

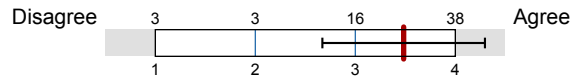


CLUSTER Course Survey
Evaluation of Instruction Program Report
 23F: CLUSTER 70A LEC 1: COSMOS AND LIFE
 No. of responses = 86
 Enrollment = 260
 Response Rate = 33.08%

1. Course Objectives and Format:

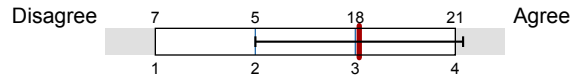
1.1)	The purpose of this cluster course was clear to me.	Disagree	3	13	32	38	Agree	n=86 av.=3.22 md=3 dev.=0.83
1.2)	The major themes that underlie this cluster course were clear to me.	Disagree	2	15	29	40	Agree	n=86 av.=3.24 md=3 dev.=0.83
1.3)	Lectures were well-prepared and organized.	Disagree	2	10	30	43	Agree	n=85 av.=3.34 md=4 dev.=0.78
1.4)	Lectures by different faculty were well-connected to one another.	Disagree	4	13	32	37	Agree	n=86 av.=3.19 md=3 dev.=0.86
1.5)	Lecture material was presented at a manageable pace.	Disagree	13	23	29	21	Agree	n=86 av.=2.67 md=3 dev.=1.01
1.6)	Discussion sections/labs were well-prepared and organized.	Disagree	7	12	37	28	Agree	n=84 av.=3.02 md=3 dev.=0.9
1.7)	Discussion sections/labs reinforced material presented during the lectures.	Disagree	26	29	15	16	Agree	n=86 av.=2.24 md=2 dev.=1.08
1.8)	Guest speakers provided information that furthered the overall objectives of the course.	Disagree	5	8	14	14	Agree	n=41 av.=2.9 md=3 dev.=1.02 ab.=45
1.9)	Cluster instructors made effective use of instructional technology.	Disagree	3	10	28	41	Agree	n=82 av.=3.3 md=3.5 dev.=0.83 ab.=3

1.10) Extracurricular activities (field trips, film nights, social events) were well-organized.



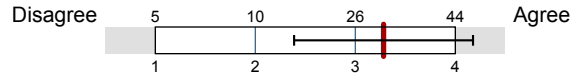
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av.=3.48
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dev.=0.81
ab.=24

1.11) Extracurricular activities provided me with valuable information and experiences.



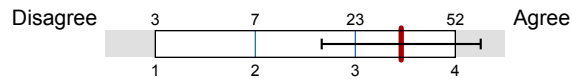
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1.12) Instructors encouraged questions and class discussions during class lectures.



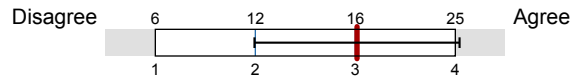
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md=4
dev.=0.89

1.13) Instructors made students feel welcome in seeking help in or outside of class.



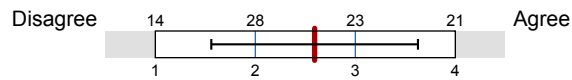
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dev.=0.8

1.14) The peer Inquiry Specialist contributed to my success in the Cluster.



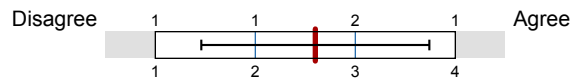
n=59
av.=3.02
md=3
dev.=1.03
ab.=27

1.15) I felt a greater sense of community among the students in this course than in my other courses.



n=86
av.=2.59
md=3
dev.=1.03

1.16) The winter quarter course content builds on material from the fall quarter (answer in winter quarter only).

