

Individual Instructor /Course Report for 202109-NR-Crosslisted(202109-CS295B-95066-Systems for KnowledgeDiscovery,202109-CS395B-95085-Systems for KnowledgeDiscovery) (Emma Tosch)

Project Title: **2021 Fall Course Evaluation**

Course Audience: **10**
Responses Received: **7**
Response Ratio: **70.0%**

Subject Details

Course Department

Computer Science

Report Comments

Introduction

This report contains the results gathered during the online course-instructor evaluations. Students were invited to share their feedback on the teaching and the course material, ultimately to help improve the overall quality of education at our institution. It is now our collective duty to turn this insight into action.

As part of this mission, all instructors receive an Individual Report for developmental purposes: to identify strengths and areas for improvement in regard to their teaching methods. Content includes graphs, tables, frequencies, and statistics, as well as the full output of student comments for open-ended questions.

We urge every faculty member to diligently examine all the analysis, to seek to understand it, to take note of patterns, to draw logical conclusions, and to take it upon yourself to act on the valuable feedback your students have taken the time to provide.

Guidelines

To aid in interpreting the results, please consider the three (3) following recommendations:

1. These evaluations stem from student perception, which implies that the validity increases proportionally with the number of occurrences. Your improvement plan should be based on the most representative results and less on outlying responses.
2. Upon getting a general sense of direction as to what requires improvement, it is important to drill down to the related questions and consider them as distinct items. They were evaluated as such by students and will indicate tangible steps/actions to incorporate into your developmental process.
3. In general high scores (4+) can be interpreted as a student consensus indicating a strength. On the other hand, low scores (2-) should be considered as an area that requires immediate developmental focus according to student feedback.

Values and legends

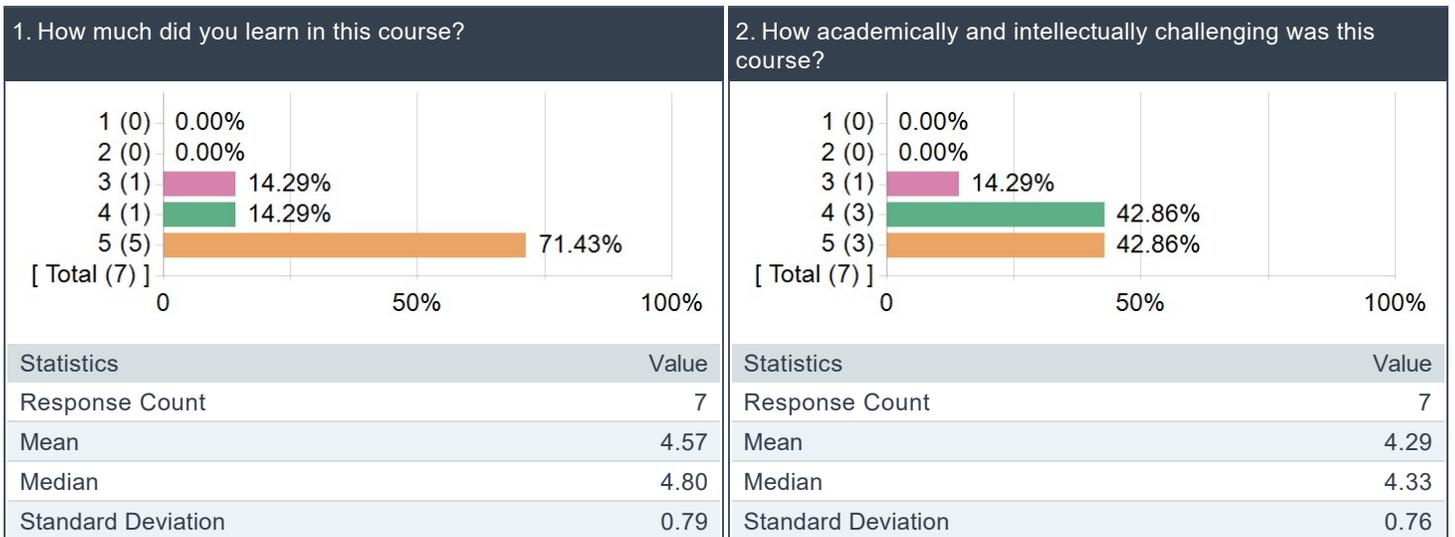
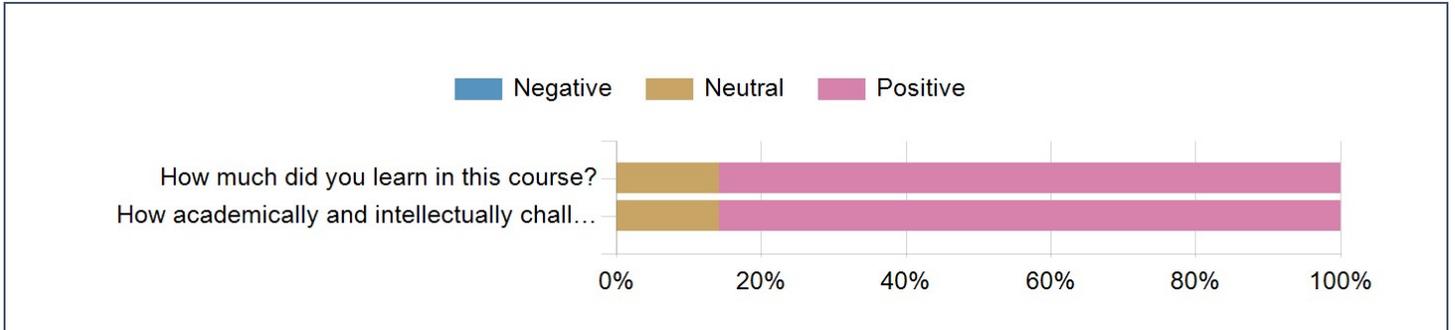
Values are represented on a 1 – 5 scale where 1 is the lowest value and 5 is the highest value. The language provided by students for this scale is not indicated for each chart and graph below to preserve space and formatting. If you would like to view the full course evaluation questions with scale, please contact your department administrator for a copy.

