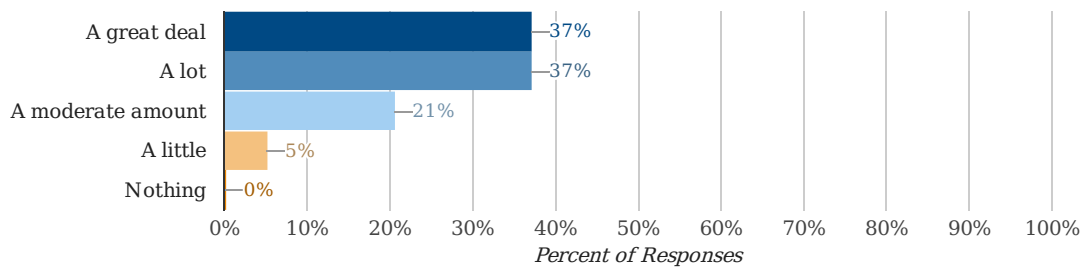
About what percent of the class meetings did you attend online?



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?	78	73%	4.1	4	0.9	37%	37%	21%	5%	0%

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

(49 comments)

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

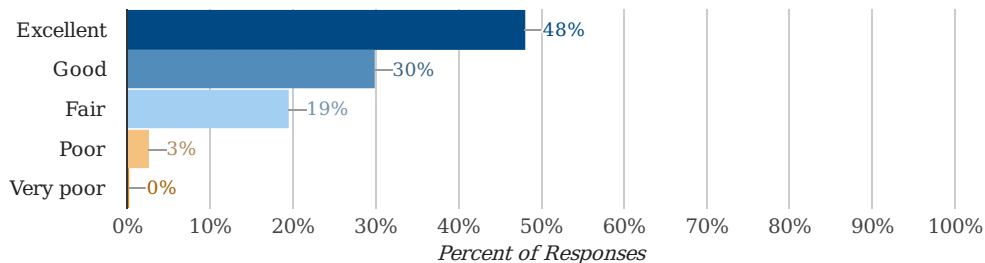
- 1 I think I improved my critical thinking skills.
- 2 My understanding of cancer and it's available treatments, as well as misconceptions about cancer.
- 3 I learned about not only the science of cancer but also medical ethics and how to view health care with a healthy amount of skepticism
- 4 I know more about the messed up healthcare system in the us
- 5 I improved my knowledge of cancer, all the different treatments, causes, and doctor's methods.
- 6 I learned to look at cancer in more depth, as well as from a wider variety of perspectives. I also learned how to think about and discuss different ethical dilemmas related to cancer.
- 7 I learned a lot about cancer complexities that I did not previously know, such as lung cancer mortality rate disparities, which I was able to delve deeper into through the student-led section assignment and my final paper.
- 8 How to think critically about cancer; learned more about cancer as a disease.
- 9 All my thinking skills were improved
- 10 the breadth of cancer
- 11 analyzing a subject from different perspectives
- 12 Critical thinking
- 13 Not much except research paper writing
- 14 Thinking of cancer in multiple perspectives
- 15 Looking at cancer through a multi-faceted scope
- 16 My overall knowledge of cancer. Knowledge about economic and political influences on the issue of cancer. Monolithic versus specific views of cancer.
- 17 Critical thinking, analytical skills, making connections, understanding correlation vs causation and its implications within the medical field.
- 18 Improved my critical thinking skills on a variety of science topics.
- 19 Critical thinking and data collecting
- 20 Knowledge about cancer
- 21 -
- 22 Question data that is presented and analyze the situation of an illness from both a biological and socioeconomic perspective
- 23 I learned to do some research, use critical thinking skills, and explore solutions to problems.
- 24 How to think critically about cancer and its wide range of issues
- 25 I developed an understanding of the multifaceted disease that is cancer
- 26 Knowledge about cancer and the issues that surround it
- 27 discussing
- 28 I learned a broad overview of cancer in its modern context, regarding society, politics and economics, the many causes of cancer, etc.
- 29 I learned things about cancer I did not know. . . mainly in terms of types, disparities, and treatments.
- 30 Understanding the ethical decisions made about cancer
- 31 I learned a lot about how to look at data and how cancer works. I was really surprised by the variations in cancer causes
- 32 Seeing between causation and correlation
- 33 Holistic view of cancer
- 34 How to think about ethics in healthcare
- 35 I learned that there are many ways to look at cancer