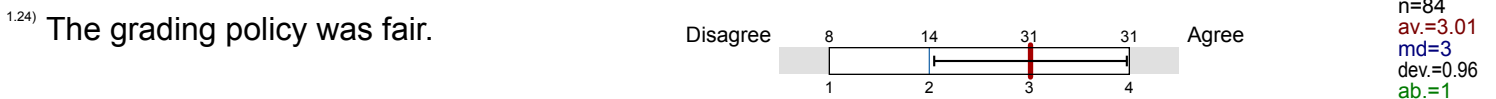
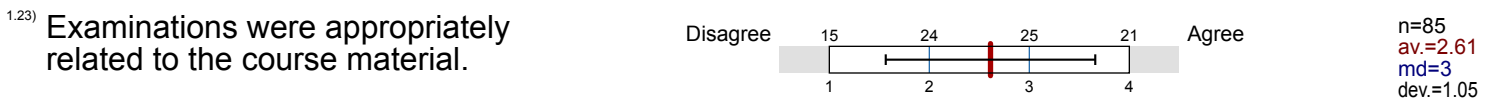
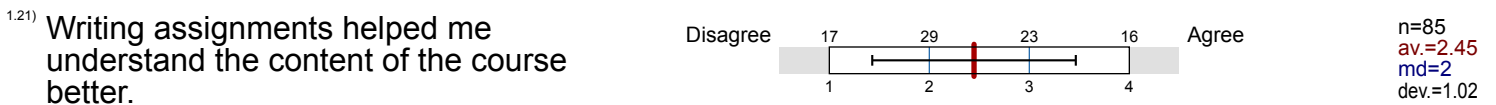
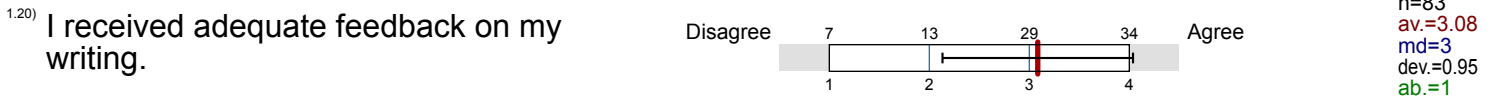
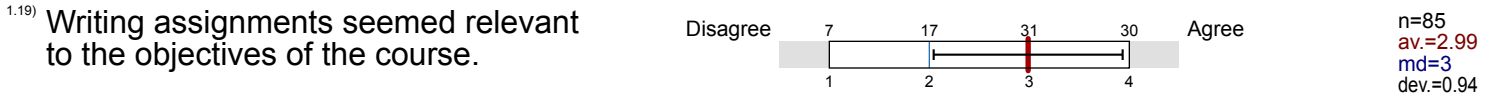
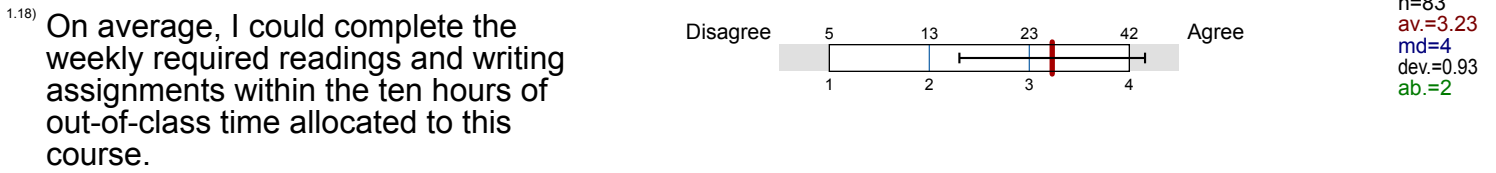


n=5
av.=2.6
md=3
dev.=1.14
ab.=72

1.17) The required readings were relevant to my learning.

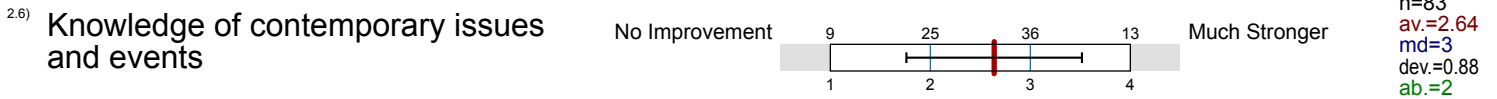
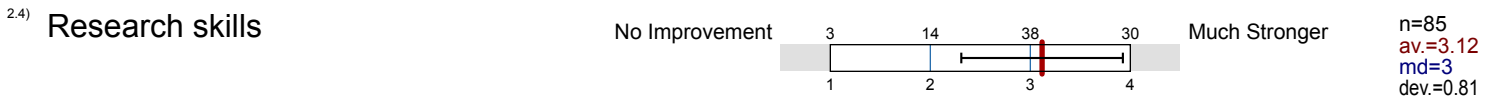


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ab.=1

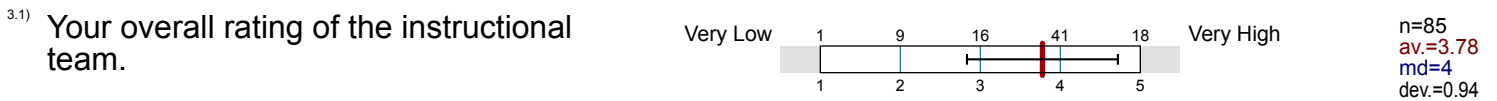


2. Skills:





3. Overall Rating:



4. Open Questions:

- 4.1) What did you find most interesting and/or valuable about your experience in this cluster course?
- Definitely my ability to take effective notes on a subject. My note-taking skills vastly improved.
 - Everything.
 - Having the opportunity to meet lauded astronomers that have made contributions to society.
 - I enjoy learning about astronomy. I think being able to learn from Professor Jewitt is a valuable experience and for that, I am grateful for this opportunity.
 - I enjoyed the labs done in class because they were fairly easy to follow and helped understand some processes.
 - I feel like I gained a lot content wise. I know a lot more about astronomy and physics than I previously did.
 - I felt like many of the topics the covered in this course were very interesting as someone who would likely not have taken an astronomy class otherwise.
 - I find that the cluster course includes a very engaging environment. The professors are always open to questions and actively engage with the students. It feels like a tight-knit community. I feel that creating this learning environment is vital to students' success.
 - I found Dr. Jewitt's lectures particularly engaging and exciting and I truly enjoyed attending class to hear him speak.
 - I found Dr. Jewitts lectures most engaging, his use of media to teach has helped me understand the concepts much more.
 - I found interesting the labs that required us to go outside and observe natural occurrences like the tides

and moon phases.

