# Fall 2018 – CHEM 2430 – Organic Chemistry 1 for Majors

In the Fall 2018 semester, I taught the organic chemistry class for chemistry and biochemistry majors. Three evaluation reports were generated:

Report \*1: Section 01 – Main Lecture

Report #2: Section 101 – Friday Problem Sessions, Taken In-Person

Report #3: Section 102 – Friday Problem Sessions, Viewed as Recordings

Sections 101 and 102 are an artifact of the recitation sections created last year to be taught by graduate TAs. They were retained this year as weekly problem sessions taught by the instructor instead of a TA. Students in the class (01) had to register for either attending the sessions in person (101) or watching recordings of the sessions (102).



# Course Evaluation Report for FL2018 CHEM-2430-01-Organic Chemistry 1 for Majors (Paul Bracher) - Fall 2018

Project Title: A&S Course Evaluations

Total Enrollment: **39**Responses Received: **19**Response Rate: **48.72**%

Creation Date: Sun, Dec 23, 2018



# **Interpretation Guidelines**

Within this report instructors can view the aggregate of all student responses to Likert scale or multiple choice questions and individual responses to short answer questions.

# I took this course (check all that apply)...

| Options  | Count |
|--|-------|
| to meet a requirement of an undergraduate academic major or minor                          | 18    |
| to meet a requirement of a graduate/professional program or minor                          | 2     |
| to meet an undergraduate core/general education requirement                                | 2     |
| as an elective (not part of any major/minor/program or core/general education requirement) | 0     |
| BA Biochemistry Requirement  | 1     |

# Questions about the Student (agree)

Level of Agreement

| I believe my academic backs this course. | ground was sufficient | to succeed in | 2. The subject matter of this cours the course began. | e was of interest t | o me before |
|--|-----------------------|---------------|---|---------------------|-------------|
| Options                                  | Count                 | Percentage    | Options   | Count               | Percentage  |
| Strongly agree (4)                       | 14                    | 73.68%        | Strongly agree (4)                                    | 14                  | 73.68%      |
| Agree (3)                                | 3                     | 15.79%        | Agree (3)   | 4                   | 21.05%      |
| Disagree<br>(2)                          | 2                     | 10.53%        | Disagree<br>(2)                                       | 1                   | 5.26%       |
| Strongly Disagree (1)                    | 0                     | 0.00%         | Strongly Disagree (1)                                 | 0                   | 0.00%       |
| Statistics                               |                       | Value         | Statistics  |                     | Value       |
| Response Count                           |                       | 19            | Response Count  |                     | 19          |
| Mean                                     |                       | 3.63          | Mean  |                     | 3.68        |
| Median                                   |                       | 4.00          | Median  |                     | 4.00        |

## **Questions about the Student (agree) (Comments)**

Level of Agreement

I believe my academic background was sufficient to succeed in this course.

#### Comment

- Gen Chem gave sufficient preparation to understand the underlying concepts for each section. Drawing Resonance was what I felt best prepared for. But when Gen chem students ask me what MO theory is, I still have trouble with that as I don't know how to fully describe it. Better teaching about MO theory in the preceding chem class would be very helpful.

The subject matter of this course was of interest to me before the course began.

#### Comment

- Students before me hyped up how interesting this class would be compared to Gen chem, so I was very interested in orgo.

## Questions about the Student (Dept & College Averages)

| Quarties   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| I believe my academic background was sufficient to succeed in this course.       | 3.63       | 4.00   | 19                | 3.34                   | 3.00   | 1760              | 3.52                                 | 4.00   | 13064             |
| The subject matter of this course was of interest to me before the course began. | 3.68       | 4.00   | 19                | 3.07                   | 3.00   | 1760              | 3.26                                 | 3.00   | 13064             |

# Questions about the Student (frequency)

Frequency

| 1. I came to each class session prepared. |       |            | 2. I invested enough time and energy requirements. | to meet the co | urse       |
|---|-------|------------|--|----------------|------------|
| Options                                   | Count | Percentage | Options  | Count          | Percentage |
| Always<br>(4)                             | 10    | 52.63%     | Always<br>(4)                                      | 15             | 78.95%     |
| Often (3)                                 | 8     | 42.11%     | Often (3)  | 4              | 21.05%     |
| Sometimes (2)                             | 1     | 5.26%      | Sometimes (2)                                      | 0              | 0.00%      |
| Never (1)                                 | 0     | 0.00%      | Never<br>(1)                                       | 0              | 0.00%      |
| Statistics                                |       | Value      | Statistics   |                | Value      |
| Response Count                            |       | 19         | Response Count                                     |                | 19         |
| Mean                                      |       | 3.47       | Mean   |                | 3.79       |
| Median                                    |       | 4.00       | Median   |                | 4.00       |

| 3. I asked the instructor for help when I needed it. |       |            |  |  |  |  |
|--|-------|------------|--|--|--|--|
| Options  | Count | Percentage |  |  |  |  |
| Always<br>(4)  | 13    | 68.42%     |  |  |  |  |
| Often (3)  | 2     | 10.53%     |  |  |  |  |
| Sometimes (2)  | 3     | 15.79%     |  |  |  |  |
| Never (1)  | 1     | 5.26%      |  |  |  |  |
| Statistics   |       | Value      |  |  |  |  |
| Response Count                                       |       | 19         |  |  |  |  |
| Mean   |       | 3.42       |  |  |  |  |
| Median   |       | 4.00       |  |  |  |  |

### Questions about the Student (frequency) (Comments)

Frequency

#### I came to each class session prepared.

#### Comment

- Compared to the rest of the class,I was very prepared coming to each class. However, by my own standards, I was not. I know you did not have the slides ready before each lecture, but allowing us to get a head start on lecture notes greatly increases my retention during lecture because less time is spent scribbling down info from the slides which move incredibly fast, and more time listening to you talk. What you have to say is actually very insightful and helpful, but I feel a lot of people did not pick it up because of the sheer speed you moved at. If you have the slides before lecture, post them ASAP so we can get more out of the lecture. Also the preclass assignments were helpful and I think they should stay. But they had limited effectivity, in that I often just glossed the textbook for answers

# I invested enough time and energy to meet the course requirements.

#### Comment

- While I did not necessarily spent an hour studying or doing orgo homework every day. I spent an average of 1.5–2 hours of orgo everyday and I ended up with one of the higher grades in the class. It took me one or two months, however, to understand that I should not put 50% of my time in notes and 50% in homework and practice problems. It was much more efficient to lightly review notes and put 95% of my time into practice problems. The content teaches itself through the application based thinking and search for information which is required in doing these problems.

#### I asked the instructor for help when I needed it.

#### Comment

- I could have made use of Dr. Bracher's extensive office hour times.
- If I never saw Dr. Bracher during his office hours or after class for help, I would have still ended up with a grade the same as or nearly below what I have now. Most of the 'help' I needed was with problems on practice tests or Wiley. I usually referred to my friends who were pretty helpful and most likely more quick to respond to these questions. However, I did see Dr. Bracher after class and during office hours quite a bit for advice on how to improve my general study habits with respect to this class and overall performance as a student. He gave excellent feedback on my own performance in the course and was very helpful for the few questions I did bring to him. The question I asked him most frequently was "How do I prepare for this test given my current level of preparation and what topics do I study."