- 36 How to lead class discussions.
The different types of cancers.
Methods to prevent and cure cancer.
How other factors, aside from science, influence cancer incidence.
- 37 I learned a lot-- i would say my analysis skills improved. I learned to participate in a subject i am not very comfortable
- 38 Critical thinking regarding data that is put out by statistics
- 39 I learned to be more skeptical of information about cancer in the media and statistics
- 40 I learned how to interpret graphs and data collection skills
- 41 General knowledge about cancer: screening, research, diagnosis, treatment, etc.
- 42 Better holistic understanding of cancer
- 43 learned a lot about the history of cancer and cancer research. learned a lot more about the complexity of the disease
- 44 I learned how to think about issues from various angles.
- 45 Many different aspects of cancer: biology, ethics, research, economics, socioeconomic problems
- 46 Knowledge of cancer itself as well as many issues surrounding it.
- 47 Cancer
- 48 I learned the reason why cancer screening is not always recommended, and how to better analyze statistical data
- 49 Think critically

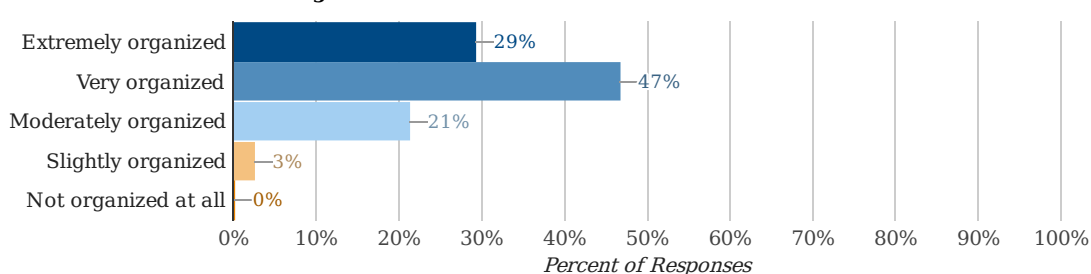
Instruction and Organization

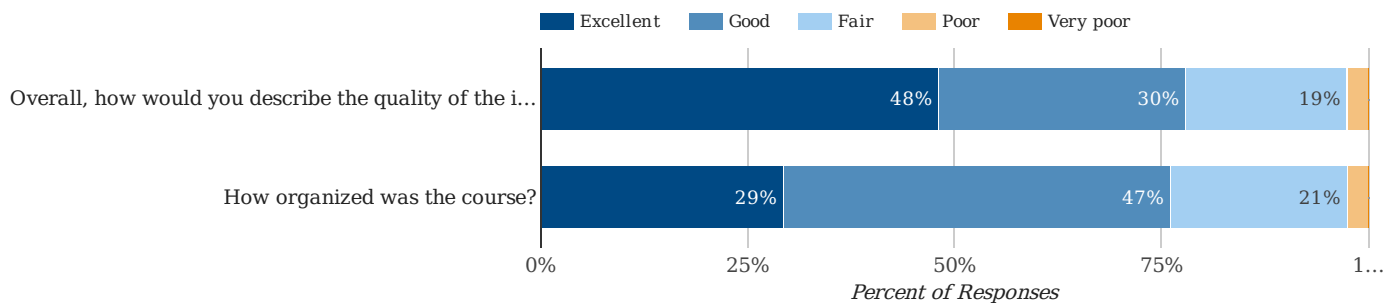
For information about effective teaching in a variety of contexts, please see Teaching Strategies (<https://teachingcommons.stanford.edu/resources/teaching-resources/teaching-strategies>).

