

Course Evaluation, Critical and Creative Thinking, UMass Boston  
**CRCRTH 645 Biology in Society: Critical Thinking**  
Hybrid, 2014 Fall

Note: lettered responses represent the same individual across the questions, so that all “a)” responses come from the same person, and so on.

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**1. Start with an evaluation of yourself What were your personal goals in taking this course? Did you achieve them? How would you have proceeded differently if you were doing this course again? What have been your major personal obstacles to learning more from this course?**

- a) I have had major personal obstacles, but critical thinking was my major goal and although I believe I have a better understanding of what it means to be a critical thinker and I have practiced some critical thinking during my semesters at CCT, I think it is not an easy task and it is going to take some more effort to master my goal... Maybe a lifelong struggle to really master it. Like sport, lots of training non stop! Commitment and everyday training, and my major obstacle I believe has been devoting the necessary time and attention to the tasks to really be prepared timely to interact enough in dialog with peers and professor to get the best out of a great class. Just my way of approaching the tasks was a bit divergent and although I reached my goal of framing a research I may not have followed chronologically the route that was meant for the course...
- b) I'm a science teacher and also interested in social sciences personally. My goal was to learn how to relate both fields to each other to create a reasoning environment in my class. I achieved my goal with this course because it showed me some different perspectives. I provided different ideas with my perspective but sometimes social cases that are special to US were new for me and I spent more time to realize them. If I was doing this course again, I would read more resources about genetic.
- c) My personal goal in taking this course was to learn how to be a more efficient critical thinker and to learn new methods of critical thinking that I have not been exposed to yet. I wanted to be able to apply new methods of critical thinking to my studies and my future career. I believe I learned some new ways of thinking, but I probably will not use them in my future. I prefer the styles of thinking that I already knew and that I have learned efficiently with. If I were to do this course again, I'd pick a different topic more applicable to my career to use as my project. Then, maybe I would have a learning experience that was new for me and that I'd want to continue to use in the future. My major personal obstacle to learning in this course was time restrictions. I could not apply all of my knowledge and full effort and thinking processes to this course while keeping up with my other courses and job.
- d) I was interested in learning new ways to convince audience of an idea. I improved a lot! I'll improve my thinking more Learn how to write like professionals ( writing that stimulates thinking)
- e) "-Learn new approach to science. -Yes, I learned how to open my mind to new ideas and concepts -I would choose another topic, I would make more questions instead of trying to find a final answer -how to engage my audience and adapt themes"
- f) I honestly wasn't sure what my own personal goals were at the beginning of this course; I think I was hoping to develop a way of problem-solving which would assist me in doing case studies for med school, but looking back on it now, I realize that the expectations I had for the class weren't what the class was about, which isn't a bad thing. I definitely gained a new way of thinking and learned a lot about thinking critically, especially when it comes down to taking in multiple perspectives. I would've looked at the syllabus in much more detail ahead of time; I felt like I spent most of the semester trying to

sort out the syllabus to just complete the assignments as opposed to understanding what I should do with the assignments. Realizing my own weaknesses (and understanding that they're weaknesses) and trying to overcome them.

- g) My personal goal is to modify my scientific teaching methods in my career, Yes. I would more attach to the current framework in science teaching when I do the PBL project. I would like to go deeper in each theme but I need more time to polish my writing on each section.
- h) my personal goal was to learn how to think critically. I am on the middle of my thinking process. if I was going to do again, i would have take less classes. That would have give more time to prepare and review my writings.
- i) I stated in the initial assessment of myself that I had a broad based knowledge of many things, but desired a deeper knowledge about at least one thing. Through research, implementing the themes of critical thinking, and my implementing the chapter installments, I was able to achieve this! I miss the very first class due to confusion about when masters students would begin and thus, miss the opportunity to interview previous students. I also missed Peter's initial explanation of the course. It was an honest mistake but one that might have alleviated some initial confusion. A personal stumbling block for me was getting rid of the idea of "perfection" in my writing. I learned that the process involved writing, rewriting, listening to my peers and the professor, re-framing my thinking based on that input and going the process again until I could find a semblance of change.

