#### Course Evaluation, Critical and Creative Thinking, UMass Boston CRCRTH 649 Scientific & Political Change Peter Taylor Hybrid, 2016 Spring

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

### 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 wanted to learn about how politics and science interact now and throughout history. Not really, but I did learn that every science/politic issue is different and unique. I also learned about scientific organizations. I would ask more questions in class to get the information I need to feel confident about what Iam learning. Too much to do at once. No project I did felt "good" to me. I always felt like I was turning in a half-baked product, but I didn't know how to bake it fully.
- b) I wanted to get an idea of how the PBL process worked in an educational setting to see if it would be worthwhile for me to try and adapt for use. I also hoped to learn some things about science/the political process. I think that I did achieve those things. Doing the course again, I might have payed more attention to what my classmates were doing in terms of their blog posts as well as utilized the posting more for myself as well. Personally, time was an issue with this course.
- c) When I first signed up for the course, it was out of personal interest. I didn't have a strong goal or a particular thing I wanted to take from it. I wanted more of a connection go science due to my work and I love politics, so this seemed like a way in. The PBL format made me nervous and I considered dropping the class. I am glad that I didn't.
- d) My personal goal was to get through the class and hopefully learn something from the experience. I am not sure exactly what I learned but I do feel better equipped to investigate topics and quickly gain command of the basic issues.
- e) I wanted to think more about how to integrate science into society successfully, and I think it was a success. I thought about science and policy in ways I had never previously done. I think I would try to keep my personal life from affecting me so much if I took this course in the future.
- f) My personal goal was have an approach of the program and challenge myself in a graduate program. When I will take this course again, I will have an native speaker to edit my writing, and I will use the Proffesor Taylor form for develop my readings, I found that it is really useful. I think my biggest challenge is the language. Because it is my purpose learn academic English, I am putting all my efforts to follow my classmates.
- g) I was my own obstacles. I needed to be more organized and better at managing my time. I believe I still was able to learn and participate in the process but it could've been better if I had dedicated more time to the process.
- h) I was disappointed with myself in this class. I felt like I was never fully in tune with what was going on even though I really enjoyed the presentations of others and learned some really interesting concepts and techniques. I think if I was doing this class over, I would forget about trying to connect the class work with my classes that I teach or putting together units of work that could be adapted for my classes.
- i) My goals were simply to gain a greater understanding of the STS field. While everything I do in this program I do with an eye toward applying it in my education programs, for this course, understanding this field better was my main goal, and I certainly feel that I achieved that. If I were taking this course again, I think I would be simply a bit more adept at navigating through the PBL format and approach each of the projects a bit more efficiently. There were no great obstacles to my learning in the course, neither personal or course-based. Some unfamiliarity with PBL learning structure contributed to some inefficiency, but not much, really.

j) My personal goal in taking this course was to take a Junior Colloquium that coincided with my interest in becoming a future physician. This course was a great course to take for me because it opened my eyes to a great amount of the public health aspects of policy surrounding public health issues along with the growing technology around biomedical technology. My major personal obstacle was keeping up with the work load of a graduate student class while still an undergraduate student.

#### **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) I like coming to class and will do that as much as possible in the CCT program. I have to be ok with not feeling good about the course and what I'm learning. That's a bummer, but I spent too much time being agitated by the course when I could have been using that energy to engage more.
- b) I don't think I learned anything new from this one.
- c) I participated face-to-face. I am glad that I did so because I think it's a bit harder to participate online and pay attention during the course.
- d) I do not know that I learned anything about what I should or could do to make the course stimulating other than put effort into the individual PBLs.
- e) I learned to go with my gut with each PBL case. If I did, it often led me down roads I had not been to before!
- f) I have to follow each step. As soon as I lost one, I mess up and each step is built to go to the next.
- g) I have learned that it makes an online class more stimulating being able to see the other person you're speaking with. Unfortunately, being online with a camera on seems to interrupt communication. I think I need a new computer.
- h) I actually like the on-line format although it is sometimes difficult to read the faces and body language of your audience, especially when those on line switch their camera off. I know that I like to be able to connect with those who I am presenting to. I do however understand that the technical challenges sometimes mean that sound quality is better without video.
- i) For an online participant in the course, I enjoyed the high level of online research required. Also the constant encouragement to initiate contact with individuals in the field to supplement my research. I will certainly try to remember to apply these to future courses.
- j) In order to make a class stimulating and productive, I think its important to come prepared and be ready to participate and add to the class discussion.