### Questions about the Student (Dept & College Averages)

| Question   |      | Your Score |                   |      | Department (Chemistry) |                   |      | College (College of Arts & Sciences) |                   |  |
|--|------|------------|-------------------|------|------------------------|-------------------|------|--------------------------------------|-------------------|--|
| Question   | Mean | Median     | Response<br>Count | Mean | Median                 | Response<br>Count | Mean | Median                               | Response<br>Count |  |
| I came to each class session prepared.                             | 3.47 | 4.00       | 19                | 3.53 | 4.00                   | 1760              | 3.49 | 4.00                                 | 13064             |  |
| I invested enough time and energy to meet the course requirements. | 3.79 | 4.00       | 19                | 3.57 | 4.00                   | 1760              | 3.59 | 4.00                                 | 13064             |  |
| I asked the instructor for help when I needed it.                  | 3.42 | 4.00       | 19                | 3.15 | 4.00                   | 1760              | 3.30 | 4.00                                 | 13064             |  |

#### Questions about the Course

| Expected learning outcomes fo communicated. | r the course were   | clearly    | 2. The required textbook(s the course. | )/readings supported my l  | earning in  |
|---|---------------------|------------|--|----------------------------|-------------|
| Options                                     | Count               | Percentage | Options                                | Count                      | Percentage  |
| Strongly Agree<br>(4)                       | 17                  | 89.47%     | Strongly Agree<br>(4)                  | 16                         | 84.21%      |
| Agree (3)                                   | 2                   | 10.53%     | Agree<br>(3)                           | 3                          | 15.79%      |
| Disagree (2)                                | 0                   | 0.00%      | Disagree<br>(2)                        | 0                          | 0.00%       |
| Strongly Disagree (1)                       | 0                   | 0.00%      | Strongly Disagree (1)                  | 0                          | 0.00%       |
| Statistics                                  |                     | Value      | Statistics                             |                            | Value       |
| Response Count                              |                     | 19         | Response Count                         |                            | 19          |
| Mean  |                     | 3.89       | Mean                                   |                            | 3.84        |
| Median                                      |                     | 4.00       | Median                                 |                            | 4.00        |
| 3. Class discussions/activities su course.  | pported my learnir  | ng in the  | 4. Assignments/homework                | supported my learning ir   | the course. |
| Options                                     | Count               | Percentage | Options                                | Count                      | Percentage  |
| Strongly Agree (4)                          | 15                  | 78.95%     | Strongly Agree<br>(4)                  | 14                         | 73.68%      |
| Agree (3)                                   | 3                   | 15.79%     | Agree (3)                              | 4                          | 21.05%      |
| Disagree (2)                                | 1                   | 5.26%      | Disagree<br>(2)                        | 1                          | 5.26%       |
| Strongly Disagree (1)                       | 0                   | 0.00%      | Strongly Disagree (1)                  | 0                          | 0.00%       |
| Statistics                                  |                     | Value      | Statistics                             |                            | Value       |
| Response Count                              |                     | 19         | Response Count                         |                            | 19          |
| Mean  |                     | 3.74       | Mean                                   |                            | 3.68        |
| Median                                      |                     | 4.00       | Median                                 |                            | 4.00        |
| 5. Exams/quizzes supported my lo            | earning in the cour | se.        | 6. The course required me              | to apply what I learned in | new ways.   |
| Options                                     | Count               | Percentage | Options                                | Count                      | Percentage  |
| Strongly Agree (4)                          | 15                  | 78.95%     | Strongly Agree<br>(4)                  | 17                         | 89.47%      |
| Agree (3)                                   | 3                   | 15.79%     | Agree (3)                              | 2                          | 10.53%      |
| Disagree (2)                                | 1                   | 5.26%      | Disagree<br>(2)                        | 0                          | 0.00%       |
| Strongly Disagree (1)                       | 0                   | 0.00%      | Strongly Disagree (1)                  | 0                          | 0.00%       |
| Statistics                                  |                     | Value      | Statistics                             |                            | Value       |
| Response Count                              |                     | 19         | Response Count                         |                            | 19          |
| Mean  |                     | 3.74       | Mean                                   |                            | 3.89        |
| Median                                      |                     | 4.00       | Median                                 |                            | 4.00        |

| 7. The course challenged me intellectually. |       |            |
|---|-------|------------|
| Options                                     | Count | Percentage |
| Strongly Agree<br>(4)                       | 18    | 94.74%     |
| Agree (3)                                   | 1     | 5.26%      |
| Disagree (2)                                | 0     | 0.00%      |
| Strongly Disagree (1)                       | 0     | 0.00%      |
| Statistics                                  |       | Value      |
| Response Count                              |       | 19         |
| Mean  |       | 3.95       |
| Median                                      |       | 4.00       |

# Questions about the Course (Comments)

Expected learning outcomes for the course were clearly communicated.

#### Comment

- Pre-lecture homework allowed students to become somewhat familiar with the content before lecture.
- Dr. Bracher spent a great deal of time communicating requirements for the class as well as how grades would be calculated (which was very helpful). Maybe If he had a slide on the second day of class outlining what topics we will cover, and give a very, very brief synopsis of what each one is, and why we are learning it in that order, it would provide us with a little more context for our learning.

The required textbook(s)/readings supported my learning in the course.

#### Comment

- This is the most important textbook I have had in college. Equally important is that it was available online.
- The textbook and the quiz archive were the number one source of practice for this exam. I found the textbook was good for drilling basic knowledge. The textbook was kind of like praticing scales for the piano. Nobody cares, and will grade you based on the fact, that you can do the book problems. But you need to do them so that when you attack the 'real stuff' (i.e. the quizzes and exams) you know how to properly do the basic and intermediate level applications of the concept. There are a lot of stupid mistakes you can make on this test, and the book helps eliminate 90% of the chance of you making those. The reason you can't use the book as the only exam prep is that the increase in the difficulty as the chapter progresses is so gradual that it is easy to expect what the answer will be. But I still recommend that YOU DO EVERY SINGLE PRACTICE problem in the book. As Ron Swanson might say "you probably heard that as 'do a lot of practice problems.' I said every practice problem in the book."

Class discussions/activities supported my learning in the course.

#### Comment

- In class problems and friday problem-sessions were very helpful in the digestion of material.
- Doing practice problems helped immensely.
- There was not much time for discussion in class, but whenever we did have it, the questions were usually insightful and helpful. I wish we spent more time doing practice problems, and I was a big fan of those extremely difficult "If you can do this problem, you are at a pretty good place." questions on naming and R and S designations. If we did more of that, I would have had a better place to know where to start with my studying.

Assignments/homework supported my learning in the course.

#### Comment

- The quizzes and pre–lectures were very helpful in getting a basic understanding of the topics before going more in depth in lecture and the quizzes helped to challenge our understanding of topics. I found the links to the reading to be extremely helpful because they directed us to the specific notes need to answer the question and understand the topics. It is a lot better than googling things and finding wrong answers.
- Homework (esp. post-chapter) acted as required practice which proved quite valuable. Strikes a great balance in how much work is required.
- Wiley homework helped to learn the basics.
- The Wiley homework had minimal impact compared to the quizzes and non-assigned homework The quizzes were very helpful for test preparation. The Wiley was helpful but the questions tested baseline knowledge, I would still keep them however.

Exams/quizzes supported my learning in the course.

