

THE CANCER PROBLEM (2018-2019 Spring)

Term: **2018-2019 Spring**
Subject: **THINK**
Catalog & Section: **23 1**
Course Title: **THE CANCER PROBLEM**

Instructor: **Lipsick, Joseph**
Enrollment: **72**
Responses Incl Declines: **62**
Declines: **3**

Learning Goals

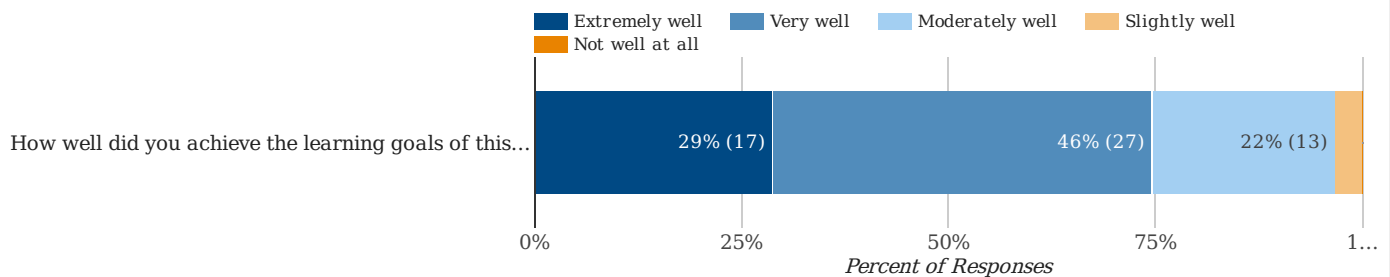
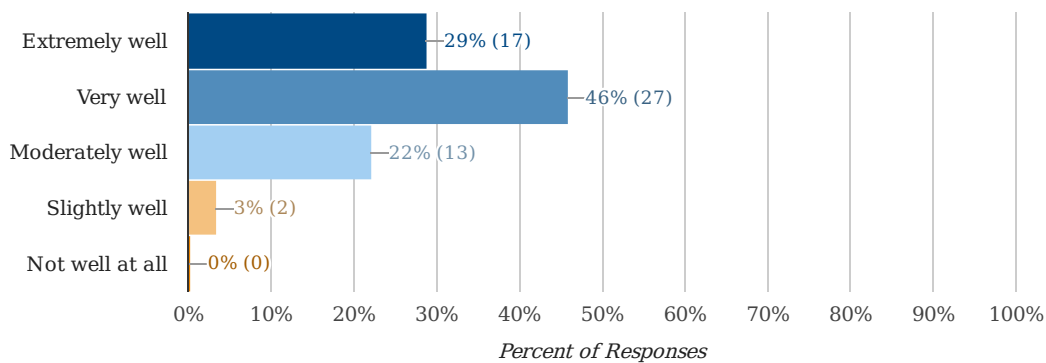
We want your feedback about your experience using the course evaluation system and reporting. To provide your feedback, please click  to answer one question.

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://evals.stanford.edu/end-term-feedback/how-write-learning-goals>).

How well did you achieve the learning goals of this course?

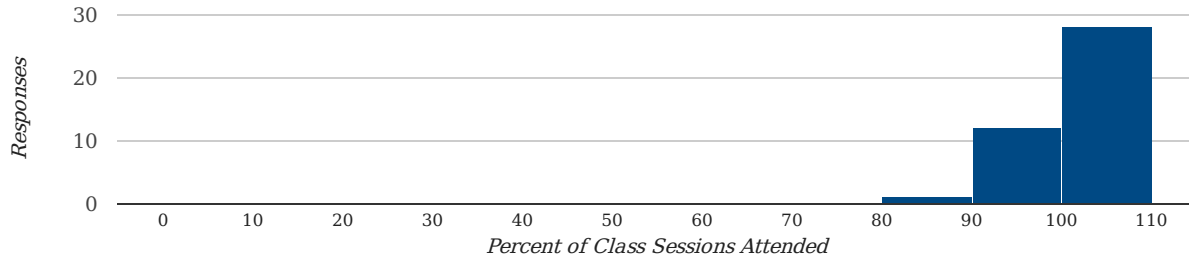


Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How well did you achieve the learning goals of this course?	59	81%	4.0	4	0.8	29%	46%	22%	3%	0%