**1. Self-evaluation (continued) What have you learned about what you have to do to make a course stimulating and productive (with respect to the format of this course: face-to-face, online, hybrid)?**

- a) The installments have to be done timely so dialogue is productive and the instructor can follow the line of the research and understand where we are headed... Also, it is important to connect the topics we learn about with other readings and knowledge to make analogies and critical connections to test understanding and contrast ideas... in a timely manner so we can get support from the instructor or peers.
- b) To communicate with instructor during the semester is so important. He was so helpful. Receiving his comments helped me to be more productive and engaged. Using different learning tools (blog, peer comment, instructor comment, feedback, presentation, reading, writing..) at the same time for one course is a good idea. I was a face-to-face student. And I would prefer being a student on campus if I was taking same course again.
- c) To make a course stimulating and productive, you need to have a clear slate and an open mind when coming into a classroom. I often could not learn and did not feel like participating to the most of my ability because I was so stressed out about other classes, upcoming exams, etc. If I was able to take this course on its own or with just one or two other courses, I believe my learning experience would have been much different.
- d) Face to face
- e) discussions, listening to other students ideas definitely face-to-face, short trips, such as to the museum
- f) Encouraging discussion is important, as is having a lot supplementary materials that assist in conveying a certain topic. In regards to the environment of the class, this is the first time I've ever participated in a hybrid class, and it didn't feel any different than a face-to-face class. If anything, having people from such different backgrounds brings in such new perspective and information that adds value to the course and the material that we learn.
- g) Everyone will have to respect and appreciate the ideas coming from different perspectives, and try to make them useful to their own topic.
- h) I learned that i should read a lot, be free to write what i think, be free to think.

- i) The face-to-face in my opinion is more dynamic but part of being a good teacher and learning in letting in other perspectives. I gained a great deal of hearing the online voices and it excited me to hear their ideas and criticisms. Giving everyone a voice is better than hearing just the teacher "preach" about a topic.

**2. General Evaluation of course What was special about this course (+positive and/or -negative)? How did the course meet or not meet your expectations? In what ways do you think this course could be improved?**

- a) Very good class, excellent topics for critical thinking, interesting, varied and motivating. Very good structure. I will just make sure if I were the instructor that instructions for students are well understood and if not, I will have them interact with each other to support understanding and make sure everybody is on the right track from the start. For some weird reason it seems difficult to follow the syllabus although it is an improvement from previous courses (same instructor) ... On blog, I will try to find a way of engaging students with each other to read their postings... This time I had the feeling that we were not sharing as much on each others' topics...
- b) Its content and instruction style were good. Page's language of course could be clearer. (<http://crcrth645.wikispaces.umb.edu/Syllabus>) It is a good thing that the course's expectations were clear but I'm writing about its language. When I checked Harvard's pages, their language level is less complex to understand. I would take this course again. My suggestion to be improved is less time for lecture of next session and more time for examining our peers' installments. (different pairs in each session)
- c) I liked the small classroom and personal relationships formed in this class. I have never been in a discussion based class this small. This course fulfilled my expectations. I do not have any recommendations for improvement.
- d) The course teaches totally different way of thinking and reading things. It is unlike any other class I have taken. It makes me think and go between lines while reading. I expected to be harder because it was confusing in the beginning, but it wasn't about difficulty, it was more about changing the way we learn things. The course cannot be improve more, I think it should contain more field trips, or forum where students apply what they learn.
- e) I thought it was much more work that I have anticipated, even with the professor explaining how much we had to work in the first day of class. I was not expecting to have to do a revision for every installment, I though we had to do ONLY if was necessary, and it would not be frequent. I did open my mind to new perspectives, but in I different way I thought it first
- f) Positive: Definitely the diversity and how small the class was. I think my expectations came from a lack of understanding what the course was exactly. I wish there was a better description of it in the Honors syllabus so I could gain a better understanding of how to approach the course. Maybe a different room...like one of the conference rooms in the campus center with the TV to put online people there. Having a more in-depth syllabus quiz and encouraging students to understand the syllabus better prior to actually starting the class. Also, getting an actual grade occasionally would be helpful, too, so we know if we're meeting the professor's standards adequately or not.
- g) The curriculum setting is different, which is good. Students always have chances to make process on critical thinking. Since the need of each student is different, if there were more one on one learning time would be great.
- h) The positive thing about this class was the small number of students. For the first time i was able to know by heart the names of my classmates ; and also the ability of the professor to always want to help.