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



How organized was the course?



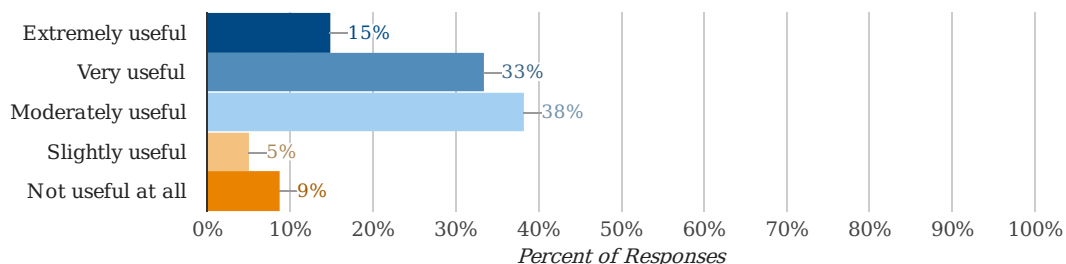


Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
Overall, how would you describe the quality of the instruction in this course?	77	72%	4.2	4	0.8	48%	30%	19%	3%	0%
How organized was the course?	75	70%	4.0	4	0.8	29%	47%	21%	3%	0%

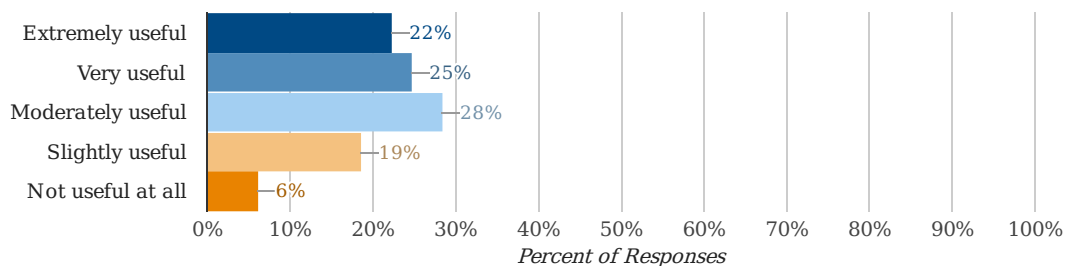
Note: 5:Excellent; 4:Good; 3:Fair; 2:Poor; 1:Very poor;

Course Elements

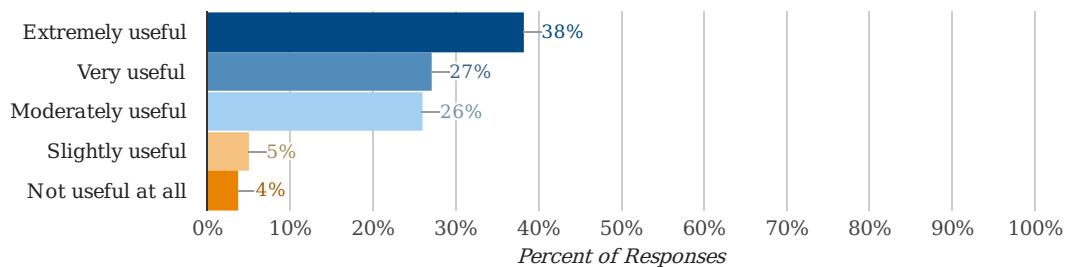
How useful to you was the final project?



