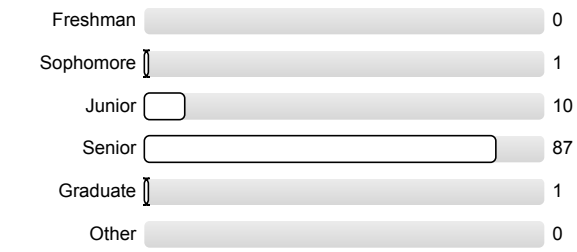
J.U. BOWIE
Evaluation of Instruction Program Report
14S: CHEM 156 LEC 1: PHYSICAL BIOCHEM
No. of responses = 101
Enrollment = 135
Response Rate = 74.81%

Survey Results

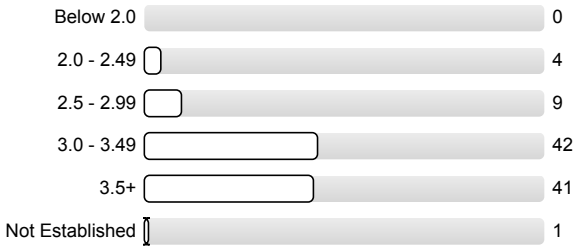
1. Background Information:

1.1) Year in School:



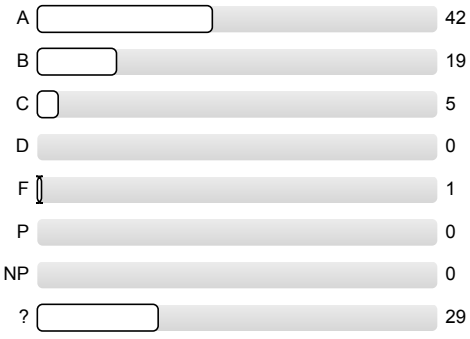
n=99

1.2) UCLA GPA:



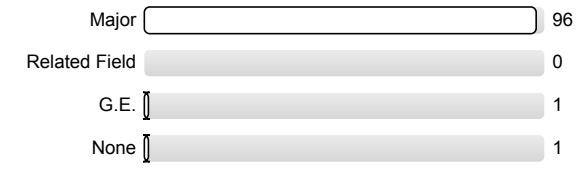
n=97

1.3) Expected Grade:



n=96

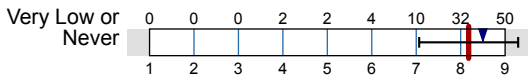
1.4) What requirements does this course fulfill?



n=98

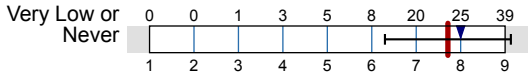
2. To What Extent Do You Feel That:

2.1) Instructor Concern – The instructor was concerned about student learning.



n=100
av.=8.18
md=8.5
dev.=1.11

2.2) Organization – Class presentations were well prepared and organized.

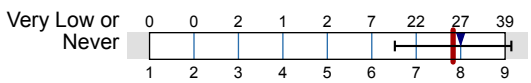


n=101
av.=7.71
md=8
dev.=1.42

2.3) Interaction – Students felt welcome in seeking help in or outside of the class.

n=100
av.=7.9
md=8
dev.=1.35

2.4) Communication Skills – The instructor had good communication skills.

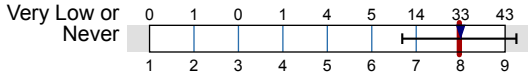


n=100
av.=7.83
md=8
dev.=1.31

2.5) Value – You have learned something you consider valuable.

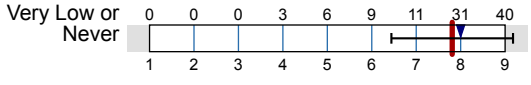
n=101
av.=7.73
md=8
dev.=1.5

2.6) Overall – Your overall rating of the instructor.



n=101
av.=7.97
md=8
dev.=1.28

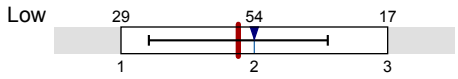
2.7) Overall – Your overall rating of the course.