## Comment

- Exams were challenging, but that works out well for the following reasons: 1. Grading cutoffs were properly forgiving 2. Quizzes excellently prepared students for the exams
- Quizzes were very helpful to know what is expected from us on the following exam.
- The exams were very difficult. I performed highly in all of them and this prepared me a lot for the final. All of them got me to apply the knowledge heavily and forced me to learn this completely foreign subject.

The course required me to apply what I learned in new ways.

## Comment

- I was encouraged not to just memorize reagents or definitions. Rather, I gained deeper understanding of why many reactions happen and why concepts are important.
- I don't think I have ever had to learn so many different ways of thinking for a class since African American Lit in High school. Reactions, Mechanisms, Stereochemistry, rearrangements, H NMR Splitting, skeletal structures, bond angles, ARIO acidity— all of these were really cool because they used stuff I have learned over and over for a very useful purpose and that is why I enjoyed the

#### Comment

class.

The course challenged me intellectually.

## Comment

- To be clear, I was challenged the proper amount
- I enjoyed the challenge.
- YES.
- This is, without a doubt, the second hardest class I have ever taken at SLU. (Calc III was #1 just in case you were wondering, but Orgo required more time out of me). It required me to think about molecules and reactions in a completely different way. It was really cool because we finally got to apply what we learned. As much as I kind of enjoyed the suffering, it was kind of disgusting how deeply I had to immerse myself in the class to understand and gain mastery over the content. Often I would spend 7–8 consecutive hours (with plenty of breaks) drawing molecules and mechanisms. I mean it got really bad. When I was falling asleep in class, or was going to bed and transitioning into dreaming, I would slowly lose grasp of reality and start decomposing the people around me into carbon skeletons. They would exist transitions between human form and some sort of epoxide or Newman projection and move and interact with other people, but they would only do this via talking into the antiboinding orbitals of the other person. It really messed with me when I woke up.
- Tests were too difficult often times.
- Very strongly agree

## Questions about the Course (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| Expected learning outcomes for the course were clearly communicated.   | 3.89       | 4.00   | 19                | 3.59                   | 4.00   | 1760              | 3.57                                 | 4.00   | 13064             |
| The required textbook(s)/readings supported my learning in the course. | 3.84       | 4.00   | 19                | 3.32                   | 4.00   | 1760              | 3.39                                 | 4.00   | 13064             |
| Class discussions/activities supported my learning in the course.      | 3.74       | 4.00   | 19                | 3.43                   | 4.00   | 1760              | 3.51                                 | 4.00   | 13064             |
| Assignments/homework supported my learning in the course.              | 3.68       | 4.00   | 19                | 3.44                   | 4.00   | 1760              | 3.49                                 | 4.00   | 13064             |
| Exams/quizzes supported my learning in the course.                     | 3.74       | 4.00   | 19                | 3.40                   | 4.00   | 1760              | 3.44                                 | 4.00   | 13064             |
| The course required me to apply what I learned in new ways.            | 3.89       | 4.00   | 19                | 3.54                   | 4.00   | 1760              | 3.52                                 | 4.00   | 13064             |
| The course challenged me intellectually.                               | 3.95       | 4.00   | 19                | 3.68                   | 4.00   | 1760              | 3.56                                 | 4.00   | 13064             |

# What suggestions do you have for improving this course?

#### Comments

Great as is. Would be cool if Wiley was more user friendly (autosubmitted answers on deadline, or able to switch submitted answers as long as you are before the deadline). The instructor recommended doing "every problem in every chapter of the book". I think this turned off a lot of people from doing book problems at all because 'if you aren't going to do them all, its not worth it'. Maybe it would be beneficial for there to be a list of recommended problems that the instructor thinks are best for review of the course, such as picking 20 problems per chapter, for people who are intimidated from doing all of the problems but not a few handpicked ones.

none, the class was perfect

Amazing course. Unsure of how to improve it.

I think this course was taught very well. Organic chemistry is expected to be a difficult class, but the class organization and teaching made it doable and even enjoyable. I took Dr. Bracher's advice on how to approach this class as a competition. A competition not between fellow students but between the me and the class. I think it worked very effectively and made it more fun to learn.

Can you really improve organic chemistry???

I know there is a lot of content, but slowing down on the slides would help. Giving four spectra problems that are easy so we have good starting point for those questions, because a lot of them are very hard. Pushing forward the Metallacycle website because that was very helpful. If you are still in contact, ask him to put fisher, Newman and and more complex projections on there. Not holding office hours during the Analytical chem lab would have also been nice because there were a lot of times I could not see you when I wanted to. Otherwise the course was very well structured and I wouldn't to change much.

Change the homework system. More than one try should be available, as well as knowing whether or not you get the answer correct immediately. I found that the pre—hw was more manageable than the post—hw assignments, yet both were not helpful in my learning process.

More practice problems in class would be nice

## Please offer any additional comments and/or suggestions you wish to share about the course:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

The textbook had some really good examples and diagrams that show how different mechanisms work. They also have good summation tables of all the possible ways that a starting material can react to produce different products.

The class was extremely difficult, but the way the professor taught it and organized it made it seem so much easier.

The course was very good and I feel prepared for future classes in this subject area.

I enjoyed this class so much. Yes, it was hard and time consuming, but if you put in the work, then it is most certainly doable.

I really liked the way this course was designed to allow you to drop your lowest quiz and exam because it really helped us learn more about the topics at hand while also making it okay to make a few mistakes because this course was HARD.

This was not related to anything in this class, but I found the orgo lab where we went through the four spectra to be very helpful for exam 2. As it gave us medium level difficulty problems for

I believe that the tests are more difficult than they need to be. I understand that this course is particularly challenging, but there is no reason that a class average for a test should be as low as it frequently is. Just because the whole class does bad doesn't make the drops in self–esteem of college students any less significant after doing terrible on an exam.

#### Questions about the Instructor Paul Bracher

| 1. The instructor communicated id | eas and informatio | on clearly. | 2. The instructor demonstrated ent matter. | husiasm for the s | subject    |
|-----------------------------------|--------------------|-------------|--|-------------------|------------|
| Options                           | Count              | Percentage  | Options                                    | Count             | Percentage |
| Always<br>(4)                     | 19                 | 100.00%     | Always<br>(4)                              | 19                | 100.00%    |
| Often (3)                         | 0                  | 0.00%       | Often (3)                                  | 0                 | 0.00%      |
| Sometimes (2)                     | 0                  | 0.00%       | Sometimes (2)                              | 0                 | 0.00%      |
| Never (1)                         | 0                  | 0.00%       | Never (1)                                  | 0                 | 0.00%      |
| Statistics                        |                    | Value       | Statistics                                 |                   | Value      |
| Response Count                    |                    | 19          | Response Count                             |                   | 19         |
| Mean                              |                    | 4.00        | Mean                                       |                   | 4.00       |
| Median                            |                    | 4.00        | Median                                     |                   | 4.00       |

| <ol><li>The instructor provided feedback/critique<br/>subsequent work in the course.</li></ol> | that help | ped me with |
|--|-----------|-------------|
| Options  | Count     | Percentage  |
| Always<br>(4)  | 17        | 89.47%      |
| Often (3)  | 1         | 5.26%       |
| Sometimes (2)  | 0         | 0.00%       |
| Never (1)  | 1         | 5.26%       |
| Statistics   |           | Value       |
| Response Count   |           | 19          |
| Mean   |           | 3.79        |
| Median   |           | 4.00        |