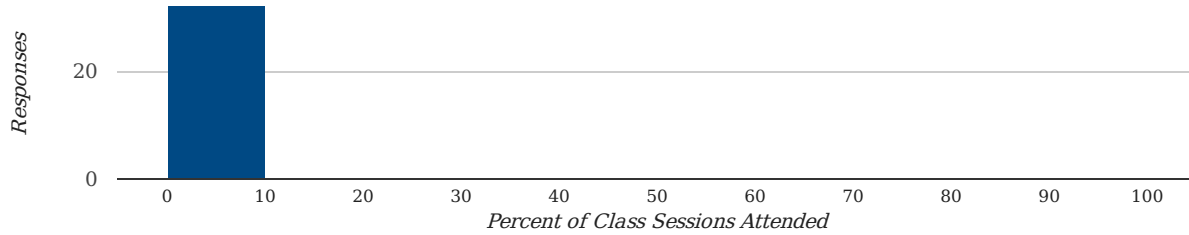
Note: 5:Extremely well; 4:Very well; 3:Moderately well; 2:Slightly well; 1:Not well at all;

Attendance and Engagement

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



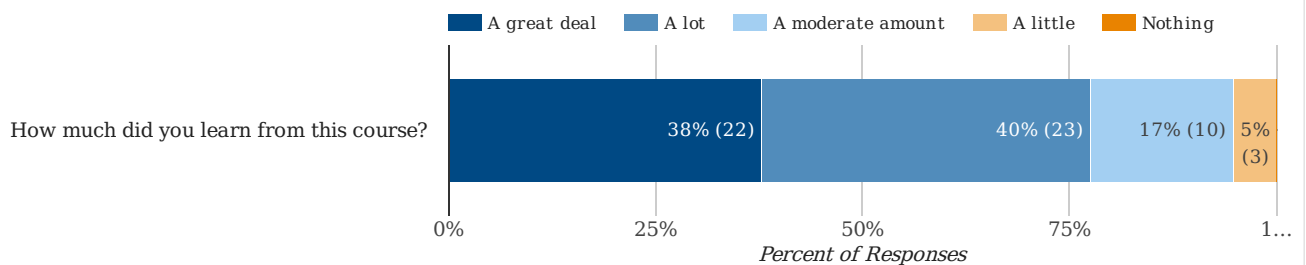
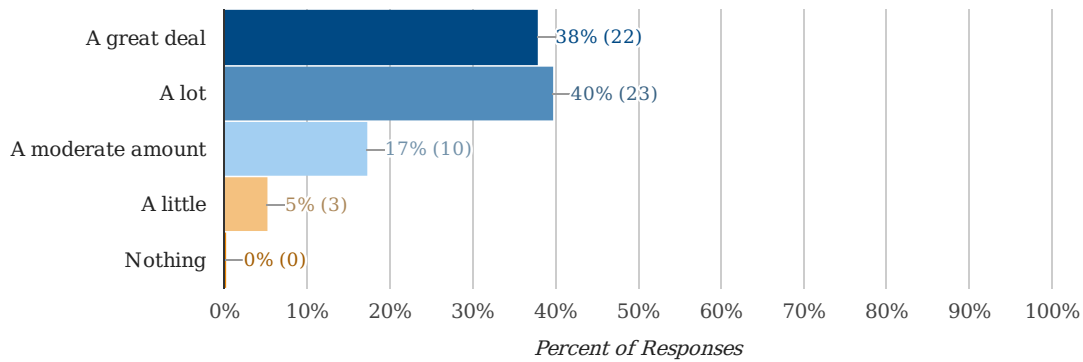
About what percent of the class meetings did you attend online?