n=100
av.=7.81
md=8
dev.=1.37

3. Your View of Course Characteristics:

3.1) Subject interest before course



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av.=1.88
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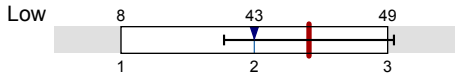
dev.=0.67

3.2) Subject interest after course



n=100
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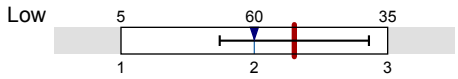
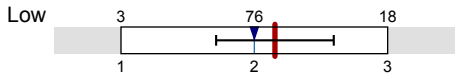
md=2
dev.=0.64

3.3) Mastery of course material



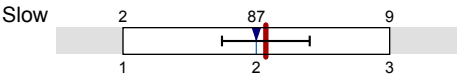
n=100
av.=2.3
md=2
dev.=0.56

3.4) Difficulty (relative to other courses)



n=97
av.=2.15
md=2
dev.=0.44
ab.=1

3.5) Workload/pace was



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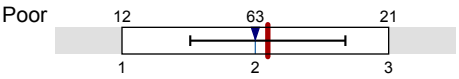
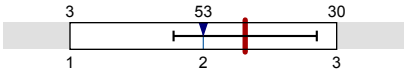
av.=2.07
md=2
dev.=0.33
ab.=1

3.6) Texts, required readings



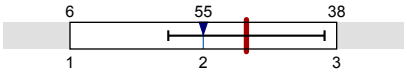
n=96
av.=2.09
md=2
dev.=0.58
ab.=4

3.7) Homework assignments

Poor  Excellent

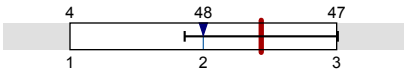
n=86
av.=2.31
md=2
dev.=0.54
ab.=14

3.8) Graded materials, examinations

Poor  Excellent

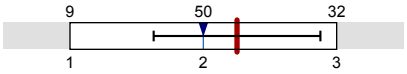
n=99
av.=2.32
md=2
dev.=0.59

3.9) Lecture presentations

Poor  Excellent

n=99
av.=2.43
md=2
dev.=0.57
ab.=1

3.10) Class discussions

Poor  Excellent

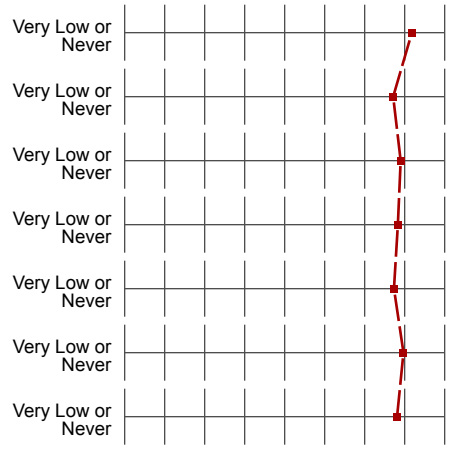
n=91
av.=2.25
md=2
dev.=0.63
ab.=9

Profile

Subunit: CHEM
Name of the instructor: J.U. BOWIE
Name of the course: (Name of the survey) 14S: CHEM 156 LEC 1: PHYSICAL BIOCHEM

