

Course Evaluation

CHEM 427 01 – Professor Alanna Schepartz

Question 1

Looking back on Chemistry 427 01, what is your overall assessment of the course? What are its strengths and weaknesses, and in what ways might it be improved?

Response 1

This course is an excellent opportunity for sophomores to gain real training.

Response 2

Chemistry 427 is the best lab class I have taken at Yale. It is interesting in that the students actually conduct original research, learn techniques not commonly taught in undergraduate lab courses, and get a lot more personal attention from teaching assistants. The projects are rewarding and the student really gets a sense of what it feels like to be a research scientist. I liked the structure of the class – mini projects led by TAs, and having weekly lecture sections. The work towards end of the term can get ridiculously hectic but overall it's worth it.

Response 3

I thought the course was great. It gave me exposure to a lab setting I could not find in any other course. The experiments were all interesting and we learned a lot about lab techniques that I wouldn't have learned otherwise.

Response 4

A Great course that exposes us to a real chemical biology research experience. However, the number of techniques learned was not a lot.

Response 5

Low student to TA ratio, very personal, can ask pretty much whatever you want & TAs will answer you. They really want to help you. In general, I thought it was very good.

Response 6

This was a great course. Did an amazing job at teaching some of the basic research techniques. It was both fun and very enlightening. It gave me a sense of what research is like without a commitment to a lab...a great place to decide whether research is for you.

Question 3

Please evaluate your teaching assistant here (discussion section leader, lab section leader, grader, or other assistant). What are his or her strengths and weaknesses as an instructor, and in what ways might his/her teaching be improved? Please evaluate only the teaching assistant that you are most familiar with. Note: If the instructor of the course led your discussion section, please evaluate your discussion section in this part of the evaluation.

Response 1

Danielle was an excellent TA. She was always very willing to help, organize, and inform. She's a tough grader; however, she is one of the best TA's I have had at Yale.

Response 2

Joshua is one of the best TA's I've had. He is patient and thorough in explaining the material and makes sure that each of us understands the principles behind experiments, not only how to do them. He is very forgiving of our errors and incredibly helpful from answering questions to fixing the machines and other things that we break. He is very responsible and kept our morale's up at low points.

Response 3

Joshua was a terrific TA. He was very helpful and understanding. Joshua was always eager to explain and make sure that we were clear on what we were doing and why each step of the way. This brought us greater understanding of the science and thus made the course more enjoyable.

Response 4

Joshua was a greatly dedicated TA. He helps us a lot and shows deep understanding of the materials. One of the best TAs that you can hope for.

Response 5

Abby was awesome. She was extremely helpful always, and one of the nicest TA's I have had, despite some rumors to the contrary. She helped me learn a ton this semester, and was understanding of when I needed additional assistance or just needed to be pushed to speak. I don't know what the class would be like without this TA, but it was great with her. She deserves a lot of the credit for the positive experience I had.

Question 4

How would you summarize Chemistry 427 01 for a fellow student? Would you recommend Chemistry 427 01 to another student? Why or why not?

Response 1

This is a great course that does not only teach students new and interesting techniques in chemical biology but introduces them to independent research. The class is led almost completely by TAs and divided into very small groups working on short projects, which are very rewarding. One has to be willing to work hard in this class and devote possibly a lot of extra time outside of normally scheduled hours, and the workload can get quite hectic sometimes. Nevertheless, the course is a great experience and maybe there would be more chemistry majors if the department got rid of orgo lab and substituted something like this class.

Response 2

I would recommend this course to any student who is unsure whether or not they are interested in lab science – or to a student who knows they are. The course provides a totally different perspective on the lab than any other course I have taken at Yale.

Response 3

Chem 427, which is centered on a real research problem, is infinitely more interesting than standard laboratory courses, in which specific lab techniques are performed not as means to an end, but as ends in and of themselves. Chem 427 is unique in that it gives a student a reason for performing the techniques, namely to solve an actual research problem. Supplemental lectures provide a wonderful introduction to modern methods and topics in chemical biology.

Response 4

Yes. It exposes students to what real research is all about, including its ups and downs. It also emphasizes problem-solving skills in our experiments.

Response 5

Definitely recommended. It is a lot of work, but not so much if you compare it to biochem lab, which also gives 1 credit. Actually, it's not so much work outside class because you don't have much homework other than reading some papers. And this is actually REAL research!

Question 5

Overall, how would you rate the workload of this course in comparison to other Yale courses you have taken?

Response 1

Much Less Less Same Greater Much Greater

Response 2

Much Less Less Same Greater Much Greater

Response 3

Much Less Less Same Greater Much Greater

Response 4

Much Less Less Same Greater Much Greater

Response 5

Much Less Less Same Greater Much Greater

Response 6

Much Less Less Same Greater Much Greater

Response 7

Much Less Less Same Greater Much Greater

Question 6

What is your overall assessment of this course?

Response 1

Poor Below Average Good Very Good Excellent

Response 2

Poor Below Average Good Very Good Excellent

Response 3

Poor Below Average Good Very Good Excellent

Response 4

Poor Below Average Good Very Good Excellent

Response 5

Poor Below Average Good Very Good Excellent

Response 6

Poor Below Average Good Very Good Excellent

Response 7

Poor Below Average Good Very Good Excellent

Question 7

Describe positive and negative aspects of the general field and specific science behind the project, the techniques used, the quantity and quality of results, and opportunity to interpret/analyze the results.

Response 1

I liked the idea of the project and what we did with it, although we didn't quite finish. I thought there was maybe a little too much left to chance with the design of the project. I learned some techniques I wouldn't have otherwise learned in Chem lab classes (HPLC, MS, and FP).