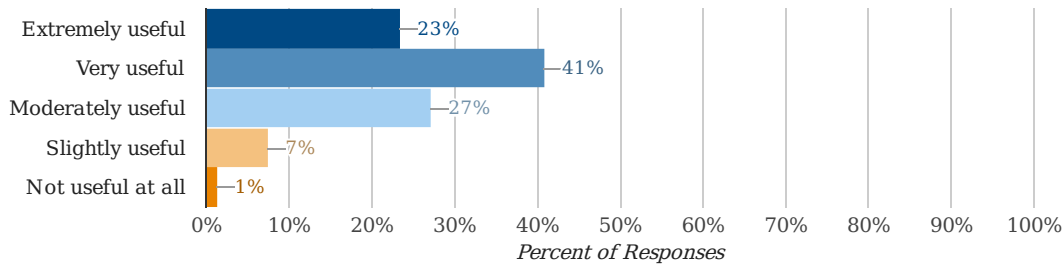
How useful to you were the lectures?



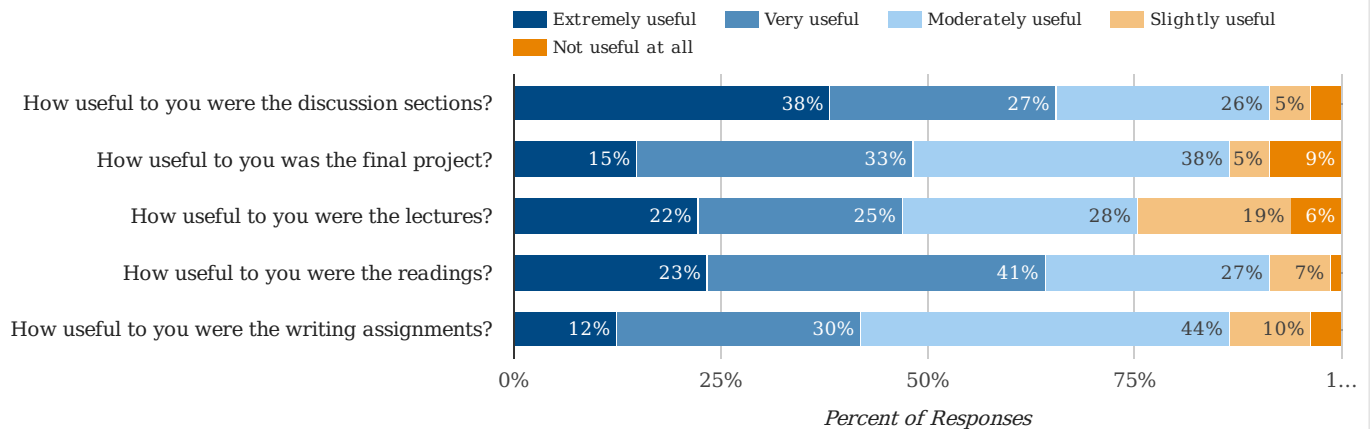
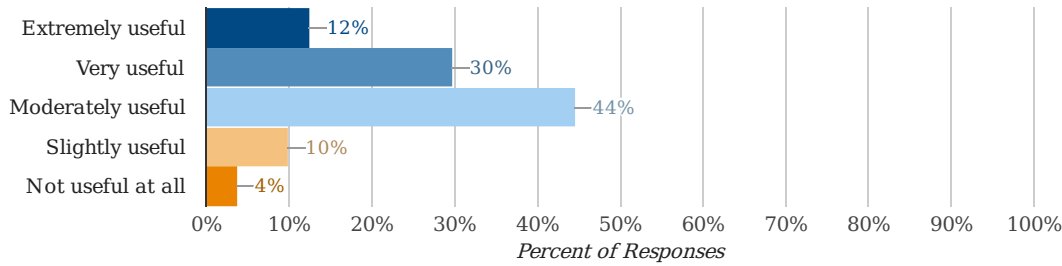
How useful to you were the discussion sections?



How useful to you were the readings?



How useful to you were the writing assignments?



Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How useful to you were the discussion sections?	81	76%	3.9	4	1.1	38%	27%	26%	5%	4%
How useful to you was the final project?	81	76%	3.4	3	1.1	15%	33%	38%	5%	9%
How useful to you were the lectures?	81	76%	3.4	3	1.2	22%	25%	28%	19%	6%
How useful to you were the readings?	81	76%	3.8	4	0.9	23%	41%	27%	7%	1%
How useful to you were the writing assignments?	81	76%	3.4	3	0.9	12%	30%	44%	10%	4%

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>).

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

- 1 Very interesting course material. Instruction varies from moderate to excellent.
- 2 As long as you keep up with the readings, you'll understand what's going on in the course. Sections are based around the readings and lecture pretty much explores the same topics as the reading for the week.
- 3 Take it!
- 4 Be prepared to deal with annoying requirements. Try to have fun w it
- 5 I loved this class! Even if you aren't pre-med this class teaches you a lot that is very interesting and important to know. Would definitely recommend. Lots of reading, though.
- 6 Be organized and focus on the reading questions before doing the reading.
- 7 This has been my favorite class at Stanford so far! This class explores cancer from a very interdisciplinary perspective-- allowing you to think on many different levels. We look at social implications, economics of cancer, and the medical side of things. Professor Lipsick is very personable and engaging. Definitely take this class for THINK.
- 8 TAKE IT!
A lil more work than other THINK classes but absolutely worth it.
- 9 The homework load isn't bad and the class projects are pretty minimal
- 10 great class about the history of cancer
- 11 Definitely take it. It's super interesting and you'll definitely learn a lot.
- 12 You'll get a lot out of it if you do the readings and participate in section; it helps you learn a lot about cancer.
- 13 Probably one of my favorite courses I have ever taken. So interesting and so applicable to real life.
- 14 It is interesting but mainly just touches on a many parts of cancer but does not go in depth on most of them. But a pretty easy Think class, only one final paper which isn't too difficult and not very much reading each week.
- 15 definitely take it!
- 16 It's a good class. lots of work
- 17 Lectures are completely useless. Don't take this think class unless you're ready to be pummeled with unnecessary assignments.
- 18 You're better off taking an actual science course and an actual humanities course
- 19 Great class, very heavy reading loads
- 20 Do the reading responses early. Otherwise it will take a lot of time out of your week.
- 21 Very informative on the general gist of controversies surrounding cancer and its role in the medical history.
- 22 This is an amazing think class, and you'll learn so much from it. It's extremely well taught, interesting, and thought provocative. The people who are staffing this course really care about you and want you to succeed.
- 23 Great class to take to learn about cancer
- 24 Lots of busywork for not that much applicable knowledge
- 25 easy course
- 26 Good course for those interested in medicine, very insightful
- 27 This course is very interesting and I would recommend taking it as a THINK course. You really learn a lot.
- 28 It's a very interesting course, the TA's are great and Prof Lipsick is passionate and a great lecturer
- 29 This is the best think class you could take
- 30 It is chill. The lectures are boring but discussions during section were very interesting.
- 31 This class is quite reading-intensive, but the material is fascinating! Definitely take it even if you're not particularly interested in biology or medicine. However, don't expect too much; if you're really interested in cancer, take CBIO 101 or an actual bio class instead. This is just a broad overview -- nothing is covered in any depth, which was disappointing (but about right for a THINK class.)

Keep up with the readings and assignments, participate, and take advantage of the section discussions -- they're really interesting and people bring up some great points. Even though the readings are long, you can skim them for the assignments if need be.

As long as you participate and devote the necessary time, you'll do fine.

- 32 Read in advance !