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
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How much did you learn from this course?	58	80%	4.1	4	0.9	38%	40%	17%	5%	0%
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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 learned about the science of cancer, and about a lot of the ethical issues that scientists, physicians, and researchers face when dealing with cancer.
- 2 screening stuff was interesting, everything else was pretty obvious
- 3 Basic biology of cancer and cancer treatments, evaluating effectiveness of screening and treatment, disparities in patient outcomes, comparison of different healthcare systems, ethics of clinical trials and use of biospecimens
- 4 I became a better thinker.
- 5 I learned so much about cancer that I would not otherwise have known.
- 6 I learned more about cancer treatments, prevention, screening, and history.
- 7 I learned how to think about a problem from two or more opposing perspectives. I learned the complexity of problems and the pros and cons of simplifying a problem like cancer into a single 'war'. I learned how to analyze several articles for common themes and efficiently extract relevant evidence from them to respond to a question.
- 8 I improved my knowledge on issues surrounding cancer.
- 9 I improved on doing the readings and extrapolating the most important ideas.
- 10 I learned about the U.S. health care system and about different issues that face health care around the world.
- 11 The ability to think about cancer beyond the medical model. Research skills such as finding sources and integrating them into formal writing. Lead a class discussion. Work successfully in a group to produce a final product.
- 12 knowledge of the outside factors that influence cancer
knowledge of how cancer affects loved ones
- 13 Critical reading
Critiquing statistics
Writing with little time
- 14 I learned a lot about various biological, ethical, and humanitarian concerns in cancer treatment
- 15 Debate skills, how to read nuanced scientific data.
- 16 understanding a topic like cancer with the ethics and complications around it
- 17 Critical Thinking, Discussion Leading, Research Skills
- 18 My knowledge in the medical field especially about cancer.
- 19 - Learned more about the nuances of cancer
- Improved discussion / debate skills
- 20 I became better at analyzing papers and data.
- 21 Discussion and inclusion
- 22 Critical thinking
- 23 My critical thinking skills and my ability to analyze certain situations better.
- 24 I learned to be skeptical of data that we are presented with, since axis, labels etc., can trick one into believe one or another thing.
- 25 Critical thinking
- 26 How to ask questions that will spark up a discussion in class
- 27 Thinking
- 28 I understand more about the ethics behind cancer and how it affects people. I improved my writing skills and participating in group discussions and debates.
- 29 Cancer and its flaws/ potential improvements

- 30 Learned how to skim the reading and extract meaning
- 31 general knowledge of cancer (in terms of treatment and prevention)
skills to consider different factors and reaching a conclusion
- 32 Critical thinking, understanding of the modern for-profit pharmaceutical industry, existing and historical racial gaps in healthcare.
- 33 I learned about the history of cancer, it's current state, and where it is headed in the future. We talked about treatments, disparities among treatments and much more.
- 34 I learned a lot about critical thinking and the true scope of cancer problem in the world.
- 35 I learned how to broaden my perspective about certain issues.
- 36 ethics of cancer
- 37 I felt I learned the skill of thinking critically about science presented to me, how science is presented in the media, and how politicians make decisions regarding science.
- 38 How to speak up, be confident and contribute to group discussions. I learned so much about cancer and the history behind it as well.
- 39 My critical thinking definitely improved from taking this course.
- 40 My ability to look at data and understand what it means. My ability to think critically and in depth about the ideas presented to me.
- 41 I learned a good deal more about cancer, especially issues regarding economic interest, drug pricing, and racial disparities.
- 42 I learned how to think critically about problems in a system
- 43 inhibit protein receptors to (maybe) stop cancer
- 44 I improved general knowledge about cancer and the health care industry
- 45 I learned risk factors of cancer and health care disparities that make it more difficult for certain groups to receive proper care.
- 46 I learned a lot of critical thinking through all of the reading we did
- 47 I learned many facts about cancer and how it is looked at from a societal and historical perspective.
- 48 cancer in general
- 49 critical thinking

Thinking Matters Programmatic Question (49 comments)

Q: The Thinking Matters Requirement is intended to develop your critical thinking ability while engaging you with fundamental questions and complex problems approached from multiple perspectives. In what ways do you think this class did or did not fulfill these THINK requirement goals?

- 1 The discussions allowed us to think critically, but the lectures were a little less thought provoking, and more just information heavy about cancer.
- 2 absolutely did not fulfill those goals. this class was fine if a little underwhelming, but the thinking matters program is just broken. i used less critical thinking skills in this class than any others this quarter.
- 3 Looked at cancer over time, from the point of view of different disciplines. Presented complicated questions and the various answers to them
- 4 I became a better thinker.
- 5 It addressed these very well and forced me to think critically about a variety of aspects of cancer stigma.
- 6 I learned more about how to critically analyze data.
- 7 It allowed me to view cancer from the perspective of an African-American patient, from the perspective of a child who did not want chemotherapy, from the perspective of people for and against the pressure of positivity, from the perspective of drug companies and the researchers they fund, from the perspective of hospitals and doctors that recognize the hike in cancer drug prices and many more. I think it was highly successful.
- 8 I think this class fulfilled these THINK requirement goals pretty well. We learned about a variety of different problems surrounding the topic of cancer.
- 9 The class fulfilled the THINK requirement by making us think about the real truth around cancer. We learned about things like big pharma, cancer disparities, and the lack of cancer research.
- 10 I think the weekly readings/ reading responses did a good job at making us think about controversial topics. Lectures were also content rich. Sections, however, were not as useful.
- 11 I think that lecture and discussion gave students many opportunities to refine their critical thinking skills through interactive