- I found it interesting learning in depth on parts of science that I would not have necessarily learned about out of my own volition.
- I found it valuable that I was able to learn research and analytical skills when writing my essay. I know this skill will help me for the rest of life.
- I found most valuable were the people in the course since everyone was willing to help each other out.
- I found the actual labs and hands-on experiments very valuable as it connected well with the course content.
- I found the content to be most interesting and how deep we went into astronomy and understanding why things work the way they do.
- I found the help from the librarians most valuable to my research and writing skills.
- I found the library/research portions to be very useful. I also enjoy the material as it is very engaging and fun to learn about.
- I found the whole course very interesting and particularly enjoyed the lectures which help give me a broad understanding of the universe.
- I got a better understanding of the work of contemporary scientists and how science works in general. I learned to read and get a basic understanding of scientific papers.
- I have learned A LOT about the creation of the Earth and the universe. I have found the course material extremely interesting and I have enjoyed learning about space. I also find the instructors to be very knowledgeable and fascinating. I think the information about the universe and the Earth have been very valuable because it has changed my perspective to realize the perspective of space exploration and has also made me more conscious about the threats of climate change and asteroid impacts. This class has helped me grow my appreciation for our Earth and the universe.
- I have truly grown to appreciate the course material on a broad scale. I feel it is obvious that the professors have a great passion for this subject and are eager to share with the students, which makes it a pleasure to attend the class. The new perspective on the information has been so fascinating.
- I just loved how it was so many different topics and instructors, so if you did not like ones teachings style you did not have to struggle for long.
- I like that it was related to science and that it made you think of multiple subjects.
- I like the explorations of space and stars quite a bit. I did not know much about astronomy in the past, and it was extremely fun and interesting for me to learn about it.
- I liked getting to know my peers and forming a good relationship with my TA.
- I liked how in-depth the course material was. It made me consider things I hadn't thought about before.
- I love the professors and the people i've met in class, and I think it's a great way to take GE's.
- I mostly really enjoyed the formation of the universe lectures.
- I personally love astronomy and evolution so thus far the course has simply been extremely interesting to me. I love sitting through the lectures and learning about the topics each day.
- I really appreciate the effort that the professors and TAs put into making sure their students have the opportunity to ask questions and receive feedback. There are an extraordinary amount of office hours offered and all of my instructors always welcome my questions or even just a conversation about

something in their area of expertise.

- I really appreciate the experience and knowledge that the professors of the class have, it makes me feel like I'm really learning valuable information. They are able to explain concepts really well and make lectures entertaining.
- I really enjoyed Professor David Jewitt's lectures. He is a very funny and interesting person.
- I really enjoyed the Jewitt lectures. He is super engaging and fun to listen to. My discussion section is also a lot of fun. Though some of the labs are unrelated to the course material covered in lecture, they are still engaging.
- I think the effectiveness of the lecturers in conveying difficult scientific concepts in a way that is easy for me to understand was really valuable to me. I have always loved the pursuit of science and its conceptual ideas, despite being a humanities major, and I really appreciate being in an environment where I can learn about these concepts in a digestible way. I also like how hands-on the cluster is, with optional field trips that are provided to learn more about science and also with labs that require me to get outside of the classroom (such as sketching the Moon and going to Santa Monica to measure the waves).
- I think the material is interesting
- I thought that the lectures were interesting. I also made friends with the students because it was an interactive course.
- I thought that the writing paper was valuable to help me learn how to write in this scientific style, but it could have used more of a structure.
- I wrote one of my first college papers in this class. I think that was pretty valuable.
- I'm not sure
- I really liked all the different guest speakers I thought it was interesting learning from a variety of people.
- In this cluster course, I found it particularly interesting learning about Professor Jewitt's research on Pluto. He was my favorite instructor, as his findings and research relayed during class were interesting and fun to learn about.
- Jewitt literally founded the Kuiper Belt
- Learning how to interact with a TA when asking for help.
- Learning how to use the library and database resources.
- My experience in this cluster course has given me a newfound appreciation for astronomy. I'd never really had much interest in it before, but now I find it more interesting and appreciate the work more, albeit not enough to completely change my major.
- The content itself is fairly interesting and presented in a fun way sometimes
- The course content - I honestly feel so much more informed about the world and it has only been one quarter.
- The ideas taught in class was really interesting and I enjoyed learning about how the world around me works. It feels cool to be able to explain to someone how stars work or what's going on in our solar system.
- The impact that our professors have had on the study subject was most interesting to me. It was cool to be taught from such impactful scientists and hear about their contributions to the field at large.

- The likelihood of destruction from space.
- The most interesting thing about my experience in this cluster course is Jewitt making sense of astronomical discoveries discovered mostly by himself.
- The most valuable thing I took away from my experience in this cluster course was that I should not continue the course in the winter and spring quarters. The free response section of most of the quizzes were not related to the lecture and as a humanities person, I was not equipped with the skills or knowledge to solve them.
- The overall information presented in the class is very educational and was shown in an interesting way.
- The things I found most interesting about my experience in this cluster course were the experiments that we did throughout the quarter. They made me see certain things differently and made me think about things I hadn't thought about before.
- The way the instructors made something that previously seemed impossible to grasp so accessible was terrific. I found the content to be so interesting.
- This cluster course covers one of my greatest areas of academic passion: the origins of the universe. I found that despite my previous research in this field, the instructors had much to offer in terms of enhancing my knowledge and continuing my excitement about the topic. This cluster also created one of the most personal atmospheres of my courses. I felt connected to the professors, my TA and my classmates as well.
- What I found most interesting about my experience in this cluster course is the different amount of topics that were introduced. I not only needed to take the course as it would cover a great amount of my ge's, but I was also interested at the beginning of the world prior to knowing about the course. The fact that the course was not only interesting but also beneficial to me allowed me to have a better experience.
- What I found most interesting about my experience in this cluster course is the lectures. Each lecture were unique in their own way. Whether if that includes the material being taught, the way the instructor was teaching, or the questions being asked during lecture.
- What I found most interesting is the real-world applications this course can have.
- i found that section was the most interesting part because i was able to communicate with others about the course to make sure i was on the right track.
- n/a

4.2) What did you find most challenging about this class?