- 33 There is a lot of reading, but the content is interesting if you are interested in science.
- 34 Take it if you want a break from math or physics but still want to pursue science
- 35 Fantastic and engaging course
- 36 Super interesting class about so many different aspects of cancer. Definitely one of my favorite classes so far but there was A LOT of weekly reading. The final project wasn't too bad but definitely recommend if you at all interested in cancer and all the problems surrounding the healthcare system
- 37 Lectures aren't helpful but section is great and I love the readings
- 38 Take this class!
- 39 It is not the most interesting class but you will learn a lot!
- 40 Very interesting!!! Take advantage of the amazing staff
- 41 Take this class it is super interesting and low maintenance
- 42 Take it!
- 43 it's not the best THINK, lots of annoying assignments
- 44 It's a great THINK class! Not too much work and you will learn a lot about cancer from multiple perspectives.
- 45 super interesting and eye-opening
- 46 Pretty easy course. There are weekly reading assignments that take some time. Paying attention to lectures isn't necessary to get a good grade in the class.
- 47 Great Think course. As a non-stem student, the class was still very engaging. I believe it is crucial that all individuals have knowledge on cancer as it is such a prevalent issue right now. This class provides just that and so much more!
- 48 This course is dope! Not high stress, you learn a lot.
- 49 Easy think calss
- 50 This class is great if you want to learn a lot about cancer from all aspects--biological, ethical, economic, political, etc. Definitely one of the more enjoyable classes and Professor Lipsick is very open to students.
- 51 It's a very interesting course that gives you vast knowledge on the the cancer problem.

(22 comments)

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

- 1 Thank you for the great quarter!
- 2 n/a
- 3 Make lecture attendance not mandatory. Didn't learn anything from lecture that I needed to apply to assignments actually worth my grade.
- 4 N/A
- 5 It was REALLY unhelpful that we were given no due dates at the beginning of the quarter. we were given a rough outline by week of what was expected, by only week 8 was i told the day the final paper was due.
- 6 certainly for the first half of the course, the lectures seemed quite separated from what was discussed in sections
- 7 no
- 8 no
- 9 I greatly enjoyed this course, especially with Dr. Lipsick and Jehnna Ronan. Both are incredibly passionate but well-versed in their material, and it was a true pleasure to take this class with them.
- However, I wish the class had gone into more depth. I understand this is a THINK class, but I would have loved to learn even more about cancer while going beyond just a broad overview. The stuff we learned was fascinating -- it just felt like we could've gone deeper on the topics instead of touching on them.
- 10 N/a
- 11 no

12 none

13 Nope.

14 This has been a great class. It was really allowed me to think deeper and further explore something that is so present in our society.

15 The writing assignments as well as class discussions really helped push me to exercise my critical thinking skills and consider multiple perspectives to issues.

16 One of my biggest complaints about the class is the lack of continuity between lectures, section and the reading assignments. It felt like there was minimal cross-over between those groups, making some of the reading assignments feel pointless. Additionally, the lecture topics sometimes flew over my head very easily, making it difficult to follow along, especially since the topics were rarely brought up again in section.

17 No

18 Not worth time dedication and busywork

19 -

20 Great instructor and great teaching fellows

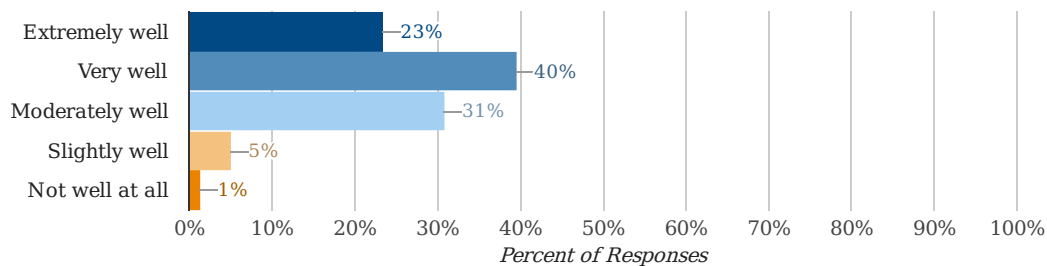
21 Good job!