activities. However, the many writing assignments took away from critical thinking and instead had a strong emphasis on composition.

- 12 I think that the course provided different ways to think about a concept that can be viewed as in a singular manner.
- 13 I feel that I am much more equipped to critically think about medical data and the politics surrounding the medical industry.
- 14 This THINK class introduced a lot of important and delicate topics which taught us how to critically think and argue for a particular stance on an issue while also keeping others' feelings/positions in mind.
- 15 I think it did a very good job.
- 16 we saw many different perspectives with the book and article selection. it would be interesting in the future to read something from the perspective of drug companies to have more material in the debate of high drug prices
- 17 I thought the class did well to encourage looking at a topic through different lenses (e.g. economic, scientific, ethical, moral, racial). Because of that I thought it helped me achieve critical thinking.
- 18 I believe it truly made you think about the real world problems. Cancer is something that has impacted everyone's life in some way, shape or form so almost everyone has their own view and experiences with cancer.
- 19 This course introduced many different perspectives on various aspects of cancer that I had not previously thought about.
- 20 This class required reading that provided opportunities to use critical thinking and see issues from different points of view.
- 21 This did that in some ways, but when a lot of it was developing factual and historical basis that only partially influenced discussions, it felt more objective than subjective and discussion based.
- 22 It definitely did. Learned so much practical and otherwise "mysterious" stuff about the cancer problem.
- 23 It did fulfill these requirements because now when I read any piece of evidence I am curious to see where they go their results and if they were skewed.
- 24 I think from the first class on, there was critical thinking involved, since the thoughts that were brought to our attention through lecture were very concrete and thought provoking.
- 25 We had weekly reading responses which helped us develop our critical thinking
- 26 I learned to think in new ways and ask thought provoking discussion questions, as well as participate in group discussions.
- 27 Made me THINK in socio-economic, philosophical, medical, and all the various aspects on cancer
- 28 I thought that by virtue of it being a required class, I was not invested in the class and cared more about getting through it than getting value out of it.
- 29 A lot of the issues we discussed were multifaceted and controversial. Thus, discussions were insightful and engaging. Hence, I was encouraged to think about the material with attention. I think this course fulfilled the goals well.
- 30 The class met THINK goals by approaching cancer from various societal, cultural, racial, and economic perspectives.
- 31 I think the class was pretty interesting and lectures were engaging. I was able to do critical thinking and look at situations from different perspectives.
- 32 Extremely complex problems
- 33 I think we were able to think critically, but that also came with a lack of being able to ask and think about bigger questions. While TF's are focused that we think critically about specific questions in the text, students don't get to engage in bigger questions about life and how to apply our current thinking to more important questions.
- 34 I think critically when writing responses
- 35 I think I definitely developed my critical thinking ability because problems regarding cancer and healthcare are so complex that different ideas I thought I strongly believed in were challenged and I no longer firmly believe in them.
- 36 This class did fulfill these requirement goals because it forced you to think outside the box, and into the unknown. It also invited participation which allowed for more in depth conversations with many perspectives.
- 37 The reading responses definitely helped to achieve this requirement. They made me really think about the material and form informed opinions based off the evidence presented in front of me.
- 38 Always making me question what I think and better develop my ideas
- 39 The course definitely approached complex problems from vast perspectives. I learned a lot of in depth information.
- 40 I think that the section activities and discussions helped me to better understand the material and form new, complex claims and ideas based off of both the class material and conversations with my peers. I think that some of the homework assignments (readings) were interesting, however did not really challenge the THINK goals.
- 41 It fulfilled this goal by presenting many of the facts regarding the current state of cancer.
- 42 definitely forced me to think about ethical and moral problems in the medical community
- 43 I learned a lot more about the healthcare industry and specific examples of problems and controversial points about the cancer