- A lot of assignments from previous weeks were all due sometime during week 10, which meant a lot of potential work that week.
- Concepts are not reinforced during discussions/labs/assignments and extraneous work must be done outside of class in order to adequately understand the lecture material.
- Definitely the quiz. They were really challenging and time consuming a lot of the time, especially when Dr. Jewitt provides hour long videos that do nothing to actually answer any of the quiz questions. I don't mind watching documentaries (I actually like them a lot) just not during the stress of trying to complete a quiz.
- General relativity was difficult to get a grasp of.
- I (and many other students) find the quizzes to be unrelated to the topics of the lecture. In class, we all agree that we understand the content and that we enjoy engaging with the content. However, on the

quizzes the math portions are simply unreasonable. This class was marketed as a STEM class for nonSTEM majors to broaden our horizons and knowledge about a different field. This idea is continued within lectures, especially when the professors will show a math equation and say that we "don't need to worry about it" because that isn't the focus of the class. These obscure equations will then appear on quizzes. This wouldn't be as big of an issue as it is if the professors would go through examples of how to solve and apply these equations instead of simply brushing over them. If you are to include them on the quiz, it only seems fair to provide practice problems students can use to approach the TAs with clarifying questions. Instead, they aren't even used in examples in lectures. This hasn't contributed to the knowledge of students; all it has done is make the quizzes unnecessarily hard and discourage student engagement.

- I did not appreciate the free response sections to the quiz that involved solving math/physics equations. We had absolutely no practice or worksheets to help us better understand the content for those questions, and they felt completely random.
- I felt that the quizzes often were somewhat unrelated to parts of the material covered in lecture and had a tendency to focus on very specific parts of the lecture which had not been covered fully. I felt that the weekly review questions did not truly prepare me for the quizzes.
- I found certain quizzes to be challenging, though they weren't impossible to complete. Other times, it would be difficult to complete lengthy reading assignments.
- I found it challenging that nothing was connected and there was not a clear outline for this course. The lectures between instructors were never on the same topic, the quizzes were not related to the lecture, and the discussion section seemed totally unrelated to the class.
- I found the FRQ tests to be challenging because the professors often said we do not need to use math in this class during lectures yet these tests were predominantly math-based.
- I found the difficulty of the assigned work to be most challenging, especially the bi-weekly quizzes and the literature review. I feel that there needs to be more resources to seek when it comes to the literature review (e.g., a detailed rubric stating what the graders are looking for).
- I found the paper most challenging since writing is hard for me.
- I found the quizzes a bit challenging because the questions allocated to study for the quizzes barely covered what was on the actual mcq.
- I found the quizzes most challenging because they were only vaguely based on what was covered in class, and they seemed to cover a much more advanced knowledge of the topics that we never broke down during class, neither in lecture nor discussion. In addition to struggling with taking the quizzes themselves, it wasn't easy to get support from the instructors in order to improve my grades on the quizzes. Early on, I asked for practice questions in order to improve on the FRQ portion of the quizzes, but the instructors at first refused to release any. And when the instructors finally allowed the release of some practice questions, they refused to release the actual answers, which in my opinion, would have helped us see if we were on the right track. This was especially frustrating because my TA just told us to get the answers from students that were in a different discussion section that somehow DID receive the answers to the practice questions. So, overall, the quizzes and the lack of support for improving on the quizzes made the class super frustrating.
- I found the quizzes most challenging since there were math problems that we hadn't been taught how to complete in the lecture.
- I found the quizzes the most challenging about this class.
- I found the reading most challenging in this class, where I would get confused about certain topics.
- I had other extracurricular obligations on Thursdays nights which is when the quiz opened. So I had to find some way to complete the quiz late at night Thursday or after section on Friday. Sometimes that

was difficult.