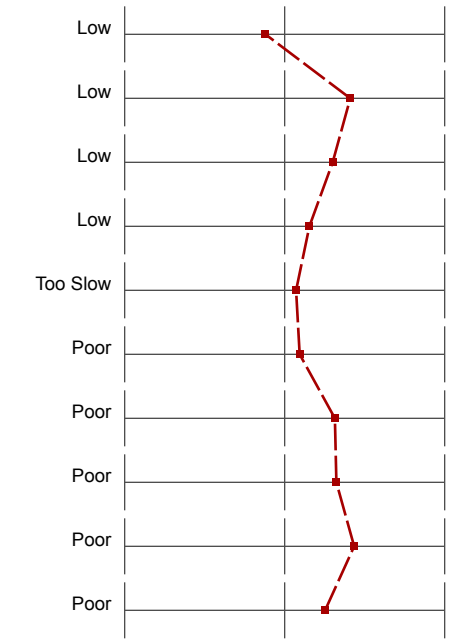
Values used in the profile line: Mean

2. To What Extent Do You Feel That:



2.1)	Instructor Concern – The instructor was concerned about student learning.	Very Low or Never	Very High or Always	n=100 av.=8.18
2.2)	Organization – Class presentations were well prepared and organized.	Very Low or Never	Very High or Always	n=101 av.=7.71
2.3)	Interaction – Students felt welcome in seeking help in or outside of the class.	Very Low or Never	Very High or Always	n=100 av.=7.90
2.4)	Communication Skills – The instructor had good communication skills.	Very Low or Never	Very High or Always	n=100 av.=7.83
2.5)	Value – You have learned something you consider valuable.	Very Low or Never	Very High or Always	n=101 av.=7.73
2.6)	Overall – Your overall rating of the instructor.	Very Low or Never	Very High or Always	n=101 av.=7.97
2.7)	Overall – Your overall rating of the course.	Very Low or Never	Very High or Always	n=100 av.=7.81

3. Your View of Course Characteristics:



3.1)	Subject interest before course	Low	High	n=100 av.=1.88
3.2)	Subject interest after course	Low	High	n=100 av.=2.41
3.3)	Mastery of course material	Low	High	n=100 av.=2.30
3.4)	Difficulty (relative to other courses)	Low	High	n=97 av.=2.15
3.5)	Workload/pace was	Too Slow	Too Much	n=98 av.=2.07
3.6)	Texts, required readings	Poor	Excellent	n=96 av.=2.09
3.7)	Homework assignments	Poor	Excellent	n=86 av.=2.31
3.8)	Graded materials, examinations	Poor	Excellent	n=99 av.=2.32
3.9)	Lecture presentations	Poor	Excellent	n=99 av.=2.43
3.10)	Class discussions	Poor	Excellent	n=91 av.=2.25

Comments Report

4. Comments:

4.1) Please identify what you perceive to be the real strengths and weaknesses of this instructor and course.

- -Fold-it game was tedious. I did not learn anything from that game.
  -I would've preferred the format of the exams staying consistent throughout the course so as students know what to expect and what to prepare for. Exam III format was changed without notice. Even if the format is different, it would be better to stay consistent throughout.
- A normal broadband instruction on biochemistry. there is no way around this course if your biochem major and it is at 8 am in the morning for 3-4 days a week. tough! but Dr. Bowie has so much energy in the morning, he jumps, laughs at his own joke, so it keeps me awake and I'm just narcoleptic at lecture hall, but I can keep awake and take notes and actually follow along the lesson and interested in the material. in fact this is very interesting above the other biochem courses because we are not dealing with pathways and its really chem 110 calculation with biochem interactions (ie. cell transport, conformational changes) and all this can be calculated (ie. whether or not the free energy change is favorable or not) so very cool; I think it's a good culminating course for the major.
- A very interesting course! Help me experience a different scope of biochemistry field.
- Bowie is a very good professor. The changes he made this quarter were good, although the Fold-it game was pointless and did not really help with the course.
- Class was great overall except 2 things. 1 is that it is in the morning. 2 is the grading. Grading felt harsh and unfair. Lectures were great though. One the best classes I've taken
- Dr Bowie is a genuinely nice person. You can tell he loves what he teaches.
- Dr. Bowie was definitely one of the better professors I had here at UCLA. He was very knowledgeable about the subject material and was able to present it in an effective way during lecture. During lecture and office hours, he would really make sure every single person in the room understood what was just discussed. He was definitely able to make this subject very interesting and I very much enjoyed his class. I like the way it was structured, but I do think it could be more effective in maybe providing less questions for the homework and really focusing on just a couple of them to really understand the topics. I found myself just trying to frantically finish all the problems before the midterm. Overall, Dr. Bowie is a great professor with great knowledge and personal skills that make the class enjoyable. Students should definitely take 156 with Dr. Bowie
- Dr.Bowie has put thermodynamics into biochemistry to give me an idea about how biological systems can make certain processes happen. I enjoyed 110A very much, but I had no idea how 156 can be even more exciting. Bowie's 156 has given me insight in biochemistry and reinforced material from other courses as well.
  Exams are relatively simple and are based on the homework assignments. Bowie allows a cheat sheet but one doesn't really need it if he/she has done/understood the homework. Once a person has understood the concepts, the person should be able to do well on the exams. Homework has been a big part of learning and has been very enjoyable to do in group settings. I usually finish all the assigned problems during weekends and then I would organize a study group to do all the problems again, especially the ones that we didn't understand when we were doing the problems alone. Solving some of the problems were like solving puzzles, and people did have multiple ways to approach the same problem, for example: how do we know B is an activator? Well, it's an activator because excess of B makes the ligand binding hyperbolic; then, a classmate pointed out simply that the Kd was lower for ligand binding when B is around. Little things like these have made learning really enjoyable. Many of the problems that we were not responsible for were actually very fun to do, like the phi psi angle determination. Every time Dr.Bowie assigns homework via email, he acts like we cannot wait to do the