Where “Median” is noted as a statistic, the value is the Interpolated Median. (See <http://www.weekscomputing.com/webhelp/hs520.htm> for definition of Interpolated Median.)

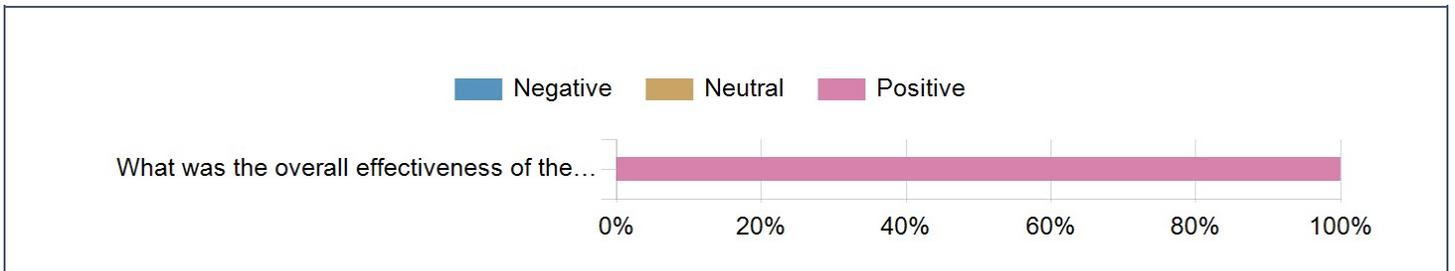
*** Please consider the environment before printing this report. ***

Creation Date: **Tuesday, March 22, 2022**

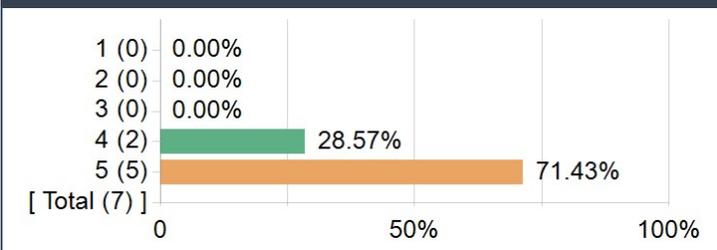
Course Questions



Instructor Questions



What was the overall effectiveness of the instructor?