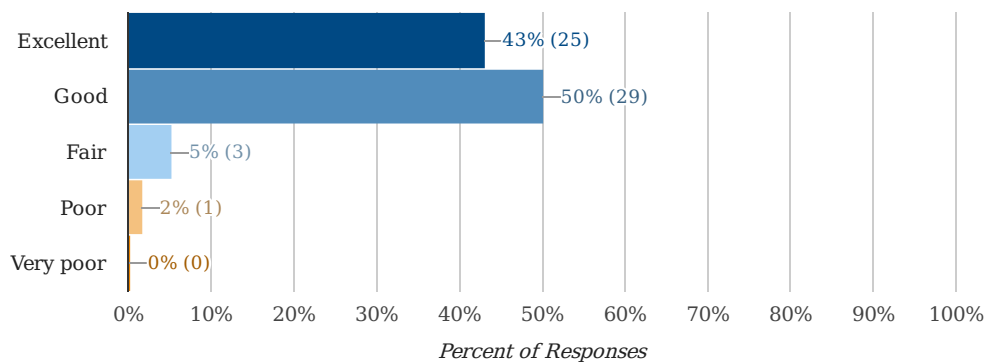
industry

- 44 I think this class fulfilled the THINK requirement goals by asking engaging questions throughout lecture that ensured everyone was actually thinking about the topic. It sometimes did not fulfill the requirements when the problem was a little too complex for everyone to understand and led to less thinking.
- 45 It made me think a lot about how cancer is a societal issue not merely a scientific one
- 46 Cancer is definitely an important problem in the US. We looked at cancer from many different perspectives.
- 47 Just pretty high school level stuff, nothing actually insightful
- 48 I learned a lot. It was my favorite lecture this year.
- 49 Yes. I learned to think more critically about certain issues, such as the US healthcare and the problems related to a lack of drug price regulation.

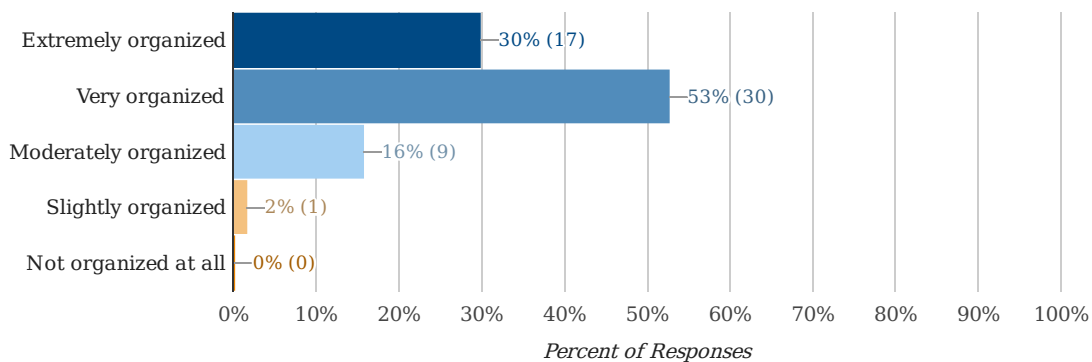
Instruction and Organization

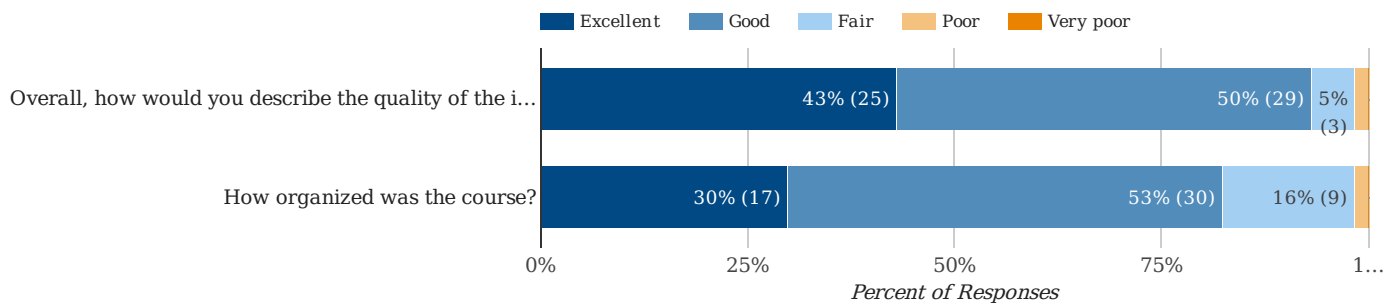
For information about effective teaching in a variety of contexts, please see Teaching Strategies (<https://teachingcommons.stanford.edu/resources/teaching-resources/teaching-strategies>).