## 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) Lots of different viewpoints. Good feeling for the vastness of the issue. I would have like more instruction to go along with the inquiry process. More scaffolding. More scaffolding and clarity. Focus one issue until understanding of it is complete. I'd rather feel like a semi-expert in one thing than a dilettante in 5 things.
- b) This course, with its four distinct cases, broke things into sections that also allowed us to investigate on our own. It showed me what a PBL course could be and how it might work. As discussed in the final class, some tweaking in terms of time allotted to the cases as well as to the structure and distribution of those cases might be best.
- c) This was my first time taking PBL and that made it stand out to me. Overall, PBL was very positive. It made me proud to be able to accomplish something in a short time and feel like I was making a genuine contribution. The course did meet my expectations in that I felt intellectually engaged and got to participate in a robust dialogue about science and public policy. Also felt like that a good group developed in the class and the conversations were productive. The course could be improved by making the PBLs something that is real and meaningful--something that will actually be used by or submitted to a particular group.

- d) I general I find that I spend a great deal of time trying to figure out what I am supposed to be doing rather than working on tasks.
- e) I sincerely enjoyed the PBL format. It is such a great way to learn, especially when it comes to the content of the course. It definitely met my expectations I didn't have any in particular though. I do think it would be better with 3 units instead of 4. Also, using Blackboard instead of Wiki would be a little easier.
- f) This course helped me to see 3 areas in different ways and mix together to have a overall idea about sciences, technology and policy. I think this course is really useful and the challenge for each student is use the tools in their field.
- g) I enjoyed the process of PBL. We each had te opportunity to explore different paths that interested us for 4 cases. Many people expressed not having enough time to work on a particular case. I would suggest reducing the number of cases to 3 instead of 4.
- h) I do like the PBL method although I would have appreciated being able to use that process to better develop a question I had about more familiar material. In a couple of my cases I tried to bend the ideas to make them fit but I felt they really were not that successful.
- i) The PBL format was new to me, and I thought it was certainly positive. I enjoyed the opportunity to research a variety of topics, and thought that the cases were focused, yet open-ended enough to allow me to follow my interests. I didn't have specific expectations other than those associated with my goals (above). The course met those. I don't know whether or not these would be improvements--in that I'm still fairly new to the PBL format (as a student) and I'm not sure these suggestions would work for other students: I would have liked to be able to work on at least one case with other students in the class (although I acknowledge the difficulties of this in a hybrid or online course). Also, I might have enjoyed having different timeframes in which to complete each case--maybe one that's very short to practice rapid research skills and one a bit longer to allow us to go a bit deeper. However, I realize that this inconsistency could be very offputting to other students.
- j) This course was different in anything I've taken because it involved a great amount of presentations. I also had never used the PBL basis of learning before. It was difficult for me at first to get used to the lack of guidance but that comes with being in a graduate school class. I liked that there was always a choice of what research you wanted to pursue for each PBL, there was never anything being forced onto the students.

# 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) It got more exhausted and negative as the course went on. PBLs began to feel like checking boxes, especially the revisions. Not good. Unless you have some experience with academic science and research, don't take the course.
- b) As I went on, I think I got more tired and/or distracted by the rest of my courseload/professional life. This was pretty comparable to my other courses, though probably more open than others in terms of personalizing the experience. It's an interesting class that presents a different educational experience.
- c) I became much more accepting of PBL as the semester went on. I was very hesitant about it at first, but I grew to understand it, appreciate its merits, and even like it to some extent at the end. Most of my other graduate courses (in another program) are formatted that everyone reads the same material before class, then there is a wide-ranging discussion of the issues raised during the class meeting. This format allows for the development of a shared understanding in a way that PBL does not. But PBL allows for a broader conversation. I'd recommend that other students be willing to take the plunge with PBL and participate in the course. I also recommend that people be comfortable in evaluating sources.
- d) This course was familiar as I have taken several other courses using similar formats. I would tell prospective students that there is a some work involved in just understanding how the class operates.
- e) I became more interested in the PBL format throughout the course, but more distracted by my personal life.