problems. It is funny but it also reminds us that we have picked the major because we once thought that it was going to be an interesting topic to pursue.

Discussion about boltzmann put the hydrophobic effect we learned in some thermodynamic context so that we can see why it is favorable for certain processes to occur. In general, Boltzmann distribution have given me much idea about what biomolecules can do/behave. In addition, Bowie has integrated it well with other concepts such as supercoiling and ligand binding. However, the most interesting lecture out of the first exam's material would be FRET. FRET was how the scrunching mechanism of RNAP initiation was illustrated to be the most consistent. In a 2006 paper titled Initial Transcription by RNA Polymerase Proceeds Through a DNA-Scrunching Mechanism, Ebright and co-workers eliminated the inch-worming and transient excursion models using FRET and found that transcription initiation by scrunching was most consistent with the result they obtained. This illustrates how relevant Bowie's lectures can be. I have learned that prokaryotes jam tryptophan residues into the DNA to separate the two strands, but only Dr. Bowie discussed about how DNA is negatively supercoil strained such that removing the supercoil by melting is actually favorable.
Another example is the cation-pi interaction that Dr. Bowie briefly lectured on. This interaction was never mentioned in any course that I have taken. In a 2006 paper titled The Structural Basis of Promoter -35 Element Recognition by the Group IV sigma factors by Darst and co-workers, crystal structure shows that cation-pi interaction is formed between arginine 176 in the Escherichia coli group IV sigma factor's 4.2 region and -36 dC residue in the -35 region of promoter DNA (figure 3A). Although R176 may be responsible for other interactions, sequence alignment of 8 bacterial species revealed that R176 is conserved in all 8 species, illustrating its importance (figure 6). It was nice to see cation-pi show up in a paper after a couple of weeks of Bowie's lecture on such an interaction.
Finally, it was also nice to be able to interpret Hill coefficients and Kd's that showed up in one paper titled Promiscuous RNA Binding by Polycomb Repressive Complex 2 by Cech and co-workers in 2013 (figure 1C/2A etc).
Never visited Dr.Bowie during his office hours or spoke up in class, but I want Dr. Bowie to know that I was not sleeping in class and that I really enjoyed the course. (Okay, I did fall asleep a couple of times, but It was too early.) In any case, I loved Bowie's mannerisms and how he looked amazed when a particular result matches with theory (such as hemoglobin). When I study alone or with some friends, I have often nodded at how we should have been amazed by some of the results and equations like Bowie did in class.
Maybe this comment is an overkill, but 156 has glued many different concepts together for me by offering some thermodynamic accounting of processes and made studying biochemistry more exciting.
Dr. Bowie gave out cash prize for fold-it game. The first place gets 50 dollars, which is more than I can get in some computer game tournament (not a popular game). Sadly, wiggle is so overpowered in the fold-it game. In any case, I enjoyed 156, and with an instructor who gives out cash prizes valued higher than what I can get for an entire Saturday of distress, what more can one ask for in a school setting?

- Entertaining lectures
- Focuses too much on equations and not applying what we learn or doing example problems.
- FoldIt: I think it was a great exercise that was useful in learning about protein structure and folding and definitely gives a better background into what we are learning. I liked the fact that it was optional and also the extra credit incentive.