| 4. The instructor treated students with | respect. |            |
|---|----------|------------|
| Options                                 | Count    | Percentage |
| Always (4)                              | 19       | 100.00%    |
| Often (3)                               | 0        | 0.00%      |
| Sometimes (2)                           | 0        | 0.00%      |
| Never (1)                               | 0        | 0.00%      |
| Statistics                              |          | Value      |
| Response Count                          |          | 19         |
| Mean                                    |          | 4.00       |
| Median                                  |          | 4.00       |

| 5. The instructor was available for assistance when needed. |       |            |  |  |  |  |  |
|---|-------|------------|--|--|--|--|--|
| Options   | Count | Percentage |  |  |  |  |  |
| Always<br>(4)   | 17    | 89.47%     |  |  |  |  |  |
| Often (3)   | 2     | 10.53%     |  |  |  |  |  |
| Sometimes (2)   | 0     | 0.00%      |  |  |  |  |  |
| Never (1)   | 0     | 0.00%      |  |  |  |  |  |
| Statistics  |       | Value      |  |  |  |  |  |
| Response Count  |       | 19         |  |  |  |  |  |
| Mean  |       | 3.89       |  |  |  |  |  |
| Median  |       | 4.00       |  |  |  |  |  |

# Questions about the Instructor Paul Bracher (Comments)

The instructor communicated ideas and information clearly.

#### Comment

- Dr. Bracher consistently asked if students had trouble understanding concepts. Dr. Bracher puts a lot of work into communicating effectively.
- Great lecturer, and very good at explaining the answer based on our own level of knowledge. Was concise where he needed to be.

The instructor demonstrated enthusiasm for the subject matter.

#### Comment

- Dr. Bracher never shied away from showing his affection for the material.
- Umm. Yeah. I have never seen anyone be so good at highlighting why their field is so important. He makes me want to be an organic chemist.

The instructor provided feedback/critique that helped me with subsequent work in the course.

#### Comment

- Every test and quiz contained useful feedback about any mistakes we made. Problem sessions gave immediate feedback on how we were doing.
- Whenever I asked him, he gave great feedback on how I could have better prepared for a test, and what order I should go through the practice resources right before a test when I was lagging behind.

The instructor treated students with respect.

#### Comment

- I never felt talked-down to.
- He never made anyone feel bad for their grade or making a mistake.

The instructor was available for assistance when needed.

#### Comment

- Dr. Bracher very often would inform us of his office hour times, of which there were many.
- Again, it was inconvenient having office hours during Analytical lab, but that's ok.

## Questions about the Instructor (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts &<br>Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|---|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                    | Median | Response<br>Count |
| The instructor communicated ideas and information clearly.                                   | 4.00       | 4.00   | 19                | 3.41                   | 4.00   | 2585              | 3.48                                    | 4.00   | 15108             |
| The instructor demonstrated enthusiasm for the subject matter.                               | 4.00       | 4.00   | 19                | 3.48                   | 4.00   | 2585              | 3.69                                    | 4.00   | 15108             |
| The instructor provided feedback/critique that helped me with subsequent work in the course. | 3.79       | 4.00   | 19                | 3.31                   | 4.00   | 2585              | 3.45                                    | 4.00   | 15108             |
| The instructor treated students with respect.  | 4.00       | 4.00   | 19                | 3.61                   | 4.00   | 2585              | 3.77                                    | 4.00   | 15108             |
| The instructor was available for assistance when needed.                                     | 3.89       | 4.00   | 19                | 3.47                   | 4.00   | 2585              | 3.64                                    | 4.00   | 15108             |

# Please offer any additional comments and/or suggestions you wish to share about the instructor Paul Bracher:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

Professor was very excited about the course material and was very knowledgeable about the subject matter. He really strived to teach in a way everyone could understand and made sure he was available if help was needed.

The recitations/problem sessions were extremely helping in understanding different ways that topics can be questioned and were very helpful for tests. They were also helpful in finding common tricks that can make complex problems a little simpler. I strongly encourage everyone to go to the problem sessions in person and not on Tegrity because many useful tips and tricks are discussed and they are really good practice problems that are very useful for exam and quizzes.

The only thing this man didn't do was show up to his own exams on time, and he also missed practically every deadline he set for himself for when he would hand back graded papers. Other than that, this man was a gem, and was super enthusiastic, knowledgeable, and helpful. The entire class format this instructor uses is perfect. The exams are hard and challenging, the quizzes are even harder and do well to prepare for the exams, and he gives ample time to ask questions and improve our knowledge. This man is a legend. Allegedly, he didn't have exams written and finalized until a few hours before exam time, but there were never any errors. He was swamped with grading papers and other work which is why he consistently returned assignments late. He should just say "I don't know when they will be graded" or just give a far out estimate on when he will return papers and that would be fine. And he should stop coming to exams late. Awesome in every other way!

My favorite professor at SLU. Funny, witty, smart, and altogether just a great professor. Knows what he's talking about and makes organic chemistry so much easier than it should be.

Dr. Bracher is the greatest professor I have had at SLU. He clearly puts in a massive amount of effort into the education of his students. He is incredibly smart, and very clearly knows the course content. He is a genuine and fun professor who treats his students very well. SLU would be making a huge mistake by not recognizing his great achievements and proficiency at teaching. I feel lucky as a chemistry major to have him in the department. I will miss having Dr. Bracher as a professor.

Dr. Bracher's deep understanding of the subject material and enthusiasm for sharing his knowledge made this a class that I looked forward to attending. He was very helpful in his office hours and in the problem sessions. He made it very clear what was expected of us on the exams, and he made the exams satisfyingly difficult. It sounds weird, but I actually looked forward to taking the exams because there was always at least one question that tested our knowledge in an interesting way. Overall, I will sincerely miss Dr. Bracher as a professor.

Dr. Bracher is hands—down the best organic chemistry professor I could have had walking into my first organic chemistry course. I really can not complain about his teaching because if I did not get something wrong, it wasn't because he never taught it to us, it was because I got it wrong. His exams are extremely difficult, but he really provides feedback to your answers. He's funny, too and made organic chemistry interesting at times. I really do not like the material, but I really liked Dr.Bracher.

#### Great class

Dr. Bracher is an excellent instructor. He is extremely knowledgeable and loves Organic Chemistry more than anyone else.

Dr. Paul Bracher is the best teacher I have had at SLU. And one of the top 3 teachers I have every had in my life. He is incredibly intelligent, not only in his own field, but in understanding the intricacies of teaching. He is also a really cool dude. I could go on and on praising him, but I will answer the guestion of how I would teach the course differently.

I would slow down a little, and have a recap slide every 10–20 slides which basically says "This is what we are doing and why. And how it ties into what he have learned so far."

I would prepare a very easy practice test for each chapter, just so students don't feel overwhelmed with content (often times this happens to me and I don't know where to start) but this sort of test would allow me to have some place to start.

I would spend a little more time using molecules that are common in real life because that is cool.

I would explain the cost, synthesis and relative obtainability of the reagents we are using in synthesis so it does not seem like we just pulling these mechanisms out of nowhere.

Otherwise, not much. Thanks so much.

Gave good lectures, however, his exams were too difficult, some questions given were never taught and required too much further application than should have been necessary.

Dr Bracher taught this challenging course exceptionally well. I only wish he made the exams less challenging.