- I think that the final essay was the most difficult project of the class but we had a very long time and the progress was at a very good pace.
- I think that the quizzes are pretty hard. The math problems seem like they weren't taught during lectures or discussions, so they were especially hard. It is nice that there is a whole day to complete them.
- I think the disconnect between lecture and discussion was by far the most challenging and disappointing part of this class. Discussion feels like an entirely different class. They don't feel remotely the same. For lecture, I'm taking notes and learning about space and taking quizzes, and in discussion, I'm writing papers about frog castration. There really is no connection on the students' end. If I had a student shadow me, I don't think they would be able to determine that the discussion is for the lecture. It makes things really confusing logistically for the class and just isn't ideal. I wish there was more connection between the two parts of the class. This is by far the worst part of the class.
- I think the mathematics is most challenging for me and I think the writing assignment is somewhat unclear to me with the feedback I receive being somewhat unclear and unhelpful making me unsure of what to do
- I think the quizzes are the most challenging part because there isn't adequate preparation for them. Also, the quizzes (at least the first two) involved many mathematical concepts that weren't discussed fully during lecture or discussion. Some parts of the free response specifically were confusing and required me to apply very broad concepts touched upon during lecture in a very specific manner that was unexpected.
- I was challenged by how quickly we were introduced to more complex astrophysical concepts and some related physics equations, but once I got over this hump everything has been relatively straightforward, and everything I do not understand my instructors have been very willing to explain to me in office hours.
- Instructions are not clear sometimes
- Petiguras' quizzes had nothing to do with the lectures. Those quizzes were so damn hard for no reason. The profs also completely lie to you when they say there is no math in this course or that "you don't need to know this formula" All of the free response on the quizzes required a formula and you needed math and 80% of it was stuff that was never covered in lecture. And with the practice quizzes, why is it on topics that have absolutely nothing to do with the actual quizzes?? Jewitts' quizzes are way more doable than Petiguras'. IT'S A GE CLASS!! CALM DOWN
- Pressure on grading, mainly for the quizzes - they did not seem easily compatible with course content, which led to stress over grades.
At times, some labs (such as the moon lab) seemed too extensive compared to the knowledge/relevance I gained from them.
- Since the class is a 6-unit course, the workload is challenging and requires a lot of time commitment to finish them on time.
- Some of the lab assignments in this course posed a bit of a tedious challenge, requiring students to go to Santa Monica Pier to observe waves and asking us to draw pictures of the moon by hand 10 nights in November. Although these lab assignments did connect with the major themes and topics of the course, the challenges they generated seemed unnecessary given their purpose. We could have easily used digital simulations to achieve the same learnings, without necessitating travel arrangements or relying on ideal weather conditions.
- Sometimes it felt like the quizzes had material that was very briefly discussed in lecture, but not in a lot of detail. As a result, sometimes the quizzes were difficult because of this seemingly lack of emphasis on certain topics that later appeared on quizzes.

- Tests, some answers to questions were ones that were barely mentioned in class and not on slide presentations (i.e. how long it would take to count all the stars in the Milky Way. The professor said the answer was 30 thousand years in class, but it was not on the slide, so you had to re-listen to the lecture to get the right answer).
- The amount of busy work is kind of annoying. Between reading assignments that don't contribute anything related to lecture and busywork questions on labs that are unnecessary, the amount of word vomit required is a bit much.
- The amount of different information we have to know.
- The amount of work we got piled on us specially at the end of the quarter.
- The content is very dense and with the fast pacing it is difficult to retain and fully grasp contents.
- The content. It's a lot to understand, but the professors make it easier than I would've thought it would be.
- The discussion section seemed almost irrelevant to the information of lectures. Specifically, the content in lecture was rarely reinforced in discussion, rather discussion labs covered a new loosely related topic. Furthermore, the biweekly quizzes, especially the free response, contained information beyond what was taught in lecture and were extremely difficult without outside resources.
- The equations were sometimes challenging when it came to quizzes.
- The examinations and the disconnectedness between the discussions and lectures. I felt the biweekly quizzes were extremely difficult and hard to predict. They were also graded fairly slowly so I could not refer back to previous feedback to improve. It didn't feel like a reflection of what was covered during lecture. Furthermore, the fact that the discussions and lectures are not directly relevant to each other made the course feel like two full courses as opposed to one.
- The first part of the lecture was before the transition to another instructor. It felt like the material we covered didn't prepare us for the quiz and that there weren't many practice questions.
- The first two written quizzes require mathematical skills that were not explained in class. Lectures would generally introduce that there is a formula to calculate something but never showed us how to do it. These skills were then the main part of the quiz and I found that extremely challenging and unfair.
- The free response section of the quizzes (at least most of them) were not related to lecture material.
- The lectures and the quizzes didn't connect well.
- The lectures, discussions and quizzes all cover different content. This is not something unique to me. The content in the quizzes is extremely specific and VERY OFTEN NOT TAUGHT BEFORE HAND. These quizzes are almost impossible. The lectures are extremely fast and the professors almost discourage questions.
- The main writing paper was difficult, especially given the vast amount of reading that had to be done in order to complete the first draft.
- The material in general was very challenging, but manageable.
- The material is nearly impossible to remember or memorize. Remembering the content from just one lecture would take hours. Even understanding the material seems impossible. Everyone I know in the class, including myself, has acknowledged that the class is nearly impossible from a lecture viewpoint.
- The math and physics was really challenging for me. I felt like I needed more practice questions either in discussion or at-home practice. The math was why I did poorly on my first two quizzes.
- The math and the FRQs/Quizzes were definitely the hardest. In lecture most of the time we would

discuss conceptually the topics and theorems that were related to what we were learning but on the quizzes we were asked how to solve in depth problems on these ideas. I found this extremely difficult especially as a humanities major and trying to understand by my self how to solve this problems was extremely overwhelming. The course did not advertise this sort of math or expectation to be able to understand these ideas and I think if I knew the amount of math I was going to be doing I may have not chosen this cluster.