The negative thing is that this class required a lot of time that i didn't have. I think if the installment were made every two week instead of every week, it will be better.

- i) Presenting a different concept of what is critical thinking was quite unique. The professor gave us the freedom to be autonomous - like one of the five themes. This along with "horizontal community" was a great positive. A negative was the "feeling of being lost" the entire class. In Peter's reflection about the semester, he mentioned that he would try to present the intersecting themes in the first class. A preview would be better than nothing.

**2. General evaluation (continued) In what ways did your attitude to doing the course change through the semester? How does it compare with other graduate courses? What would be your overall recommendation to prospective students?**

- a) I started with doubts because I was not particularly interested in Biology and I am leaving wanting to do it again so I can understand more about the specifics on genetics, DNA, complexity, epigenetics, etc. All courses from this instructor end up been motivating, challenging and very satisfying at the end for all the effort and learning one gets out of the semester... I would recommend any honor undergrad or graduate student wanting to learn about research and critical thinking to take this course!
- b) At the beginning, I was anxious because it was my first semester and shared it with my instructor. He helped me. It made me feel better. My participation increased. His class environment was very warm. I recommend prospective students to take this course because Peter's perspective and his course gives an idea about whether CCT is.
- c) This course was a lot more challenging than what I had expected. The material was not complicated, but the readings had to be done very thoroughly for a full understanding, and I did not have time to go through them adequately. This is the first graduate course I have taken, so I cannot compare it to others. My recommendation to other students would be that they do not take this course if they already have a heavy course load. It is manageable with a heavy course load because Peter is very flexible, but you will not learn what Peter intends to teach about critical thinking.
- d) The course started to be clearer after the 5th meeting, but I have always think about it kind like a class that doesn't look like any other class. .... Take the class if you are willing to learn how to change your thoughts!!
- e) The method of teaching was completely different from a traditional graduate class, especially related to Biology, which usually we have scientific papers to discuss about. I had to keep thinking how to involve all possible questions and answers to the topic. To a prospective student I would recommend to not take many classes with this course, otherwise he would be overwhelmed having to research, write and revise all the installments. Especially science of higher level.
- f) I became frustrated extremely fast because I felt like I was always missing something. I should've done more to become less frustrated as opposed to pushing it aside (I wish I did do more), but towards the end of the course, when I finally thought I was getting the hang of it, I was disappointed because I wanted a few more classes to see if I really did understand it. I don't know how it compares because this is the first graduate course I've taken. Recommendation: Understand the syllabus ahead of time and absolutely do NOT let yourself get bogged down by frustration and confusion; see Professor Taylor right away because he is extremely helpful in clarifying things.
- g) I would recommend this course to prospective students since it will be helpful for their future study in my area. At the beginning I just focused on finishing the task instead of keeping thinking on my topic. Yet, the course pushed me out off my comfort zone and motivated me to keep doing critical thinking in my project.

- h) I was very frustrated at the beginning of this course. when this course is finishing i am feeling that i increased my critical thinking abilities. I would recommend to take this course but to make sure that they have more time for it. I have many other demanding courses.
- i) My attitude went from fear to uncertainty to acceptance and finally freedom. I have not taken any other graduate courses so I don't know. My overall recommendation is that depending on how best you learn and/or able to adapt the themes, the course work may take you forever or may take you a little time. Either way it was a time investment for me.