Great professor



# Course Evaluation Report for FL2018 CHEM-2430-101-Organic Chemistry 1 for Majors (Paul Bracher) - Fall 2018

Project Title: **A&S Course Evaluations** 

Total Enrollment: **15**Responses Received: **7**Response Rate: **46.67%** 

Creation Date: Sun, Dec 23, 2018



# **Interpretation Guidelines**

Within this report instructors can view the aggregate of all student responses to Likert scale or multiple choice questions and individual responses to short answer questions.

# I took this course (check all that apply)...

| Options  | Count |
|--|-------|
| to meet a requirement of an undergraduate academic major or minor                          | 7     |
| to meet a requirement of a graduate/professional program or minor                          | 0     |
| to meet an undergraduate core/general education requirement                                | 0     |
| as an elective (not part of any major/minor/program or core/general education requirement) | 0     |
| Please explain   | 0     |

# Questions about the Student (agree)

Level of Agreement

| I believe my academic back<br>this course. | ground was sufficient | to succeed in | 2. The subject matter of this cours the course began. | se was of interest t | o me before |
|--|-----------------------|---------------|---|----------------------|-------------|
| Options                                    | Count                 | Percentage    | Options   | Count                | Percentage  |
| Strongly agree (4)                         | 5                     | 71.43%        | Strongly agree (4)                                    | 4                    | 57.14%      |
| Agree (3)                                  | 2                     | 28.57%        | Agree (3)   | 3                    | 42.86%      |
| Disagree<br>(2)                            | 0                     | 0.00%         | Disagree<br>(2)                                       | 0                    | 0.00%       |
| Strongly Disagree (1)                      | 0                     | 0.00%         | Strongly Disagree<br>(1)                              | 0                    | 0.00%       |
| Statistics                                 |                       | Value         | Statistics  |                      | Value       |
| Response Count                             |                       | 7             | Response Count  |                      | 7           |
| Mean                                       |                       | 3.71          | Mean  |                      | 3.57        |
| Median                                     |                       | 4.00          | Median  |                      | 4.00        |

# Questions about the Student (agree) (Comments)

Level of Agreement

I believe my academic background was sufficient to succeed in this course.

Comment

- Dr. Bracher rules

The subject matter of this course was of interest to me before the course began.

Comment

- Dr. Bracher rules

# Questions about the Student (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| I believe my academic background was sufficient to succeed in this course.       | 3.71       | 4.00   | 7                 | 3.34                   | 3.00   | 1760              | 3.52                                 | 4.00   | 13064             |
| The subject matter of this course was of interest to me before the course began. | 3.57       | 4.00   | 7                 | 3.07                   | 3.00   | 1760              | 3.26                                 | 3.00   | 13064             |

# **Questions about the Student (frequency)**

Frequency

| 1. I came to each class session prepared. |       |            | 2. I invested enough time and energy to requirements. | meet the co | urse       |
|---|-------|------------|---|-------------|------------|
| Options                                   | Count | Percentage | Options   | Count       | Percentage |
| Always<br>(4)                             | 3     | 42.86%     | Always<br>(4)   | 4           | 57.14%     |
| Often (3)                                 | 3     | 42.86%     | Often<br>(3)  | 2           | 28.57%     |
| Sometimes (2)                             | 1     | 14.29%     | Sometimes (2)   | 1           | 14.29%     |
| Never (1)                                 | 0     | 0.00%      | Never (1)   | 0           | 0.00%      |
| Statistics                                |       | Value      | Statistics  |             | Value      |
| Response Count                            |       | 7          | Response Count  |             | 7          |
| Mean                                      |       | 3.29       | Mean  |             | 3.43       |
| Median                                    |       | 3.00       | Median  |             | 4.00       |

| 3. I asked the instructor for help when I needed it. |       |            |  |  |  |  |  |
|--|-------|------------|--|--|--|--|--|
| Options  | Count | Percentage |  |  |  |  |  |
| Always<br>(4)  | 4     | 57.14%     |  |  |  |  |  |
| Often (3)  | 1     | 14.29%     |  |  |  |  |  |
| Sometimes (2)  | 2     | 28.57%     |  |  |  |  |  |
| Never (1)  | 0     | 0.00%      |  |  |  |  |  |
| Statistics   |       | Value      |  |  |  |  |  |
| Response Count                                       |       | 7          |  |  |  |  |  |
| Mean   |       | 3.29       |  |  |  |  |  |
| Median   |       | 4.00       |  |  |  |  |  |

# **Questions about the Student (frequency) (Comments)**

Frequency

| I came to each class session prepared.                             |  |
|--|--|
| Comment  |  |
| - Dr. Bracher rules  |  |
| I invested enough time and energy to meet the course requirements. |  |
| Comment  |  |
| - Dr. Bracher rules  |  |
| I asked the instructor for help when I needed it.                  |  |
| Comment  |  |
| - Dr. Bracher rules  |  |

# Questions about the Student (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| I came to each class session prepared.                             | 3.29       | 3.00   | 7                 | 3.53                   | 4.00   | 1760              | 3.49                                 | 4.00   | 13064             |
| I invested enough time and energy to meet the course requirements. | 3.43       | 4.00   | 7                 | 3.57                   | 4.00   | 1760              | 3.59                                 | 4.00   | 13064             |
| I asked the instructor for help when I needed it.                  | 3.29       | 4.00   | 7                 | 3.15                   | 4.00   | 1760              | 3.30                                 | 4.00   | 13064             |

# **Questions about the Course**

| Expected learning outcomes for the course were clearly communicated. |       |            | 2. The required textbook(s)/readings supported my learning in the course. |       |            |  |
|--|-------|------------|---|-------|------------|--|
| Options  | Count | Percentage | Options   | Count | Percentage |  |
| Strongly Agree (4)   | 5     | 71.43%     | Strongly Agree (4)  | 4     | 57.14%     |  |
| Agree (3)  | 2     | 28.57%     | Agree (3)   | 3     | 42.86%     |  |
| Disagree (2)   | 0     | 0.00%      | Disagree<br>(2)   | 0     | 0.00%      |  |
| Strongly Disagree (1)  | 0     | 0.00%      | Strongly Disagree (1)   | 0     | 0.00%      |  |
| Statistics   |       | Value      | Statistics  |       | Value      |  |
| Response Count   |       | 7          | Response Count  |       | 7          |  |
| Mean   |       | 3.71       | Mean  |       | 3.57       |  |
| Median   |       | 4.00       | Median  |       | 4.00       |  |

| 3. Class discussions/activities suppo-<br>course. | orted my learnir | ig in the  | 4. Assignments/homework sup | ported my learning ir | n the course. |
|---|------------------|------------|-----------------------------|-----------------------|---------------|
| Options   | Count            | Percentage | Options                     | Count                 | Percentage    |
| Strongly Agree (4)                                | 5                | 71.43%     | Strongly Agree (4)          | 3                     | 42.86%        |
| Agree (3)   | 2                | 28.57%     | Agree (3)                   | 3                     | 42.86%        |
| Disagree (2)                                      | 0                | 0.00%      | Disagree<br>(2)             | 1                     | 14.29%        |
| Strongly Disagree (1)                             | 0                | 0.00%      | Strongly Disagree<br>(1)    | 0                     | 0.00%         |
| Statistics  |                  | Value      | Statistics                  |                       | Value         |
| Response Count                                    |                  | 7          | Response Count              |                       | 7             |
| Mean  |                  | 3.71       | Mean                        |                       | 3.29          |
| Median  |                  | 4.00       | Median                      |                       | 3.00          |