  Exams: The exams were fair. I thought they would be quite challenging given the fact that we are allowed a cheat sheet, but they were structured in a way to test concepts. I could tell how prepared I was for the exams based on the material I wrote on my cheat sheet. Towards the beginning, I wrote a lot on my cheat sheet. In the next exams, I wrote less but understood the concepts better and my grades reflected that. Overall, I enjoyed the format of the exams and appreciated the fact that they weren't cumulative and there was redemption if you did poorly on one exam.
- Good class, interesting material and the extra lectures applying what we learned to real life research is cool.

Wish there were only 2 midterms instead of 3, 3 is too much and there's less being tested on during each midterm.

Really helpful that the homework and answers were given to us, helped learn and prepare for the exams.

Extra credit was fun.

Professor needs new shirts, always seems to be wearing red or maroon...

- Great and funny professor. I didn't expect to like the class this much
- Great class
- Great class and excellent exams. I like that as long as we do the homework problems we will do fine on the exam. Since we are allowed to put anything on our cheat sheet, however, it would be better if you don't put what problems the exam questions are based on. This makes it too easy.
- Had no intention of actually taking this class but after walking in the first day at 8am it instantly became one of my favorite classes at UCLA. Professor Bowie is amazing. He is so energetic and genuinely interested in the material and students learning. His testing schedule is genius. having 3 midterms keeps you on top of the material and not feeling so overwhelmed every time a test comes around. Also, the homework being optional was good. The people who don't want or need to put in the effort aren't required to, and everyone else gets so much practice for the exam with solutions.
- He cares about students a lot.
- I actually liked the structure of the exams, like how we knew exactly what material was going to be tested. I think that should be kept for future classes. The only problem is that students tend to just copy down problems onto their cheat sheets (I was one of them) and then score poorly on the exams. I think the best solution would be to stress that the problems will not be the same, but that they will generally have the same concepts so that students don't try to be lazy. I say this because I'm assuming that a lot of us saw the format of the first exam and thought that the rest of them would be very similar, as in, the same problems that were found on the practice problems with just numbers changed. If you stress that that is not the case, maybe students will study better.
- I believe the fold it was a very good way to show us about protein folding, but I don't know if making a cash prize was a necessary aspect of it.
  In terms of testing, I do really appreciate the style of how things were straight forward. The only complaint is that because of the testing style, grading is very dependent on having key words present, regardless of how well explained concepts were. Overall I did enjoy this class and appreciate you taking the time to teach it!
- I don't know if it was the early class time but I felt like I didn't really know what the class was about much in the beginning of the course. I remember watching a small animation clip on the first day. I think I was just a little lost at connecting the dots of all the theories and how they related to each other. Sometimes I would understand and other times I wondered (for a while) how it fit in with the whole of the course. Some things looked like the same theory with different letters. I think it would have been helpful to have some textbook (optional of course) where it blended everything together and it would be used as a reference.
- I feel like Professor Bowie really cares for us students. He gives numerous opportunities for us to seek help, and engage us in class by using both slides and written notes. I liked the Fold-it game personally, because I felt I was doing something related to my major that isnt just studying notes. I liked showing my peers what I can do with this puzzle because of my knowledge in biochemistry. Overall, this course was a good closure to my biochemical studies.
- I liked that the class was split up into 4 sections. Each section had its own test which made it simple to study for. The note sheets on the exams were helpful. I don't think that you should put problem numbers

on the exams that relate to the homework- people should be able to figure out what formulas they need. Fold It was fun. Having occasional Tuesday lectures was confusing; the schedule changed a lot, but it worked out in the end.