- The most challenging part about this class was being able to manage everything all at once. Lecture material is skimmed past a little too quickly for my liking, but it is understandable. I like the fact that lecture slides are posted on BruinLearn; however, on top of the lectures, we have weekly lab assignments that we must complete, bi-weekly quizzes, and the research paper. The content isn't necessarily too difficult; however, the grading scale is a bit too harsh considering this is a class specifically targeted for freshmen. It isn't necessarily a difficult class, but it is not the class that I was expecting in terms of difficulty as I was expecting difficult content but less material over the quarter,
- The most challenging part about this class was the beginning of the quarter when mathematical calculations were apparent on the quizzes. As one who is not in STEM, the physics and equations behind some of the problems in the beginning were difficult for me. Especially not really going over the math in class, I struggled on the first few quizzes.
- The quizzes by far were very difficult, especially when the math was not taught in class.
- The quizzes often had one or two questions that felt very disconnected to the material that we learned for the week. In addition, it felt as though there was no always continuity in the grading from person to person.
- The quizzes often included formulas and math questions that were not covered in lecture or discussion.
- The quizzes were awful. Specifically, Dr. Petigura's quizzes. The first 2 quizzes were extremely difficult. The free response questions were insanely hard astrophysics problems even though the course was advertised to have NO math. That was a complete lie. We were expected to do extremely difficult work without any guidance or instruction on how to do it. The multiple choice was also extremely difficult and had conceptual problems we weren't really taught about. Dr. Jewitt's quizzes were easier overall as the free response questions just asked us to watch videos and answer questions, however, the videos were long and sometimes irrelevant to the questions or course material.
- The research paper and labs did not always related to what we were learning in lecture. They felt more like busy work than anything else.
- The sections seemed unrelated to the class lectures, some of the exams leaned heavily into math when the lectures emphasized how there would be a lack of math, and there was no practice or indication of any calculations. While this class is supposed to help us improve writing there was almost no discussion about it. I just turned in my rough draft twice and got no real writing practice.
- The tests and understanding the concepts around planetary science.
- The tests are very difficult and I feel that you need to study a lot to get a good score on them.
- There are a lot of concepts that are briefly mentioned during lectures that my TA does not elaborate on and then we are tested on those concepts which gets confusing. When I asked my TA for help, he didn't really provide any useful help and instead, refused to elaborate further when I continued to ask questions.
- There are so many different multi-week assignments to juggle and turn in. The deadlines for these can be confusing.
- To find some connection between the course of the lectures itself and the connection between lectures and discussion sections, both seemed too disconnected

- What I found most challenging about this class are the bi-weekly quizzes. Some of the quizzes were harder than other, in terms of involving math that people were not familiar with. Which could set our grade in danger with the lack of knowledge of the quiz material.
- What I found most challenging about this course was the sheer amount of balance between the lectures and the writing assignment, especially not being used to the quarter system. Also, since many of the instructions were unclear in many of the assignments it made everything more confusing.
- I found the quizzes to be the most challenging about the class, but I was able to manage nonetheless.

4.3) Please comment on whether or not you think your instructors provided you with both a comprehensive picture of your cluster's subject and a diversity of perspectives on it.

- 100%. Both of the professors we've had have been amazing in their own ways, engaging and supportive.
- Absolutely. The instructors in this course (Dr. Petigura and Dr. Jewitt for the fall quarter) did an excellent job bringing in historical information that covered a wide breadth of scientific perspective. Their lectures were thorough with strong visual and auditory aids to allow for a holistic understanding of the material.
- All of the instructors were bad, although Jewitt made more sense than Petigura. There were very clear advantages between the TAs, as some had given out practice quiz questions and some did not. The office hours were inaccessible because they were inside De Neve dining and you had to use a meal swipe to actually attend them.
- Because it is only the first quarter, I will better understand the meaning of evolution once I complete all quarters of the cluster. However, the first quarter was successful in introducing me to the subject.
- During lecture the instructors definitely covered a lot about a topic, including past disproven theories, current ongoing research, unanswered questions, and different perspectives on a topic from different scientists throughout time. However, again, we weren't really tested on these things.
- I absolutely agree with this statement. All of the professors have such different valuable insights, and I really came to appreciate this aspect of the course as the quarter moved along.
- I believe that the cluster does a great job of introducing abstract concepts and providing students with a scientific overview of these concepts. The material remained engaging and interesting even though complicated concepts were explored.
- I definitely received a variety of information on many topics relating to space, bodies, physics, etc. But because this is a science class there was more of an emphasis on facts and learning them than conversations on different perspectives/ ideas about the science.
- I despise this cluster's "subject." This is supposed to be a science cluster that will "make you love science" if you just "aren't a STEM kid" but I AM interested in science and physics and this class made me like it less. "Science is not gut instinct" they told us, yet they're making our "labs" eyeballing wavelengths? We were told to imagine how many person-lengths could stretch out over the waves and then multiply that by 1.7 because most people are 1.7 meters. What kind of science is that? I am still going to take the class because the 4 GE credits is very useful, but I sincerely wish this cluster wouldn't masquerade as something it isn't. We're here for the GEs and Writing II. If you want to claim this class will make you love science, make the science relevant and interesting.
- I do think they covered a comprehensive view because they talked about how scientific knowledge came to be and the wrong perspectives people used to have.
- I do think they provide me with both a comprehensive picture of the cluster's subject and a diversity of perspectives on it.