- f) My recommendation is follow each step, so that, they are not going to lose information or mess up.
- g) I looked forward to hearing people present and I became more confident about my presentations throughout the course.
- h) I don't think that my attitude changed during the course. I feel like I have much more to learn, I haven't really got the big picture of what I learned this semester and that is different to other classes. I do think that in its current format an understanding of some science issues is an added advantage, it is a lot to learn the process at the same time as trying to work with unfamiliar content.
- i) I don't know that my attitude changed that much. During the course, I did become more comfortable with the PBL format and more conversant with the STS field. I think it compares very well to other courses. I much prefer the PBL format to that of the lecture. I also find that discussion threads in other online courses can become tedious if not carefully managed, so I appreciated their limited use in this course. I would certainly recommend this course to other students with the warning that the self-directed nature of it may be unsettling at times. They need to be able to work through that feeling without becoming too anxious as it is part of the process and be sure to contact the instructor for assistance before it becomes overwhelming.
- j) I have never taken another graduate course but I became more and more interested in the course material as the semester went on. For prospective students I would recommend making sure you knew every week what was due by checking the wiki.

# 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.

LEARNING OBJECTIVES: By the end of the semester, you will have: learned about analyses of the political influences on the development of science and technology, and, reciprocally, of influences of such developments on political processes and possibilities; re-engaged with yourselves as avid learners and inquirers; and organized resources that prepare you to teach and engage students and members of the relevant communities to participate in questioning and shaping the direction of scientific and social changes.

- a) Instruction on one issue and full knowledge gained about it before moving into the unknown. For example. Precisely where we (society, scientific research, policy) regarding one specific topic, like alternatie energy, should be presented at first. A full picture of the history and what's happening now in one area of science and politics should be delivered in full to the students in the first 4 weeks of the course. Let them know what's happening in one area before they are sent to investigate others. Feedback on how relevant what I'm turning in is to the larger field. Guided research at the beginning so I know if I'm doing it right or not.
- b) Overall, I think that the goals were well met. One idea is that the emphasis on politics be emphasized as a common thread, possible through a recurring question or component to the cases.
- c) 1. The reflexive nature of science and public policy was clearly explored and that's one of the takeaways that I have from this class. 2. One of the principle benefits of the PBL method is that I was able to see myself as an avid learner/inquirer. Doing research projects in other classes hasn't given me the same sense of excitement or interest. 3. This class encouraged me to participate in social and political discourse.
- d) For me the emphases was less on understanding the political influences on science and more on trying to understand the complexities of the different issues I investigated. I am always involved as an avid learner. I do have some thoughts about how I would engage students on this topic. Perhaps we could have looked at examples of political influences that affected science in big and important ways. I am not sure we all found issues that presented strong examples of this.
- e) -I would have liked a little more lecture regarding the first point above -I think having one reading a week would have allowed me to become a better reader. I would have digested the material better if I wasn't as concerned about reading everything. -I w

- f) In this course students can get a better sense of the importance of sciences and technology in a policy making. They will get tools that help them to develop strategies to engage with politics, and engage others at the same time.
- g) I believe the goals were met. I would emphasize that the learning is more self-driven.
- h) I felt that the course meets it goals but the emphasis is definitely on science issues rather than social change. i also wonder about the breadth of the term, science. I feel like I am an avid learner however I do feel like the class got almost beyond me. I have certainly gathered a vast number of resources, many of them I will not use but I will (and have already) pass on to colleagues.
- i) I think that the course meets the first two goals admirably. I can't think of how I would improve it in these areas. The third goal was certainly addressed in the last case. I don't know how it could be addressed more thoroughly unless more of the cases had an educational focus, but that might have detracted from the diversity of topics which I thought was advantageous. For myself as an educator, the third goal seems a bit ambitious. Perhaps I am reading more into it. Exploring the educational application for one case certainly did help me to organize relevant resources. I just wouldn't consider myself fully prepared in this areas. But since I was new to both the field of STS and the PBL format, this seems perfectly appropriate for only one course.
- j) I think that all of these goals were met with the 4 PBLs. I think that this method of learning was met with each of the different units, specifically the last unit allowed us to meet the last bullet point listed above.