- I liked the new test style. Would like a more tie in of reading to the class. He should write a course reader for the class that contains all the lectures covered in class like Dr. Kaner does.
- I loved the lecture and homework assignments, but personally felt like the exams lacked calculations. I don't think it was right that the more I studied and did problems, the worse I did on exams.
- I loved the videos you showed us in class and your enthusiasm to teach the course. The fold it game was hard to learn at first but after several long days, I got the hang of it. I felt the game was kind of useful, despite being frustrated with how to move the molecules around. Overall, I got a lot out of the course and found it to be my favorite science course at UCLA. Bravo!
- I really appreciated having practice problems and answers as good study material for the exams and review of the material. For lectures, I just wish there was more introduction of each topic, because it sometimes felt like we were jumping around. Fold-It was interesting because of the interaction with the 3D protein structure, I liked that it was extra-credit rather than required because I didn't see it being necessary for understanding course material. All in all, an enjoyable and worthwhile class even though it was 8 am, which I think says a lot.
- I really enjoyed his enthusiasm & energy, especially since this was an 8 am class. He seemed very approachable & friendly. I liked that for DNA supercoiling, he brought in a model using the rubber tubing to demonstrate; it made it much easier to understand.

  I was a little unhappy with how the exams were structured, particularly on the 2nd exam. While most of the practice problems had been calculations, and I was expecting calculations, but the majority of the test was conceptual. I would have focused my studying differently, had I known it would have been conceptually based.
- I really like how we have 4 exams of equal value. Having a cheat sheet was also nice! Bowie was always willing to answer questions after class which I found really helpful. Homework problems were not too bad, I'm glad that we were given the answer keys as well. I did not find fold it to be very helpful concerning the rest of the material we learned in this class, but it was still fun to do. Overall, I really enjoyed this class. I believe Bowie gave me everything I needed to succeed in this course!
- I really liked that you were enthusiastic about the material and genuinely cared about us learning. The only thing I think that has room to be improved is the reading material. It seemed to be too difficult to understand at times.
- I think he has a very good way of teaching this class. Students will not be bored during lecture since he applies the concept to real life applications. The exams are reasonable. We needed to work through the problems to understand and do the exams but they were not ridiculously hard.
- I think it's very unfortunate that some students (on Bruinwalk) claim that Professor Bowie does not care about his students. He shows a great amount of care, even by printing out notes for his students so that they can still take good notes in class if they forgot to print beforehand. In fact, we don't even have to worry about printing the notes before class because Bowie always does it for us. The course material can be very challenging, and I was pretty intimidated initially. The problem sets that Bowie provides are reasonably challenging but not impossible, and really help us understand and apply course concepts. Additionally, I REALLY appreciate that the exams closely resemble the problem sets. The structure of the exams (4 equally weighted exams) is helpful to manage the material at a good pace and provide a buffer for our grades. Overall, I would say that Bowie made a difficult subject very understandable and was really helpful. My only suggestion would be that he speak a little more slowly and enunciate his words more clearly.
- I wish there was a better text reference for the class which explains the material presented in class in a very concise and comprehensive way. When it comes to very conceptual classes, I have found I have a

better time understanding with a solid textbook or reading material that thoroughly explains the topics in a simple way. I'm thankful that we were given study problems with the answers, this was helpful. Overall a good class which presented a lot of concepts used within structural biology (an area of research I think is fascinating).

- In my opinion, the fold in game was useful in showing us the different conformations of proteins and how complex proteins can actually be with the many interactions. However, I felt that the game was not worth my time because a lot of the movements were random and seemed like they occurred by chance. I didn't really obtain any useful information from playing the game. Although, I am very happy with the bonus points that came with playing the game!

  The exams were great in that they reflected the difficulty of assigned homework problems and we always knew what to expect. However, I feel that the grading is a little to harsh for the free response questions. For example, there are several ways to word an answer but because I didn't use the exact terms/words as the key, I didn't get full credit, even though the answer was phrased the exact same way as the assigned problems. Also, I do feel that to make the exams more fair, an equations sheet should be given instead of whole pages. Writing all the homework problems down onto the cheat sheet does give people an advantage.. but I guess that's fair game.

- Instructor was very kind to this students. The explanations provided by the instructor, however, could have been just a little more clear...

- Just need to clearly write equations and define variables more clearly.
  Other than that, it was definitely my favorite class this quarter.

- Overall very good professor and course.

- People who copied down every problem to the cheatsheet doesn't mean they are simply regurgitating the information. I actually learned the material very well too. It was just the MWC model was harder than the previous two midterms.

  As for lecture, I slightly agree with the comments from bruinwalk. You made a lot of mistakes in lectures and interestingly, I learn more from your problem sets than your lectures. I have to say tho; your creativity in your problems set is great.