- I do, the instructors covered a vast amount of material which gave me a fairly comprehensive understanding of the topics we covered.
- I do.
- I don't think the material are connected to assignments
- I expected the cluster to have more of a focus on evolution of life, which may be coming in the following two terms but has not come up yet. The first quarter has a narrow focus on space, rather than life on Earth. The instructors definitely gave us a comprehensive picture of evolution of cosmos.
- I feel like the instructors did provide me with a comprehensive picture of the cluster's subject and a diversity of perspectives on it though the relation of one lecture to the next was unclear at times.
- I learned a lot of things, but I feel like I learned a bunch of random concepts that are only connected because they all relate to the field of astronomy. Not sure if I ever felt there was a theme in the class.
- I really think that the various speakers helped me get a variety of perspectives on certain topics which really helped my learning.
- I think Dr Jewitt and Dr Petigura both did a good job of explaining all of the various theories that were presented prior to the one that is currently accepted, as well s how to corroborate that information in multiple ways.
- I think I am getting a comprehensive picture of the subject. The different topics each lecturer lectures on are interesting but quite different at the same time.
- I think it did do a good job discussing evolution. Really interesting to start at the beginning of the universe and move forward in time from there. Overall very good class and I would recommend it to anyone in the future. I will say, however, it would be nice if Dr. Jewitt was less political during his lectures because I understand he is trying to keep the class entertaining but sometimes it feels somewhat uncomfortable.
- I think my instructors did a good job of introducing different perspectives of the topics. I especially enjoyed their inclusion of the history of the field.
- I think my instructors provided me with a comprehensive picture of the subject.
- I think my instructors provided me with both a comprehensive picture of my cluster's subject and a diversity of perspectives on it through the variety of experiements, readings questions, and videos.
- I think that I have learned a lot about my clusters subject. I have enjoyed learning from Dr. Jewitt especially because of his amazing discoveries about the Kuiper Belt and Pluto. I think it is such an honor and a privilege to be taught by an instructor who has made such incredible advances in the field of space exploration. Dr. Petigura is also extremely knowledgeable and I can tell he is very passionate about his work. I learned a lot about exoplanets and the universe from him. I
- I think that the instructors provided me with a good picture of my cluster's subject and have provided a diversity of perspectives (since there have been multiple professors).
- I think that this has provided me with a comprehensive picture of the course content as the two different lecturers provided two different perspectives on the subject
- I think the instructional team did a great job.
- I think the instructors did a good job.
- I think the instructors did provide me with both a comprehensive picture of your cluster's subject and a diversity of perspectives.

- I think the instructors provided a comprehensive picture of my cluster's subject and a diversity of perspectives on it.
- I think the picture was provided but I'm not sure if I fully understood it, as it was challenging and broad.
- I think the professors did this well.
- I think they did a good job, especially in showing us the content in a chronological order which helped me better understand the class.
- I think they provided me with a comprehensive picture of the cluster's subject.
- I think this quarter has covered an impressive amount given its timeframe, and I feel very knowledgeable about the layout and evolution of the cosmos.
- I thought so -- there was a diverse range of topics covered about the topic. It is a science cluster so diversity was not super relevant.
- I would agree that my instructors provided me with both a comprehensive picture of my cluster subject and a diversity of perspectives on it.
- Instructors did a good job of presenting info relating to the course.
- Instructors did a good job on presenting material; however, for quizzes some questions did not relate to lectures.
- It's a GE class. No one is taking this thing because we are interested in the evolution of the cosmos Imfao. We are doing it for the credits. There's some cool stuff in lecture from time to time but it's not that interesting.
- So far we have only covered astronomy and space science in the course, but the two instructors who have lectured so far have definitely provided different perspectives about the science of space.
- The instructors did provide me with these aspects.
- The instructors provided a decent amount of material for the subject as it covered everything that was required on assignments. Some content is purposely covered less and not talked about much at all due to the instructors encouraging students to go over specific content that will eventually be on quizzes. At times, instructors will talk about a specific topic that is not necessarily important and essentially run out of time during a class period. However, I believe that the instructors do have students' best interests and do believe that they attempt to try their best to cover everything.
- The instructors provided me with a comprehensive picture of evolution of the cosmos. I am very glad I took this course, and it honestly makes me want to go find other sources of education, such as documentaries, for this subject. Additionally, I feel that they made the content relevant as well, discussing politics/climate change/human impact etc.
- The professors in this cluster definitely did provide me with subject information and a comprehensive picture of what the cosmos is all about. Going into this class, I had very little knowledge of space so I learned a lot in this first quarter. I am not exactly interested in it, but this course allowed me to broaden my horizons and open my eyes to what occurs in galaxies above.
- They did a great job.
- They did.
- They have provided a comprehensive picture of the subject and perspectives on it.
- They provided adequate content to shape my opinion, however it was presented in a very disorganised and superficial manner without any depth of knowledge on any subject