| 5. Exams/quizzes supported my learning in the course. |       |            |  |  |  |  |
|---|-------|------------|--|--|--|--|
| Options   | Count | Percentage |  |  |  |  |
| Strongly Agree (4)                                    | 4     | 57.14%     |  |  |  |  |
| Agree (3)   | 2     | 28.57%     |  |  |  |  |
| Disagree (2)  | 1     | 14.29%     |  |  |  |  |
| Strongly Disagree (1)                                 | 0     | 0.00%      |  |  |  |  |
| Statistics  |       | Value      |  |  |  |  |
| Response Count  |       | 7          |  |  |  |  |
| Mean  |       | 3.43       |  |  |  |  |
| Median  |       | 4.00       |  |  |  |  |

| 6. The course required me to apply what I le | earned in | new ways.  |
|--|-----------|------------|
| Options                                      | Count     | Percentage |
| Strongly Agree (4)                           | 4         | 57.14%     |
| Agree (3)                                    | 3         | 42.86%     |
| Disagree (2)                                 | 0         | 0.00%      |
| Strongly Disagree (1)                        | 0         | 0.00%      |
| Statistics                                   |           | Value      |
| Response Count                               |           | 7          |
| Mean   |           | 3.57       |
| Median                                       |           | 4.00       |

| 7. The course challenged me intellectually. |       |            |
|---|-------|------------|
| Options                                     | Count | Percentage |
| Strongly Agree (4)                          | 5     | 71.43%     |
| Agree (3)                                   | 2     | 28.57%     |
| Disagree (2)                                | 0     | 0.00%      |
| Strongly Disagree (1)                       | 0     | 0.00%      |
| Statistics                                  |       | Value      |
| Response Count                              |       | 7          |
| Mean  |       | 3.71       |
| Median                                      |       | 4.00       |

# **Questions about the Course (Comments)**

Expected learning outcomes for the course were clearly communicated.

#### Comment

- Dr. Bracher rules

The required textbook(s)/readings supported my learning in the course.

#### Comment

- Dr. Bracher rules
- No textbook required

Class discussions/activities supported my learning in the course.

#### Comment

- Dr. Bracher rules

Assignments/homework supported my learning in the course.

#### Comment

- Dr. Bracher rules
- N/A

Exams/quizzes supported my learning in the course.

#### Comment

- Dr. Bracher rules
- N/A

The course required me to apply what I learned in new ways.

## Comment

- Dr. Bracher rules

The course challenged me intellectually.

## Comment

- Dr. Bracher rules

# Questions about the Course (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| Expected learning outcomes for the course were clearly communicated.   | 3.71       | 4.00   | 7                 | 3.59                   | 4.00   | 1760              | 3.57                                 | 4.00   | 13064             |
| The required textbook(s)/readings supported my learning in the course. | 3.57       | 4.00   | 7                 | 3.32                   | 4.00   | 1760              | 3.39                                 | 4.00   | 13064             |
| Class discussions/activities supported my learning in the course.      | 3.71       | 4.00   | 7                 | 3.43                   | 4.00   | 1760              | 3.51                                 | 4.00   | 13064             |
| Assignments/homework supported my learning in the course.              | 3.29       | 3.00   | 7                 | 3.44                   | 4.00   | 1760              | 3.49                                 | 4.00   | 13064             |
| Exams/quizzes supported my learning in the course.                     | 3.43       | 4.00   | 7                 | 3.40                   | 4.00   | 1760              | 3.44                                 | 4.00   | 13064             |
| The course required me to apply what I learned in new ways.            | 3.57       | 4.00   | 7                 | 3.54                   | 4.00   | 1760              | 3.52                                 | 4.00   | 13064             |
| The course challenged me intellectually.                               | 3.71       | 4.00   | 7                 | 3.68                   | 4.00   | 1760              | 3.56                                 | 4.00   | 13064             |

# What suggestions do you have for improving this course?

#### Comments

Sometimes we started late or ended early... it wasn't super worth it to wait an hour after class for a 30 minute session. Usually it was fine.

# Please offer any additional comments and/or suggestions you wish to share about the course:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

I think there should be a better way to encourage people to come. I convinced someone to come on the very last day of recitations and he said it was super helpful and he regret not coming earlier. I am sure there is some way to incentivize people to come without giving them anything for it.

#### Questions about the Instructor Paul Bracher

| 1. The instructor communicated                                      | ideas and information  | on clearly.   | The instructor demonstrate matter.                              | d enthusiasm for the s | subject                                     |
|---|------------------------|---|---|------------------------|---|
| Options   | Count                  | Percentage  | Options   | Count                  | Percentage                                  |
| Always<br>(4)   | 7                      | 100.00%   | Always<br>(4)   | 7                      | 100.00%                                     |
| Often (3)   | 0                      | 0.00%   | Often (3)   | 0                      | 0.00%                                       |
| Sometimes (2)   | 0                      | 0.00%   | Sometimes<br>(2)  | 0                      | 0.00%                                       |
| Never<br>(1)  | 0                      | 0.00%   | Never<br>(1)  | 0                      | 0.00%                                       |
| Statistics  |                        | Value   | Statistics  |                        | Value                                       |
| Response Count  |                        | 7   | Response Count  |                        | 7   |
| Mean  |                        | 4.00  | Mean  |                        | 4.00  |
| Median  |                        | 4.00  | Median  |                        | 4.00  |
|   |                        |   |   |                        |   |
| 3. The instructor provided feedbased subsequent work in the course. | ack/critique that help | ped me with   | The instructor treated stude                                    | ents with respect.     |   |
|   |                        | ped me with   | The instructor treated stude     Options                        |                        | Percentage                                  |
| subsequent work in the course.                                      |                        |   |   |                        | Percentage 100.00%                          |
| subsequent work in the course.  Options  Always                     | Count                  | Percentage  | Options Always  | Count                  |   |
| Options Always (4) Often  | Count 6                | Percentage<br>85.71%                                      | Options Always (4) Often  | Count 7                | 100.00%                                     |
| Options Always (4) Often (3) Sometimes                              | Count 6                | Percentage<br>85.71%<br>14.29%                            | Options Always (4) Often (3) Sometimes                          | Count 7                | 100.00%                                     |
| Options Always (4) Often (3) Sometimes (2) Never                    | Count 6 1 0            | Percentage<br>85.71%<br>14.29%<br>0.00%                   | Options Always (4) Often (3) Sometimes (2) Never                | Count 7 0 0            | 100.00%<br>0.00%<br>0.00%                   |
| Options Always (4) Often (3) Sometimes (2) Never (1)                | Count 6 1 0            | Percentage<br>85.71%<br>14.29%<br>0.00%                   | Options Always (4) Often (3) Sometimes (2) Never (1)            | Count 7 0 0            | 100.00%<br>0.00%<br>0.00%<br>0.00%          |
| Options Always (4) Often (3) Sometimes (2) Never (1) Statistics     | Count 6 1 0            | Percentage<br>85.71%<br>14.29%<br>0.00%<br>0.00%<br>Value | Options Always (4) Often (3) Sometimes (2) Never (1) Statistics | Count 7 0 0            | 100.00%<br>0.00%<br>0.00%<br>0.00%<br>Value |

| 5. The instructor was available for assistance when needed. |       |            |  |  |  |  |
|---|-------|------------|--|--|--|--|
| Options   | Count | Percentage |  |  |  |  |
| Always<br>(4)   | 7     | 100.00%    |  |  |  |  |
| Often (3)   | 0     | 0.00%      |  |  |  |  |
| Sometimes (2)   | 0     | 0.00%      |  |  |  |  |
| Never (1)   | 0     | 0.00%      |  |  |  |  |
| Statistics  |       | Value      |  |  |  |  |
| Response Count  |       | 7          |  |  |  |  |
| Mean  |       | 4.00       |  |  |  |  |
| Median  |       | 4.00       |  |  |  |  |

### **Questions about the Instructor Paul Bracher (Comments)**

The instructor communicated ideas and information clearly.