  I wish you could have make things clearer in lecture. If you have done so, you would have captivated my interest in physical biochemistry.

- Professor Bowie cares about his students' learning. He compiled a collection of problems, which greatly help students master the class materials well. He does his best to convey his point across despite the fact that lectures can be somewhat unorganized. He is a great professor.

- Professor Bowie is a really nice professor and I can see that he wants to help his students. However, I often felt lost during lecture and had trouble connecting topics together that we learned throughout the quarter and this is even after going to many office hours and review sessions. It was a little frustrating that a lot of mistakes were made during lecture (luckily a few students caught those mistakes).

- Professor Bowie is a truly excellent professor. His class is a thrill. I loved waking up every morning to go to his class--and that has only happened before with Prof. Pang and Prof. Kwon. Thank you for my best quarter of Biochem yet!

- Professor Bowie is really friendly and welcome any students who seek for help. I really enjoyed taking his course this quarter. He is also a good lecturer. Thank you professor Bowie!

- Professor Bowie is very passionate about physical biochem and it helped us appreciate the subject more. I thought the fold-it activity was interesting, educational, and dare I say- fun, especially with the competition aspect. I also thought the practice problems were a good idea since it helped us focus on important concepts. The tests were still challenging even with the problems- I think limiting the cheat sheet to one side was good to even out the playing field a little.

- Professor Bowie writes the most amusing questions ever! I was very appreciative of whatever puns I encountered as I was working through the problems.

- Professor has definitely breakdown the subject very well and making different topics clear cut, so we know what we were learning about. The lectures consist mostly introduction of concepts where very few examples were used, however Dr. Bowie did an excellent job in explaining the materials. So, there's not really questions to raise about the concept when he was lecturing. But the problem sets compensate for how we can apply the concepts into situations. Doing the problems sets clarify many questions to the concepts but also create more questions in mind for understanding the material. The answer keys to the problems are where we get most of our questions if not then the TAs will. I hope that the answer keys can be written more clearly because sometimes it's hard to decipher the handwriting. Other than that I think this approach ensures us to really learn the material. But if all the exam questions are derived from the hw, then class attendance is not so great especially at 8 am. There are plenty of people who don't come to lectures can score higher on the exams than me, who comes to every single lecture. Somehow, I feel it is not fair, but if the grade only depend on the exam scores, then it is what it is unless attendance is accounted for as well, like 10% or so. People can just do the problems and have a nice cheatsheet to do well in class without going to lectures. So I think, some exam questions should be given from lecture materials that may not have given away from the practice problems.
  The fold it game was a great game to understand how protein folds, but to score high in the game requires little knowledge about what we have learned from the class. Even though the prizes were generously enough for me to spend hours on the game, but it really depends on luck for the protein to fold into it's best conformation because you just need to keep trying over and over again. However, even without the prizes, I would do it for the extra credit.
  All in all, Chem 156 was a great class that I enjoyed much more than 110A because it was with Bowie and his TAs.

- Professor was very concerned with student learning and mastery of the material. He was always open to questions and accommodating/considerate of the student schedules and priorities. Made efforts to help all students do well despite being the last course necessary to graduate. Only weakness was that the course was 8AM in the morning with an 8AM final. Overall professor was great.

- Protein folding is very interesting, it allows me to explore tons of conformations a protein can adopt. I like the testing regime , the problem sets give me great practice,but i think it is better to limit what can put on cheat sheet, Formulas only! Otherwise, the cheat sheet is literally "cheat sheet"!

- Strength was lecturing on exactly what was important. Tested students on what he said he would - no curveballs.

- Strengths:
  - FoldIt was quite fun and I enjoyed it.

  Weaknesses:
  - It's understandable that this quarter was an experimental quarter, but I feel like the assigned problems could have more relevance to the lectures. Often times I have to go through all the problems once first before I can link the relevance of the lecture material to it.

- Thank you Dr. Bowie for teaching this course. I learned a lot of important concepts from this class. Fold it game and contest were helpful. They helped understand protein folding concepts better. The Testing Regime and page of notes were very beneficial. The study questions were very useful and helped focus on the main topics that were illustrated in lecture. Writing the page of notes helped study for the exams better and made it easier to put everything together and helped understand the concepts better.