**3. Evaluation in relation to the course description Read the course description/goals below. Comment on how well the goals expressed in the syllabus were met. Make general and specific suggestions about how these could be better met.**

*Course Objectives:*

*Critical thinking about the diverse influences shaping the life sciences. Topics include evolution and natural selection; heredity, development and genetic determinism; biotechnology and reproductive interventions. We interpret episodes in science, past and present, in light of scientists' historical location, economic and political interests, use of language, and ideas about causality and responsibility. You address the course material on a number of levels: as an opportunity to learn the science and approaches to interpreting science; as models for working as an educator--construed broadly as stimulating greater citizen involvement in scientific debates; and as a basis for discussions about practices and philosophies of education and lifelong, collaborative learning. You undertake individual semester-long "learning/engaging" project in an area of the life sciences in their social context about which you are interested in engaging others in learning and critical thinking. Each week you adopt or adapt the themes and activities from the previous session to apply to your project area. This provides many tools and perspectives on self-directed research (and thus serves as a research seminar for honors students).*

- a) This course definately teaches specifics about influences shaping the life sciences like evolution, natural selection, heredity, etc without needing specific background in biology, with a complexity and intersecting processes lense and with a timeline approach taking into consideration past and present events surrounding the topics been studied and finally adapting/adopting them to apply them to our specific project area.
- b) As mentioned above, the course was successful in meeting its goals. It asked for us to adopt those topics into our project. While doing it, we discussed both past, present and future. Especially, the nature of idea part was a good tool to stimulate citizen involvement in scientific debates. We could see the differences of scientific approaches. Being free to choose our topic and manage our adaptation/adaptation process ourselves helped us to regulate our learning process.
- c) All of the topics described were discussed or read about at some point throughout the semester. I believe most of the goals were met. I did learn about critical thinking and played the role as an educator for my fellow students. I did not, though, do as much research as I could have. This, again, was related to time restrictions.
- d) The describtion was exactly as the class was found to be. I was thought a lot from different perspective and using different themes.
- e) All the goals were met throughout the semester.

- f) Reading the syllabus now...the class met exactly what the syllabus described. I don't think I fully understood what this description meant when I read this in the beginning of the year. I don't know how to describe this class to someone who hasn't been through it. Maybe in the description give a brief overview of what the assignments are so students can understand how heavily based in writing this class is (not that it's a bad thing or not expected, but this class is one of the most writing-intensive classes I've had in a while).
- g) Each week I adapt the themes and activities to my topic. This process enriched my understanding about the topic I chose, also make me think about how to use critical thinking as a tool in my future career.
- h) I was late for some of my installment but i think i am better in critical thinking that i was before. It will suggest to use one topic for two weeks so that students can have time to study and understand it better.
- i) Personally, the course description is quite accurate. However, adding a statement about the critical thinking process might be helpful. In Peter's paper, he says "we will move through uncertainty..our knowledge is destabilized, etc." I know we read this in the first class but I did not grasp this concept until mid-course when my knowledge was destabilized.

**4. Synthetic statement (1 or 2 paragraphs) Building on your comments from Qs 1-3, compose a synthetic statement (1 or 2 paragraphs) evaluating this course. (Imagine readers who might not be willing to wade through all the answers to Qs 1-3, but are willing to read more than simply the numerical averages of standard course evaluations.) Please make comments that help the instructor develop the course in the future and that enable some third party appreciate the course's strengths and weaknesses. Among other things you might comment on the overall content and progression of classes, the session activities, and the use of mentors to support the learning in the course.**

- a) This course is worth taking, not only for his interesting and challenging content but because of its interesting logistics that works well
- b) In this course, we had to adopt our topic into social context. We were free choosing the topic. When adopting the theme, we got benefit of regulating our learning process. Using different style of learning tools (blog, peer comment, instructor comment, feedback, presentation, reading, writing..) helped us to think critically. Our instructor was so helpful and his class environment was warm. He was good at his field. If you are interested in relating science and social life to each other, you can prefer this course. You can be familiar both historical/political cases and scientific concepts. Syllabus was so helpful but its language could be clearer. In Biology in Society course, I can formulate my thoughts to make them more logical and clear by reading my comments. To evaluate planning, monitoring, evaluation, feedback to peers, feedback from peers and feedback from teachers is so important at the end of the semester.
- c) This class was a lot more difficult than expected. It is more than just doing some readings and applying the reading to your topic. Often, I found that I had to really expand my thinking process to even be able to connect the reading to my project. The process does get easier as the semester moves along, but the work load does not decrease. It becomes apparent that you must to research, and there are new writings and revisions every week, which can become overwhelming. When you finally think you are caught up on readings and installments, you are struck with the realization that you still have revisions to do, as well as taking the time to read through other students' installments and comment on those. The readings themselves are also generally on the longer side, or if they are short they are still in depth readings that take some time to go through and truly understand. The best aspect of this course, though, Peter's flexibility and support, and other classmates' support a long the way. Also, it is apparent that Peter cares about every student's work. He writes very thorough comments on all of the work from every student. He is very helpful.