#### Comment

- Dr. Bracher rules

The instructor demonstrated enthusiasm for the subject matter.

#### Comment

- Dr. Bracher rules

The instructor provided feedback/critique that helped me with subsequent work in the course.

#### Comment

- Dr. Bracher rules

The instructor treated students with respect.

#### Comment

- Dr. Bracher rules

The instructor was available for assistance when needed.

#### Comment

- Dr. Bracher rules

# Questions about the Instructor (Dept & College Averages)

| Question   | Your Score |        | Department (Chemistry) |      |        | College (College of Arts &<br>Sciences) |      |        |                   |
|--|------------|--------|------------------------|------|--------|---|------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count      | Mean | Median | Response<br>Count                       | Mean | Median | Response<br>Count |
| The instructor communicated ideas and information clearly.                                   | 4.00       | 4.00   | 7                      | 3.41 | 4.00   | 2585                                    | 3.48 | 4.00   | 15108             |
| The instructor demonstrated enthusiasm for the subject matter.                               | 4.00       | 4.00   | 7                      | 3.48 | 4.00   | 2585                                    | 3.69 | 4.00   | 15108             |
| The instructor provided feedback/critique that helped me with subsequent work in the course. | 3.86       | 4.00   | 7                      | 3.31 | 4.00   | 2585                                    | 3.45 | 4.00   | 15108             |
| The instructor treated students with respect.  | 4.00       | 4.00   | 7                      | 3.61 | 4.00   | 2585                                    | 3.77 | 4.00   | 15108             |
| The instructor was available for assistance when needed.                                     | 4.00       | 4.00   | 7                      | 3.47 | 4.00   | 2585                                    | 3.64 | 4.00   | 15108             |

# Please offer any additional comments and/or suggestions you wish to share about the instructor Paul Bracher:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

Dr. Bracher is the greatest professor I have had at SLU. He clearly puts in a massive amount of effort into the education of his students. He is incredibly smart, and very clearly knows the course content. He is a genuine and fun professor who treats his students very well. SLU would be making a huge mistake by not recognizing his great achievements and proficiency at teaching. I feel lucky as a chemistry major to have him in the department. I will miss having him as a professor.

#### Great class

Drawing on the iPad was a creative way to do the recitations and it worked quite well. Great guy



# Course Evaluation Report for FL2018 CHEM-2430-102-Organic Chemistry 1 for Majors (Paul Bracher) - Fall 2018

Project Title: **A&S Course Evaluations** 

Total Enrollment: **25**Responses Received: **11**Response Rate: **44.00**%

Creation Date: Sun, Dec 23, 2018



# **Interpretation Guidelines**

Within this report instructors can view the aggregate of all student responses to Likert scale or multiple choice questions and individual responses to short answer questions.

# I took this course (check all that apply)...

| Options  | Count |
|--|-------|
| to meet a requirement of an undergraduate academic major or minor                          | 11    |
| to meet a requirement of a graduate/professional program or minor                          | 0     |
| to meet an undergraduate core/general education requirement                                | 1     |
| as an elective (not part of any major/minor/program or core/general education requirement) | 0     |
| Please explain   | 0     |

# Questions about the Student (agree)

Level of Agreement

| I believe my academic backg<br>this course. | round was sufficient | to succeed in | 2. The subject matter of this course the course began. | e was of interest t | o me before |
|---|----------------------|---------------|--|---------------------|-------------|
| Options                                     | Count                | Percentage    | Options  | Count               | Percentage  |
| Strongly agree (4)                          | 8                    | 72.73%        | Strongly agree (4)                                     | 8                   | 72.73%      |
| Agree (3)                                   | 2                    | 18.18%        | Agree (3)  | 2                   | 18.18%      |
| Disagree<br>(2)                             | 1                    | 9.09%         | Disagree<br>(2)  | 1                   | 9.09%       |
| Strongly Disagree (1)                       | 0                    | 0.00%         | Strongly Disagree (1)                                  | 0                   | 0.00%       |
| Statistics                                  |                      | Value         | Statistics   |                     | Value       |
| Response Count                              |                      | 11            | Response Count   |                     | 11          |
| Mean  |                      | 3.64          | Mean   |                     | 3.64        |
| Median                                      |                      | 4.00          | Median   |                     | 4.00        |

# Questions about the Student (agree) (Comments)

Level of Agreement

I believe my academic background was sufficient to succeed in this course.

Comment
[No Response]

The subject matter of this course was of interest to me before the course began.

Comment
[No Response]

# Questions about the Student (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| I believe my academic background was sufficient to succeed in this course.       | 3.64       | 4.00   | 11                | 3.34                   | 3.00   | 1760              | 3.52                                 | 4.00   | 13064             |
| The subject matter of this course was of interest to me before the course began. | 3.64       | 4.00   | 11                | 3.07                   | 3.00   | 1760              | 3.26                                 | 3.00   | 13064             |

# **Questions about the Student (frequency)**

Frequency

| 1. I came to each class session prepared. |       |            | 2. I invested enough time and energy trequirements. | o meet the co | urse       |
|---|-------|------------|---|---------------|------------|
| Options                                   | Count | Percentage | Options   | Count         | Percentage |
| Always<br>(4)                             | 9     | 81.82%     | Always<br>(4)                                       | 10            | 90.91%     |
| Often (3)                                 | 0     | 0.00%      | Often (3)   | 0             | 0.00%      |
| Sometimes (2)                             | 2     | 18.18%     | Sometimes (2)                                       | 1             | 9.09%      |
| Never (1)                                 | 0     | 0.00%      | Never (1)   | 0             | 0.00%      |
| Statistics                                |       | Value      | Statistics  |               | Value      |
| Response Count                            |       | 11         | Response Count                                      |               | 11         |
| Mean                                      |       | 3.64       | Mean  |               | 3.82       |
| Median                                    |       | 4.00       | Median  |               | 4.00       |

| 3. I asked the instructor for help when I needed it. |       |            |  |  |  |  |  |
|--|-------|------------|--|--|--|--|--|
| Options  | Count | Percentage |  |  |  |  |  |
| Always<br>(4)  | 7     | 63.64%     |  |  |  |  |  |
| Often (3)  | 1     | 9.09%      |  |  |  |  |  |
| Sometimes (2)  | 3     | 27.27%     |  |  |  |  |  |
| Never (1)  | 0     | 0.00%      |  |  |  |  |  |
| Statistics   |       | Value      |  |  |  |  |  |
| Response Count                                       |       | 11         |  |  |  |  |  |
| Mean   |       | 3.36       |  |  |  |  |  |
| Median   |       | 4.00       |  |  |  |  |  |