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 very difficult. It is like an endless Google search with deadlines and products due. If you take this course, be very ok with not knowing if you're doing it right. Just do it. Pressing forward without getting wrapped up in what you think you aren't learning is the best way to get through it and actually get the most from it. A strength of the course is breadth, not depth, so be open to just grazing the surface of issues. Don't get overwhelmed by mountains of data, just pick something and go with it. You will not be able to paint a full pictue of the issue with the time you have, so just keep going and don't get discouraged. Another strength of the course is the instructor. Try to get him to talk as much as you can.
- b) This course was my first experience with a Problem Based Learning (PBL) type class. The scenarios given were interesting, though sometimes too vague for me to have a firm idea of what to do or what direction to go in. The openness allowed for great variety in angles taken by my fellow students, but it also added uncertainty and stress. That being said, Peter was great at helping guide us as well as recommending sources for us to research.
- c) This class was a new experience for me in a few ways. I am a doctoral student in a different program, so this subject was new to me. I was interested and looking forward to it, but I didn't have much of a background. And I had never participated in a PBL before. I was nervous about doing the PBL but I decided to stick with it and I'm glad I did. Overall I felt that participating gave me the ability to focus as a learner, experience the material in a new way, and made the course a bit more different or fun than it would have otherwise been. It is definitely worth it to stick through the discomfort of the PBL method-the learning you get in the end is worth it. Peter is a great instructor and the other students become learner-teachers as well. I know it sounds like corny education pedagogy, but it really did enhance the learning in the class. One of the key benefits of the course was the ability to talk through scientific and political issues with other people in a robust way. This was a huge value add and worth the price of admission on its own.

- d) The strength of this course is in professor Taylor's ability to engage students and offer insightful, thoughtful comments that provide an expansive view of the subject. Some of the process can feel vague and unstructured but overall it is worth the effort.
- e) While the readings of the course are very informative and important, the PBL units and personal inquiries are what give the course its body. The units forced me to think of things differently, and really delve into science and policy in ways I had not done before. The final PBL unit has an openness that allows you to pursue issues that you may have noticed throughout the semester. I do have to say that even as a very computer literate person, the wiki is hard to follow at times. There are so many different side bars and links to follow, that sometimes it is hard to remember where to find what you need.
- f) I
- g) This course was different from other courses in the sense that my learning was self-driven. I learned about and researched areas that interested me and shared them with my classmates. It was equally interesting to hear the presentations of fellow classmates and the directions they took their research. This format helped me gain a greater understanding not only of my own interest but also of what others were interested in.
- h) The PBL method of investigating a topic enables students to delve far more deeply and with greater breadth that other forms of learning so I would highly recommend it from that point of view. However if you don't have a keen interest in science issues then this course may end up being overwhelming. The necessity of having to learn bothe the method and the content is A LOT.
- i) This course is challenging and exciting. I found the PBL format to be highly engaging and a great way to assimilate a field of research (STS) which was fairly new to me. It was also unsettling, though I'm not sure that this is a bad thing. This feeling comes from beginning at a starting point over and over (at the beginning of each project) with a wide world of options and having to trust that I can focus enough to complete the product. I found that doing this multiple times--each time easily finding an area of great personal interest--greatly increased my enthusiasm and motivation to understand and apply this field. Because of the self-directed nature of the format, it is especially important to contact the instructor quickly with problems as they arise. In addition to providing guidance, the instructor provided the opportunity to contact researchers in the field which was daunting at first, but ultimately rewarding.
- j) In order to make a class stimulating and productive, I think its important to come prepared and be ready to participate and add to the class discussion. I think that all of these goals were met with the 4 PBLs. I think that this method of learning was met with each of the different units, specifically the last unit allowed us to meet the last bullet point listed above. I have never taken another graduate course but I became more and more interested in the course material as the semester went on. For prospective students I would recommend making sure you knew every week what was due by checking the wiki.

#### 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) No
- g) Yes
- h) Yes
- i) Yes
- j) No

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

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

#### Using the scale below, overall, how would you evaluate this instructor?

1. Very Poor 2. Poor 3. Average 4. Good 5. Excellent

a) 5

b) 5

c) 5

d) 5

e) 5

f) 5

g) 5 h) 5

i) 5

j) 4