- d) The class uses different materials and many different ways in approaching topics. We did field trip, read papers, book, old and new publications. Above of that, the class teach the students to teach themselves and look for the information themselves instead of just getting the information processed by the instructor. The students had the opportunity to learn and make their own ideas.
- e) The course is very challenging. The process of Critical thinking is hard, because you have to think broad. We are used to receive a message and pass this to the writing form. In the critical thinking we have to analyze the information and think in other options before start writing. Also, you have to leave it open to new positions. It is hard to adapt the themes with your subject. Also, to engage the audience. There is a lot of writing and research involved. The syllabus mention that there is about 6.5 hours of work out of class, but I found myself spending much more than 6.5 hours per week, but, to do a good job, you spend almost 10hrs/week with the required readings for each class. Therefore, I believe it varies significantly among the students. It was a big commitment, and I would have taken less credits for this semester if I knew beforehand. I believe I would have done better in this class- and in other classes too. Although, I would still have taken it again. I actually would like to continue with a new topic.
- f) I think the most important thing to remember is to find a balance of doing what's good for you ("Do you" as a lot of people would say) but also improving yourself as the class progresses. Don't get stuck, ask for help, and remind yourself that the entire class is a learning process and you're SUPPOSED to be developing and changing, and change isn't a bad thing in this case. Understand the syllabus thoroughly in the beginning of the semester so you can focus on the quality of your work. You really do learn a lot, and you might not realize it until the end of the course.
- g) This course is teaching about the attitude to doing life science especially when it is closely related to the social issue. Students will see the history of certain big biological events from different perspectives. So they could be motivated to participate into the discussion to deal with the problems in different ways. Besides, during the course, students have plenty of opportunities to rise their questions and develop the answer with the peer students and the instructor. Each one will complete a problem based learning project during the whole semester. They adopt the thinking skills gained from each session to the project to modify their goal on certain topic.
- h) There is nothing good like test your thinking ability. This class was great in the way that it help me to see things differently. Critical thinking class needs a lot of work. Student needs more time for it.
- i) The process of critical thinking in society course is a personal journey that involves you, your ideas , your previous knowledge and how you will respond to a new way of thinking; of seeing the world. You should expect to evolve and grow if you allow yourself to surrender to the process. There is a saying in old Latin times about "kicking against the goads." It is a rural farming term that describes what a farmer does to oxen. A goad is a stick that the farmer would use to encourage an ox to move. However, the more the ox resisted the more the farmer poked him. In some ways the sooner you can allow yourself to surrender to the process, which include being uncertain about your ideas and yourself, the easier the process will become. Personally, my journey was fruitful and I found myself quite interested in continuing the critical thinking process and questioning "everything" in my life in general, way beyond the end of the class.

**I give permission for my response to Question 4 to be included anonymously in the compilation posted to the CCT wiki (and thus viewable to the public)**

- a) Yes
- b) Yes
- c) Yes

- d) No
- e) Yes
- f) Yes
- g) Yes
- h) No
- i) Yes

**Using the scale below, overall, how would you evaluate this course? [1. Very Poor, 2. Poor, 3. Average, 4. Good, 5. Excellent]**

(AVERAGE = 4.33)

- a) 5
- b) 5
- c) 3
- d) 4
- e) 5
- f) 4
- g) 4
- h) 4
- i) 5

**Using the scale below, overall, how would you evaluate this instructor? [1. Very Poor, 2. Poor, 3. Average, 4. Good, 5. Excellent]**

(AVERAGE = 4.78)

- a) 5
- b) 5
- c) 4
- d) 5
- e) 5
- f) 4
- g) 5
- h) 5
- i) 5