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?	58	80%	4.3	4	0.7	43%	50%	5%	2%	0%
How organized was the course?	57	79%	4.1	4	0.7	30%	53%	16%	2%	0%

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

Course Elements

No Data.

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>).

(48 comments)

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

- 1 Its a great class you should take it!
- 2 It's an interesting class with interesting ideas and content. It's not too much work either and I enjoyed learning the material too, I would recommend.
- 3 Interesting course
- 4 This was a very busywork heavy class. Required reading responses of ~250 words each week/sometimes two times each week. Section twice a week to discuss readings and do different activities. Two movie screenings in the evenings, a final paper, and poster session on an infographic that you had to make with a group. The lectures were good, but I stopped paying attention since there were no quizzes, tests or assignments based off of it. This is an interesting class, but mostly for people who are pre-med. I'm glad it's over.
- 5 I would say this is a good THINK class. The materials are quite interesting even to those who are not studying medicine or biology. The workload is not that bad (we only have one proper essay and a mini-presentation at the very end).
- 6 Great class, very interesting material with engaging lectures.
- 7 It's a great class! A good amount of reading each week and preparation before each discussion, but you come out of the class knowing a lot about cancer (the science behind it, as well as the ethical and current issues researchers/physicians are facing regarding it).

- 8 The sections can be a bit repetitive but Joe is a fantastic teacher and I really enjoyed his lectures.
- 9 . a moderately good class if you're interested in cancer, but don't expect to learn much if you have a bio background. professor lipsick is great, but any think class is still gonna suck, the program is fundamentally broken.
- 10 It is a really good THINK course to take that covers interesting problems facing biomedical communities and people around the world.
- 11 It is a really good course. I am not really a STEM person but j enjoyed it. It looks at cancer from historical, sociological, ethical, biological, and epidemiological perspectives (among others). It really made me think hard about an issue (cancer) I had not previously dedicated much thought to. There are some very interesting guest speakers and activities as well. Joe is a great professor and provides students lots of opportunities to get to know him and learn more about topics presented in class.
- 12 It is pretty interesting and eye-opening.
- 13 a this is a very good think class with not that much work. You don't have to read the books to complete the course work but they add a lot and are very interesting. Overall good think, would recommend.
- 14 It's a good class. Having a good background already in cancer, it's interesting to hear the social perspective of the problem. I don't recommend taking this class if you've spent a lot of time already engaging with this material. Take a new class you haven't engaged with before.
- 15 It's a great course.
- 16 lots of reading
- 17 I would recommend doing the readings because they are very interesting and are discussed in depth in section. While I learned a lot about the biological side of cancer, there are a lot of other issues surrounding cancer that this class opened my eyes to.
- 18 I think you will find the diversity of topics surrounding cancer very interesting. Cancer is so much more prevalent than you think it is, in ways that are not very evident. I think the information in this course is information that everyone should know.
- 19 The class tackles some interesting problems with cancer. Every week, there are about one to two reading assignments. The assignments have about two questions and each with a 250 word response. There is no midterm or final exam; only a final paper and infographic presentation. The class is pretty easy if you don't mind the frequent short assignments. If you are interested in topics about cancer, take the class.
- 20 This class gives you an inside look into what cancer really is. It's not just a disease that attacks the human body, but it also attacks the people around emotionally and mentally.
- 21 I thought it was a good class for someone who like me, knew very little about cancer/ the health care system going into it. I don't think, however, it is a good class for someone who already knows a lot about the subject matter.
- 22 Highly recommend, very intriguing!
- 23 This class presents an opportunity to learn about a subject matter that is often underrepresented in society. I really enjoyed all of the lectures and section discussions, but I found the class to be more intensive that I thought it would be. There are a lot of requirements that you have to fulfill, but overall, I recommend this class to anyone who is interested in learning more about cancer.
- 24 This course is very informative regarding everything cancer related. Some lectures are more interesting than others, but they are all informative regardless.
- 25 If you have a loved one affected by cancer, this is a very good course that shows all of the complexities of what some seem to think is a monolithic disease.
- 26 It is a well structured course that goes over a ton of information. You walk out much more informed. However, if you have not taken many biology classes or been involved in the sciences, it can get caught up in the specifics and be difficult to follow.
- 27 This course is interesting and gives a decent overview of the history of cancer research and current implementations. If you are looking for a hard science course on cancer, this is not it. This course is instead more society-based, dealing with trends in research, treatment, economics, and disparities. Interesting and not too much work!
- 28 THINK 23 is a very interesting course, and I would recommend it to those not sure of what THINK to take. Joe is a great lecturer, and the weekly work is not too bad.
- 29 Very interesting class with an extremely reasonable amount of work.
- 30 definitely an interesting one
- 31 interesting and enlightening
- 32 Put your thinking cap on, because thinking matters in this course
- 33 Take it! Super interesting and insightful.
- 34 You get as much as you put in. A lot of it is very interesting but there is a hefty amount of readings
- 35 I found this course to be really interesting, even as someone who does not typically take biology classes. It introduces you to many different issues within cancer and breaks down its nuances.
- 36 It's a lot of work. There is a good amount of reading in addition to weekly reading responses. Make sure you get a TA who doesn't