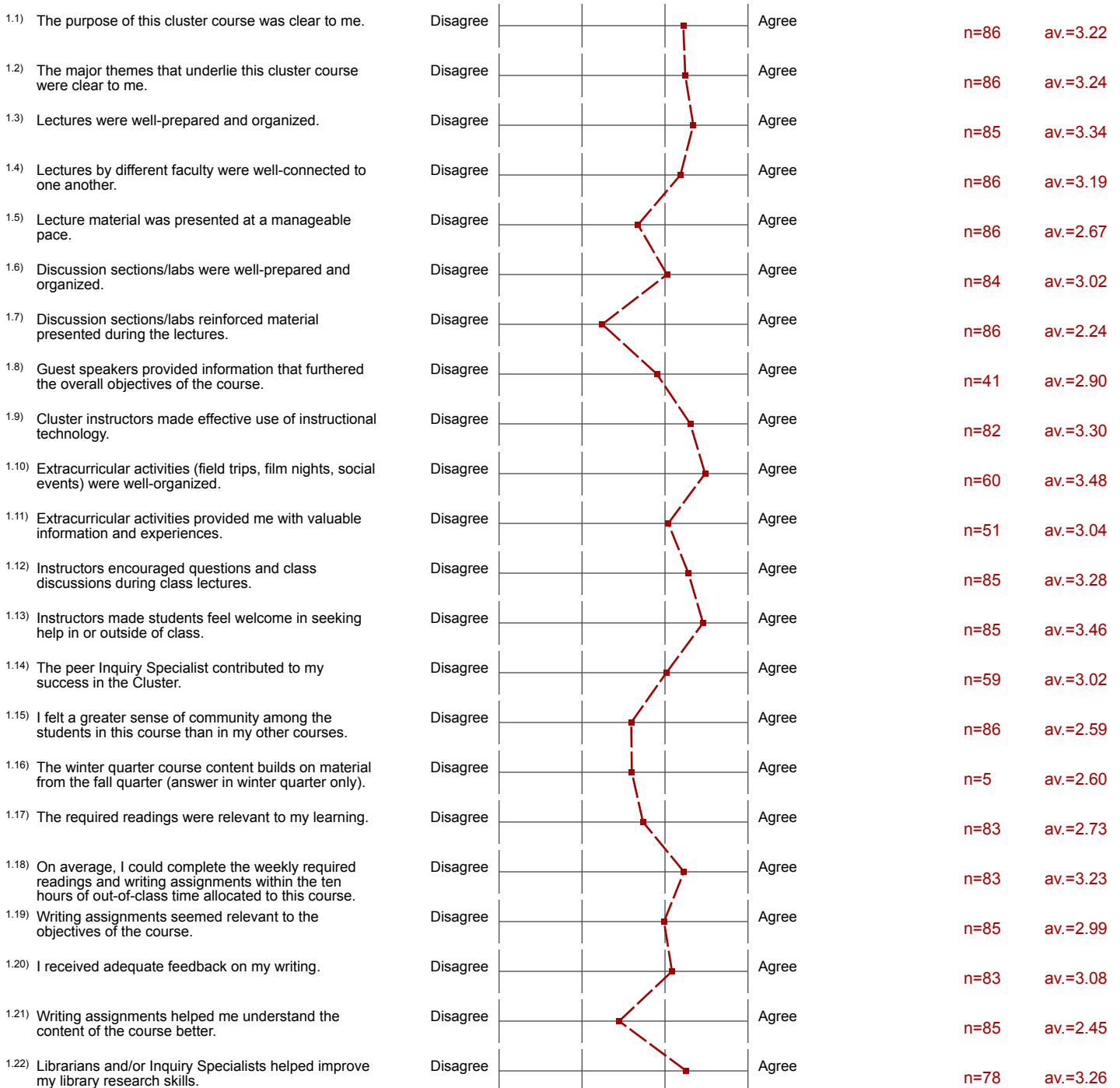
- Would have appreciated extra credit opportunities
- Yes I do think the instructors provided both comprehensive and diversity perspectives on it.
- Yes they did. I think it was helpful that the instructors are experts in their field.
- Yes, I felt that for a class about evolution at first - I got what I expected to get in this class. Although the workload was a lot at first, I believe that further in the Winter Quarter I will have a better appreciation for the course.
- Yes, I think that was really clear and the instructors definitely spent a lot of time discussing the cluster's field of study and how there are many different approaches to it (science) as a whole. I really liked this because I never really thought science could be a point of debate and I like how the instructors defined science before delving deeper into it during the class.
- Yes, I think this was good.
- Yes, they are passionate about the subject.
- Yes.
- they have done a solid job expanding on the cosmos
- yes

Profile

Subunit: CLST PG
 Name of the instructor: . CLUSTER Course Survey
 Name of the course: 23F: CLUSTER 70A LEC 1: COSMOS AND LIFE
 (Name of the survey)

Values used in the profile line: Mean

1. Course Objectives and Format:



1.23) Examinations were appropriately related to the course material.	Disagree		Agree	n=85 av.=2.61
1.24) The grading policy was fair.	Disagree		Agree	n=84 av.=3.01

2. Skills:

2.1) Writing skills	No Improvement		Much Stronger	n=85 av.=2.65
2.2) Analytic skills	No Improvement		Much Stronger	n=85 av.=2.66
2.3) Library skills	No Improvement		Much Stronger	n=82 av.=3.00
2.4) Research skills	No Improvement		Much Stronger	n=85 av.=3.12
2.5) Communication skills	No Improvement		Much Stronger	n=85 av.=2.41
2.6) Knowledge of contemporary issues and events	No Improvement		Much Stronger	n=83 av.=2.64

3. Overall Rating:

3.1) Your overall rating of the instructional team.	Very Low		Very High	n=85 av.=3.78
3.2) Your overall rating of the course.	Very Low		Very High	n=84 av.=3.37