- Thank you Dr. Bowie! I really enjoyed your class.

- The fold it game is helpful and interesting.

- The handwriting on the answer key of the problems is very hard to read sometimes. An okay class overall, not great but not bad. Much of the class was based on notes only from lecture. They weren't available anywhere else, and being an 8 am everyday made it a struggle.

- The instructor had a great setup, don't change anything!
- The instructor meant well and tried to make the course as interesting and informative as possible. However, lectures seemed unorganized and readings were difficult to follow. The exams changed each time around so we never really new what kind of questions to expect, making studying very difficult.
- The instructor really organized this course well. The hw/ practice problems with the answers was very helpful in learning and understanding the material. The exams well were made very well as well. I really enjoyed learning about the extra material. Thank you!
- The materials can be hard to understand sometimes but the professor explains the concepts well and also very concerned about student learning.
- The professor inspires the student for the material.
- This class was amazing. I did not expect to enjoy it so much. The foldit program was fun to do, but some parts were confusing.
- This instructor knows a lot about physical biochemistry, but sometimes, it seems that he cant deliver what he wants to say.
- This professor is AMAZING. He has opened my eyes in regards to protein folding and has inspired me to think of a career in teaching.
- This was a fascinating course and professor Bowie was an overall good professor. His style of providing us with the questions to know for the exam and then actually testing us on what he said is a breath of fresh air compared to some of the other chemistry upper divs I have taken. His notion of not needing to memorize minute details and allowing us to write down a page of notes for the exam is nice as well. The class was paced pretty well and the choice of a non-cumulative final exam was nice, but I feel as though I have lost some of the material from the beginning of the course. As much as it pains me to say, perhaps a cumulative final would be a good decision. Bowie's choice to allow various options for extra credit was also thoughtful on his part. Overall I liked Bowie as a professor for this class. He made a lot of good decisions.
- Very eccentric guy...I've never seen a professor skip and hop around like he does. Very passionate about his work and a moderately good lecturer but makes many mistakes in class that need to be corrected by students. Foldit was interesting but tedious and actually quite difficult. I feel bad for protein modelers who have to do this all day. Exams were good, I liked the idea of using the homework problems as study material even though they were difficult. Definitely need the cheat sheet or we would all fail. Lecture notes don't really help with homework problems as well as one might think. Need to do the problems over and over to master the course material. But the format of the course should be kept this way.
- Very enthusiastic teacher who is very knowledgeable in the field. He is very willing to hold extra office hours and is very patient with his students, even though he is a busy professor. He is one of the best professors I've had at UCLA.
- Very knowledgeable about the material. Helpful in use of props to explain concepts. Liked how he had the powerpoint presentations printed before each lecture.
- When I came into this class, I was not looking forward to it, mainly because I did not like thermodynamics and the idea of physical biochemistry was not appealing. Added to that was the fact that classes were 8am. However, Professor Bowie completely changed my views. His passion for his subject and his willingness to help students learn made me want to go to all my 8AM lectures (and stay awake the entire time). He was super engaging, and his tests were very fair (posting the study question and answers, even handwriting them!). He makes the class fun. While he modified the cheat sheet requirements after the second exam, I think that overall, he makes the class very fun to learn. It's all about applying the concepts, not just wasting time memorizing. He really made what I thought was going to be a daunting and difficult task to a really fun one.

- While I understand the professor wanted to try new things, the inconsistency of the examinations etc throughout the quarter made it very difficult to know what he wanted. I found it annoying that the professor would miss a whole week of classes, yet would not be flexible with the students in terms of moving the final which almost conflicted with graduation. Overall I enjoyed the class and material, but found it hard to know exactly how to succeed in the class.
- extra credit yay!!!!!!!!!!!!!!!!!!!!
- he's funny and cool. i enjoyed this class
- ok professor, slightly above average, not bad, but not amazing either
- professor is very good at attract students' attention .
  If professor can do more examples in the class, it will help a lots.
- very helpful professor and very approachable, handouts of slides and practice problems were greatly appreciated