Results are results. We saved some time in the end to look over the results instead of going on with the project, which was helpful in understanding what we had achieved.

Response 2

Something I had never done with Proteins and expressions, and mutations and there was a lot of new stuff that was quite interesting. Used a variety of different machines and techniques and learned much about each. Obtained results for most tests we performed, with lots of data, which was exciting. We got lots of data and used a few different diagrams and forms of analysis...understood data and it's meaning in the end.

Response 3

I didn't learn too much about the fundamentals of chemical or biological systems, but I know that's not the point. The possible applications that the projects could develop are very exciting, and it was the project of thinking about applications of chemical principles which I felt was the highlight of the class. Learning the theory behind techniques (Kunkle Mutagenesis, Cell culture, High pressure liquid chromatography, UV spectroscopy, Floresence polarization, and Mass spectroscopy) I felt was a definite positive. Well, the results are results. Unfortunately we did not finish in time to generate the figures of merit, only gather data for controls.

Response 4

Very interesting. Puts us in the forefront of research. The science is good and simple. Teaches a wealth of new techniques, both theoretically and practically. Not much conclusive results. But then, that is only a normal side effect of science. We were thoroughly taught data analysis techniques and given the opportunity to do so ourselves.

Response 5

B-peptides are interesting, but purifying them on HPCL and MALDI day in and day out was a bit taxing. HPLC, MALI-MS, Circular Dichroism, UV techniques were used. We obtained a lot of results; however, the quality of the results and conclusions may be questionable because we didn't have enough time to check and recheck results or perform extra trials to truly confirm our results. There were plenty of opportunities to interpret and analyze results.

Response 6

The choice of the project was excellent. Beta-peptide is an exciting new field, and the project hit the right note in just about everything (difficulty, feasibility, interest, etc.). The techniques we used were HPLC, CD, MALDI-TOF. It took a while to actually get results, but once we had purified peptides, we got a lot of data. We would have gotten a lot more if we started out with purified (or semi-purified) peptides. Although we analyzed most of the data in class while doing HPLC or CD, we were doing experiments until the very last week. It would have been nice to reserve the last week to go over all the data for the presentation.

Response 7

The quality and quantity of our results were excellent. We had plenty of time to organize and discuss the data obtained.

Question 8

Did you feel that the project was well suited for the amount of time? Any suggestions for improving this aspect?

Response 1

I felt like the project was planned out well and we'd accomplished a lot and worked efficiently given the time allotted.

Response 2

Yes. We did most of the work and got some interesting results...I guess you couldn't do much more in the time frame so it was good.

Response 3

It's tough to say. Had certain things worked out we might have been able to finish. Though for this project we probably would have been finishing things right up to the end of semester even if every procedure went smoothly.

Response 4

The project was a little too long. It would have worked if everything had gone according to plan. In the future, some consideration should be given to non-positive results that we may normally encounter in Science.

Response 5

Yes, the project was well suited for the amount of time.

Response 6

The design of the project was perfect, but it would have been much more effective (especially time-wise) if we didn't have to purify all the peptides. HPLC is repetitive and time-consuming. It would have been better if the peptides had been semi-purified (thus decreasing the amount of HPLC time) or purified in lieu of class one week (switching turns HPCLing is not effective; it is much better for one person to locate the peak and purify it all continuously in one sitting).

Response 7

Yes. The project was well designed and fit nicely into the constraints of one semester.

Question 9

Describe anything you learned about the process of scientific research as a result of your experience.

Response 1

Not every bright idea turns out?

Response 2

Long and lots of work to get small amounts of detailed information.

Response 3

The paper writing at the end I felt was one of the more valuable exercises of the lab. Also, the class was a very good way into seeing how life as a scientist would be.

Response 4

Results are never perfect. At best, they are only close to perfect. A lot of deductions and fair assumptions must be made to arrive at a certain conclusion.

Response 5

I learned that you never know where trying to answer a seemingly simple question may take you. Scientific research is unpredictable-it's usually either pretty boring or extremely exciting.

Response 6

Things do not always turn out the way you hypothesized.

Question 10

How did this project affect the way you look at Chemical Biology research?

Response 1

It did certainly give me an idea of what chemists or more specifically chemical biologists do, as I had very little idea of what this field is all about before taking this class.

Response 2

Never was really into the research side of science, but the project sort of made it seem logical and purposeful where as it seemed not so much before. Definitely a positive to consider research type work in the future.

Response 3

It made me consider taking up the field, about which I previously had very little knowledge.

Response 4

It has exposed me to this field significantly. For certain, it has increased my respect towards it. However, our project cannot be strictly labeled as Chem. Biol. Research only. It is a combination of many different fields.

Response 5

This class is how I found out that such a field of science called Chemical Biology even existed, so I don't think I ever looked at ChemBio research in the past. Now, I think that the field is interesting, necessary, and much different than I expected it to be, although I'm not sure if it is a field that I would want to go into.

Response 6

The project was infinitely more exciting than a laboratory course devoted solely to the exposure of students to an array of techniques, and in which experimental results are predetermined and uninteresting. The problem with most labs is that there is no incentive whatsoever for students typically not new and not interesting. A laboratory course based on novel research provides students with ample incentive to go beyond performing various techniques and to think analytically about experimental data.

Question 11

What, if anything, would you change to make this project experience more valuable?

Response 1

Maybe a bit more discussion, not so much formalized presentation (as that made some people uncomfortable and some presentations utterly unintelligible), but weekly lab-meeting type things...

Response 2

It was pretty darn good just as it was.

Response 3

Get rid of the quizzes. They are not necessary in the learning process other than to make it less enjoyable.

Response 4

Would not change anything.