Statistics	Value
Response Count	7
Mean	4.71
Median	4.80
Standard Deviation	0.49

Open-Ended Feedback

Please comment on the value of the laboratory experience here and/or suggestions for improvement (e.g., facilities, organization, handouts, integration with lecture topics, etc.).

Comments
Everything felt really useful and interesting. I don't know that the topics or materials should be changed at all. It is a very unique course, I hope it gets taught again so others can experience it.
It was nice to be made to read papers on a regular basis, and practice presenting stuff.
The paper reviews and class discussions were the most valuable part of the course for me. Reading and reviewing papers were a bit challenging for me at the beginning probably due to my lack of experience in this aspect. The fact earlier papers were PL-based was a bit confusing but I was able to catch up after reading a couple of papers.
As a relative newcomer to research, the course has given me a great sense of how to approach research in general.
This course did not have a lab component.
I think that the workload for this course was very effective.

Please comment on the effectiveness of the teaching assistant support here and/or suggestions for improvement (e.g., accessibility, quality of help, etc.).

Comments
There was no teaching assistant as far as I was aware.
The instructor was always available and supportive.
There was not a TA for this course.
I did not work with any TAs

Please elaborate on any aspects of the instructor or course that work well or need improvement (e.g., organization, preparation, content, textbook, delivery, homework, quizzes/exams, assessment, responsiveness to student level, ability to answer questions, bias, etc.).

Comments
The course materials, topic, and professor were great. I absolutely loved this class. These comments are meant only to help improve the course in the future, not to be critical. Everything that I would suggest be changed about this course has to do with how the time was structured.
The class sessions were not long enough at all. It is hard to foster a good discussion when there is no time available to have it in. The course needs to run longer each day or it needs to cover less material each day. The time slot simply does not fit. This is more of an administrative issue though.

Comments

Following from that point, I think it would have been possibly beneficial to cover less material and less papers. Reading 20+ papers in a semester is pretty taxing despite some of them being simple. In other courses I've taken that had a paper reading/presenting component like this we did maybe 10–12 total, which averaged out to about one paper per week. Each student's presentation had an entire class session so they generally had 40min to present and another 20–30+ to discuss. This allowed us to dive deeper into each paper and allowed more time for discussion/presentation of the materials and consequently more understanding of tough papers.

In contrast, everything in this course felt rushed with no time to process or even really discuss many of the tougher papers we were reading. We skimmed through a lot of material and ground but didn't have time to let it breathe and sufficiently process it before moving on. The same points about systems for knowledge discovery could definitely be touched on with fewer papers.

The material itself is great, I wouldn't change any of it. All this is only to suggest tweaking the rate at which you move through the material and the presentations.

My recommendation is that the instructor be more strict about the deadlines for paper reviews as many students turn to not submit on time (including me sometimes), probably because there are no clear consequences. Apart from that, the course was great and I wouldn't change anything else.

There is nothing I would change about the way the course was presented.

The teaching strategies were really good, which kept us engaged throughout the semester. We read and reviewed more than 26 research articles, had interesting class lessons and projects to be done.

This course was one of my favorite courses I've taken in the CS department here so far. The format of the course as a methods course was very helpful and I wish I'd been able to take it earlier in my program. I believe this course, or a similarly designed methods course, should be required for CS PhD students. I think the course content, specifically the systems focus, was successfully able to bridge the wide range of research areas present in our department and this course. I thought the course was very well taught, especially considering that the breadth of the subject matter covered would exceed the bounds of any professor's specialization. I thought the lectures were informative and interesting and the discussions generative and generally managed well. I found Professor Tosch to be incredibly responsive to student questions and concerns, on many occasions going out of her way to provide answers to students' questions about portions of the course content from areas of CS outside of her specialty.