22 N/A

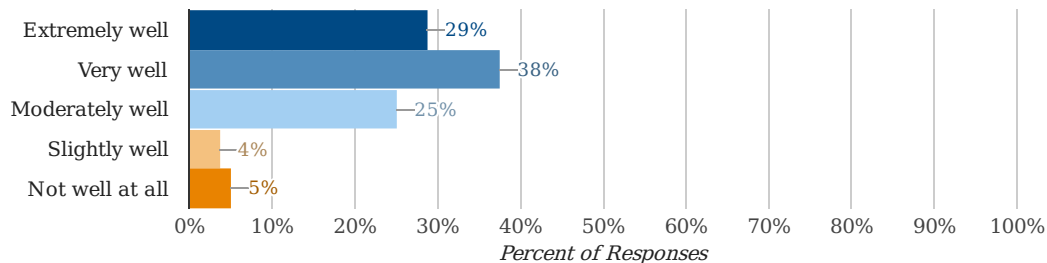
Instructor Added Questions

Close-Ended Questions

How well were the learning goals conveyed?



How did the different topics and parts of the course fit together?



Open-Ended Questions (85 comments)

Q: Were there any topics that we missed or that you would like to have covered in more depth?

1 no

2 N/A

3 No

- 4 Ethics should have been covered more in depth. They were only covered in an ad hoc manner. Lecture should have had a more clear emphasis on defining ethical schools of thought. people in discussion section did not understand utilitarian/deontological thought
- 5 I would have liked to cover the economics and financial side more.
- 6 Economic disparities
- 7 I would like to have covered all of the topics in more depth. I significantly appreciated the broad span of the topics covered, and I felt I gained a wide overview of "the cancer problem" as it is today.

However, I was disappointed in that it was just a wide overview! I would have loved to discuss the lecture and reading topics in more depth. I felt that in lecture and section, much of the time all that was presented *was* a broad overview. The presentations and course content, despite having plenty of breadth, just didn't have the depth and technical content I would have loved for a subject as fascinating as this. Maybe that's just me -- but this stuff is so interesting I would love to learn even more about it, despite not being a Hum Bio major.
- 8 No I thought I understood a lot more about cancer after this course
- 9 No, I really enjoyed being able to look at cancer from so many different perspectives.
- 10 I felt like we could have talked more about cancer disparities and how cancer affects families.
- 11 How insurance companies and healthcare providers interact to come up with a cost as well as what the future of cancer looks like.
- 12 No
- 13 There could have been more discussion on the role of race when it comes to medicine. It sometimes seemed like students were not able to properly engage in these conversations.
- 14 i would have liked to learn more about auto-immune diseases (but to be fair, it isn't cancer)
- 15 no
- 16 economics of cancer
- 17 I was hoping for more depth into the ethical dilemmas posed by cancer
- 18 Ethics involving last days of patients
- 19 N/a
- 20 n/a
- 21 no
- 22 ethics
- 23 I'd like for the lectures to be more relevant to section material.
- 24 More on the perspective of cancer patients, not just their view towards death but also as political agents.
- 25 Maybe touch on cancer's role in society in general? How does it extend beyond the individual?
- 26 None.
- 27 All topics of my interest were covered
- 28 No
- 29 More real world implications revolving commerce and public opinion/issues
- 30 -
- 31 Maybe more emphasis on social problems associated with cancer
- 32 Everything was covered well!
- 33 NA
- 34 It would have been nice to cover more of the molecular mechanisms of cancer, but I understand that this isn't a biology class.
- 35 The future of cancer
- 36 Maybe more on the health disparities

Q: From which readings did you learn the most? The least?

- 1 The Immortal Life of Henrietta Lacks was a great read.
I did not enjoy the Emperor of All Maladies as much.
Most of the articles were very interesting.