grade too harshly.

- 37 This is a lot of work and many of the reading responses take time, but so long as you do them early or know that they take time, you'll be fine. Some of the instruction and lack of good discussion can be annoying at times, but it can be remedied by you as the student in your section.
- 38 Take it if you really want to learn important stuff about cancer
- 39 It is a very fun class but it can be frustrating to do the info graphic because not everyone puts the same amount of effort. The grading for the reading responses can also be very harsh for no reason. You do get into ethical debates which is interesting.
- 40 It's interesting
- 41 The lectures are sometimes boring but it is overall a good course about an interesting topic.
- 42 You will learn a lot about all different aspects of cancer!
- 43 This Thinking Matters will end up teaching you a lot about your life going further, and will open your eyes to the world of medicine, science etc.
- 44 Joe is engaging and lectures are interesting.
- 45 If you want to learn about the science behind cancer take this course
- 46 Good as a Think class, but also so much work than other ones. Long readings and reading responses every week.
- 47 it's very interesting and the reading aren't as bad as they look
- 48 I enjoyed the lectures a lot. Sections aren't always super useful though.

(21 comments)

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

- 1 Thanks for a great and informative quarter!
- 2 The online discussions definitely feel trivial at times, especially if they don't relate to the course. Also, the course is very laid back which is very helpful for the type of discussion/group learning in section.
- 3 The canvas was extremely confusing to navigate. The reading assignments were incredibly meticulously graded - 4.75/5 - really? The poster session was not a good time, and everyone there knew it was a joke. I really like Professor Lipsick, but I think that making a course like this required is extra, and will end up with students who are less than committed. It was cool to have the lab session with Professor Lipsick and get to see all the organs!
- 4 n/a
- 5 Great course; great instruction and great discussion questions. Take this class!
- 6 I loved the class. Wish there were more things to be done during section though. I thought the discussion could be expanded more.
- 7 I really enjoyed going to the toxicology lab!
- 8 i think assigning a specific cancer for final project isn't the best way to do it. really difficult to make a cohesive infographic about 'a cancer,' would've been better if presentations were across types of cancer (e.g., on funding or screening or equity)
- 9 no
- 10 none
- 11 It was interesting!
- 12 No.
- 13 N/A
- 14 Thanks for a great quarter.
- 15 I really enjoyed this course and would love to learn more about some of the material introduced to me.
- 16 I thought the student-led discussions were not explained enough. I appreciate the skill, but it did not allow me to think differently about cancer. It did allow me to think about teaching.
- 17 I think Professor Joe is such a great instructor. He definitely prioritizes his students.
- 18 N/A
- 19 Professor Lipsick did a great job making the class engaging and informative. I appreciated his effort to get to know students outside of class through lunches at the Faculty Club.

20 Thanks for a great quarter!

21 The lectures were very engaging. The sections were not always useful.

Instructor Added Questions

Close-Ended Questions

No Data.

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 \(https://vptl.stanford.edu/getting-started-vptl\)](https://vptl.stanford.edu/getting-started-vptl)