My main complaint about the course would be that I felt the paper reviews ended up being fairly redundant with student presentations on those papers. As reviewing papers and presenting research are both crucial activities of the actual process of academic research in computer science, I was happy that the course workload was largely focused on these activities and generally found the quantity of work required for this course to be very reasonable. However, I believe that the assignments felt more burdensome than the workload actually was due to the fact that the most time-consuming portion of the paper review was typically summarizing the paper, which usually overlapped to a very large degree with the content of the presentation the next day. However, I also do not believe there is really a simple way to fix this issue. While I, and some other students, did try to incorporate some additional perspective or content into the paper presentation, I do not think there really was a way to prevent the presentations from generally being simply summaries of the paper presented, especially considering undergraduate students are likely less accustomed to reading and analyzing research papers. I also do believe summarizing the paper did need to be a part of the paper review process as this is in fact a part of writing reviews for all actual CS conferences as far as I am aware.

The only solution I could really think of would have been to just not do the reviews for all the presented papers. I think we could have done the reviews as a separate part of the course, writing a smaller number of them and doing evaluative reviews, as you would for an actual conference, rather than focused on understanding the papers' methods. I think this approach, coupled with more extensive feedback on the writing of the review, would provide helpful educational experience on reviewing. I did definitely appreciate that this course encouraged an approach to reading papers that was not about just trying to pick out all of their flaws, but as writing evaluative reviews is a part of research practice I think it would have been a helpful activity. I think for a methods course, having students write down the research questions, methods, and evaluation techniques for each paper we read actually did make a lot of sense and could definitely still be part of a future version of the course, but I think making a distinction between this analysis and actually writing a review and not requiring a summary of the paper (which would already overlap to some extent with this analysis) would make writing some methods analysis for each paper to overlap less with the paper presentations. I believe there are additional methods components it would be useful to ask students to identify (rather than writing a summary) such as the reproducibility of the paper, the ethical considerations taken, or the computational resources used.

Lastly, though I think the content of the presentations will unavoidably largely be summary, I think they could have potentially played a slightly better role in the course. I want to first offer a disclaimer that the organization, running and assessment of presentations in this course was handled as well as, if not better than, every other CS course I have taken at UVM. However, as anyone doing CS research in any almost context will at times have to present slides on their research, I think that, although this is not a science communication course, it would be reasonable for a methods course to take a particularly rigorous approach to presenting. I appreciated the higher volume of presentations in this course (compared to other CS courses) which I think was a step in the right direction. I do think, though, that more robust feedback on the presentations (like on narrative structure, amount of detail to include,

Comments

use of figures), especially at the beginning of the semester, would have been helpful. This is a more minor complaint though, as I think the sort of feedback I'm suggesting would fall under the domain of science communication, which is a different area of expertise from the rest of the methods content of this course. A slightly more significant issue with the paper presentations was that, as a result of the redundant summarizing work noted above, most of the questions students seemed to have at the end of paper presentations were not really answerable by the presenting student and had to be addressed by the instructor instead. One simple fix I can think of to allow students more experience answering questions at the end of the presentation would be to require students to mention, at the end of their presentation, some more recent works which cite the presented paper (perhaps with the instructor offering a couple recommendations to undergrads). This fix is only simple in retrospect, as many of the questions students had over the course of the semester seemed to be on the direction of future work following the presented paper, and would've been difficult to anticipate before offering the course. As implied by the disclaimer in the second sentence, the above feedback on presentations is not intended as a complaint but instead constructive suggestions for a future version of this course.

The course was overall informative, interesting, and instructive. I found the majority of the topics covered and articles assigned to be relevant and informative for the course. I liked how we were given a background on some of the social and technical aspects of the articles and systems before reading them. I also found that the guest speakers enhanced the course as they brought in an outside perspective to topics the instructor was not knowledgeable in. I think the course could have benefited from longer discussion periods and longer time spent on some topics as some topics were too complicated to fully understand in one class period.

I think that the class was well organized and had a good intensity level!