- 2 The Emperor of All Maladies and The Immortal Life of Henrietta Lacks both taught me a lot, but The Emperor of All Maladies was hard to read because it was all over the place in my opinion
- 3 The two core books gave way too much reading and i ended up skimming. The supplemental articles were interesting
- 4 I think I learned the most from the Siddhartha Mukherjee book and learned the least from the Henrietta lacks book
- 5 I learned the most from the news articles that were posted and medical journals. They were more focused and seemed a lot more relevant.
- 6 The Immortal Life of Henrietta Lacks
- 7 The most from the Immortal Life of Henrietta Lacks and the least from some of the articles from the weekly readings.
- 8 Love the humanistic aspect of Henrietta Lacks combined with the more scientific style of Emperor of All Maladies.
- 9 Most - The Immortal Life of Henrietta Lacks
Honestly I learned from every reading every single week
- 10 most: henrietta lacks
least: none! all of them were great
- 11 the emperor of all maladies
- 12 I learned the most from the HeLa readings (had no prior knowledge about it). I learned the least from some of the more biologically focused aspects of sections of Emperor of All Maladies (most of it flew over my head).
- 13 I liked the readings about DNA, etc.
- 14 Immortal life of henrietta lacks (most)
Some of the economics readings (least)
- 15 I actually felt Mukherjee was the least helpful. The information in it was useful, but the readings could have been more narrow in terms of pages, since out of a chapter there were a few really useful pages. I liked the other readings more, especially Skloot's book.
- 16 Learned the most from the autonomy vs beneficence readings. Learned the least from week 8 readings, since we didn't really have any reading response to do that week and so I regrettably skimmed over the material.
- 17 I really liked the books and learned a lot from them.
- 18 Learned the most from Henrietta lacks and the weekly readings
- 19 -
- 20 Learned the most from the Henrietta Lacks reading
- 21 I learned a lot from "The Immortal Life of Henrietta Lacks". I learned a lot from all the readings so there isn't really a least.
- 22 I took away the most from the readings on Henrietta Lacks, but in general I appreciated each reading assignment given.
- 23 Henrietta Lacks and Emperor of Maladies were interesting and informative
- 24 Enjoyed both books that's for sure, nothing comes to mind as to readings I didn't enjoy
- 25 articles I learned the most, Henrietta lacks I learned the least
- 26 Most: ILHL and Emperor (Emperor in particular -- fantastically-written yet comprehensive book!)
Least: individual news articles, just because the amount of content was lesser
- 27 Learned the most of Emp of all Maladies
- 28 Emperor of All Maladies
- 29 I think the books were the best readings.
- 30 Learned the most from The Emperor of all Maladies

Learned the least from The Immortal Life of Henrietta Lacks
- 31 Emperor of All Maladies, I learned the most. Short articles, I learned the least.
- 32 I learned the most from ILHL because it was told in a story and easier to follow and a lot more interesting than the other book.
- 33 I learned the most from the Henrietta Lacks book
- 34 I learned the most from the New York Times articles. I learned the least from the book most likely.
- 35 I learned the most from the articles assigned. At times we had to read so much from the actual books that it was hard to get at the message.
- 36 I learned the most from "The Immortal Life of Henrietta Lacks" and some of the articles. I learned the least from "The Emperor of..."
- 37 i learned the most from both books

38 I learned the most from readings in the Emperor, in terms of medical ethics and reality and how is different from modern times

39 I liked both of the main course readings and all of the readings

40 the ones recounting personal experiences w/ cancer

41 the hormone therapy readings taught me a lot

42 I liked the Emperor of All Maladies the best but I wish we hadn't taken a break from it in the middle

43 learned the most from Henrietta Lacks.

44 Henrietta Lacks.
Emperor of All Maladies.

45 The Emperor of All Maladies was my favorite

46 I learned the least from the book readings, the most from the short readings

47 Emperor of Maladies - most
NYT - least

48 I really enjoyed The Immortal Life of Henrietta Lacks and helped me learn a lot about ethics in research. Emperor of All Maladies gave an overview of cancer research history but seemed repetitive at times

49 The most- The Emperor of All Maladies
The least- the Immortal Life of Henrietta Lacks

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)