# **Questions about the Student (frequency) (Comments)**

Frequency

| ame to each class session prepared.                             |  |
|---|--|
| omment  |  |
| o Response]   |  |
| ovested enough time and energy to meet the course requirements. |  |
| omment  |  |
| o Response]   |  |
| sked the instructor for help when I needed it.                  |  |
| omment  |  |
| o Response]   |  |

# Questions about the Student (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts & Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|--------------------------------------|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                 | Median | Response<br>Count |
| I came to each class session prepared.                             | 3.64       | 4.00   | 11                | 3.53                   | 4.00   | 1760              | 3.49                                 | 4.00   | 13064             |
| I invested enough time and energy to meet the course requirements. | 3.82       | 4.00   | 11                | 3.57                   | 4.00   | 1760              | 3.59                                 | 4.00   | 13064             |
| I asked the instructor for help when I needed it.                  | 3.36       | 4.00   | 11                | 3.15                   | 4.00   | 1760              | 3.30                                 | 4.00   | 13064             |

# **Questions about the Course**

| Expected learning outcomes for the course were clearly communicated. |       |            | The required textbook(s)/readings supported my learning in the course. |       |            |  |
|--|-------|------------|--|-------|------------|--|
| Options  | Count | Percentage | Options  | Count | Percentage |  |
| Strongly Agree<br>(4)  | 10    | 90.91%     | Strongly Agree<br>(4)  | 8     | 72.73%     |  |
| Agree (3)  | 1     | 9.09%      | Agree (3)  | 3     | 27.27%     |  |
| Disagree (2)   | 0     | 0.00%      | Disagree (2)   | 0     | 0.00%      |  |
| Strongly Disagree (1)  | 0     | 0.00%      | Strongly Disagree (1)  | 0     | 0.00%      |  |
| Statistics   |       | Value      | Statistics   |       | Value      |  |
| Response Count   |       | 11         | Response Count   |       | 11         |  |
| Mean   |       | 3.91       | Mean   |       | 3.73       |  |
| Median   |       | 4.00       | Median   |       | 4.00       |  |

| Class discussions/activities supported my learning in the course. |       |            | 4. Assignments/homework supported my learning in the course. |       |            |  |
|---|-------|------------|--|-------|------------|--|
| Options   | Count | Percentage | Options  | Count | Percentage |  |
| Strongly Agree (4)  | 8     | 72.73%     | Strongly Agree<br>(4)  | 9     | 81.82%     |  |
| Agree (3)   | 2     | 18.18%     | Agree (3)  | 1     | 9.09%      |  |
| Disagree (2)  | 1     | 9.09%      | Disagree<br>(2)  | 1     | 9.09%      |  |
| Strongly Disagree (1)   | 0     | 0.00%      | Strongly Disagree (1)  | 0     | 0.00%      |  |
| Statistics  |       | Value      | Statistics   |       | Value      |  |
| Response Count  |       | 11         | Response Count   |       | 11         |  |
| Mean  |       | 3.64       | Mean   |       | 3.73       |  |
| Median  |       | 4.00       | Median   |       | 4.00       |  |

| 5. Exams/quizzes supported my learning in the course. |       |            |  |  |  |  |  |  |
|---|-------|------------|--|--|--|--|--|--|
| Options   | Count | Percentage |  |  |  |  |  |  |
| Strongly Agree (4)                                    | 10    | 90.91%     |  |  |  |  |  |  |
| Agree (3)   | 0     | 0.00%      |  |  |  |  |  |  |
| Disagree (2)  | 1     | 9.09%      |  |  |  |  |  |  |
| Strongly Disagree (1)                                 | 0     | 0.00%      |  |  |  |  |  |  |
| Statistics  |       | Value      |  |  |  |  |  |  |
| Response Count  |       | 11         |  |  |  |  |  |  |
| Mean  |       | 3.82       |  |  |  |  |  |  |
| Median  |       | 4.00       |  |  |  |  |  |  |

| 6. The course required me to apply what I learned in new ways. |       |            |  |  |  |  |  |  |
|--|-------|------------|--|--|--|--|--|--|
| Options  | Count | Percentage |  |  |  |  |  |  |
| Strongly Agree (4)   | 10    | 90.91%     |  |  |  |  |  |  |
| Agree (3)  | 1     | 9.09%      |  |  |  |  |  |  |
| Disagree (2)   | 0     | 0.00%      |  |  |  |  |  |  |
| Strongly Disagree (1)  | 0     | 0.00%      |  |  |  |  |  |  |
| Statistics   |       | Value      |  |  |  |  |  |  |
| Response Count   |       | 11         |  |  |  |  |  |  |
| Mean   |       | 3.91       |  |  |  |  |  |  |
| Median   |       | 4.00       |  |  |  |  |  |  |

| 7. The course challenged me intellectually. |       |            |  |  |  |  |  |
|---|-------|------------|--|--|--|--|--|
| Options                                     | Count | Percentage |  |  |  |  |  |
| Strongly Agree<br>(4)                       | 11    | 100.00%    |  |  |  |  |  |
| Agree (3)                                   | 0     | 0.00%      |  |  |  |  |  |
| Disagree (2)                                | 0     | 0.00%      |  |  |  |  |  |
| Strongly Disagree (1)                       | 0     | 0.00%      |  |  |  |  |  |
| Statistics                                  |       | Value      |  |  |  |  |  |
| Response Count                              |       | 11         |  |  |  |  |  |
| Mean  |       | 4.00       |  |  |  |  |  |
| Median                                      |       | 4.00       |  |  |  |  |  |

## **Questions about the Course (Comments)**

Expected learning outcomes for the course were clearly communicated.

#### Comment

[No Response]

The required textbook(s)/readings supported my learning in the course.

#### Comment

[No Response]

Class discussions/activities supported my learning in the course.

#### Comment

[No Response]

Assignments/homework supported my learning in the course.

## Comment

- The quizzes and pre–lectures were very helpful in getting a basic understanding of the topics before going more in depth in lecture and the quizzes helped to challenge our understanding of topics. I found the links to the reading to be extremely helpful because they directed us to the specific notes need to answer the question and understand the topics. It is a lot better than googling things and finding wrong answers.

Exams/quizzes supported my learning in the course.

#### Comment

[No Response]

The course required me to apply what I learned in new ways.

#### Comment

[No Response]

The course challenged me intellectually.

#### Comment

[No Response]

# **Questions about the Course (Dept & College Averages)**

| Question   |      | Your Score |                   |      | Department (Chemistry) |                   |      | College (College of Arts & Sciences) |                   |  |
|--|------|------------|-------------------|------|------------------------|-------------------|------|--------------------------------------|-------------------|--|
| Question   | Mean | Median     | Response<br>Count | Mean | Median                 | Response<br>Count | Mean | Median                               | Response<br>Count |  |
| Expected learning outcomes for the course were clearly communicated.   | 3.91 | 4.00       | 11                | 3.59 | 4.00                   | 1760              | 3.57 | 4.00                                 | 13064             |  |
| The required textbook(s)/readings supported my learning in the course. | 3.73 | 4.00       | 11                | 3.32 | 4.00                   | 1760              | 3.39 | 4.00                                 | 13064             |  |
| Class discussions/activities supported my learning in the course.      | 3.64 | 4.00       | 11                | 3.43 | 4.00                   | 1760              | 3.51 | 4.00                                 | 13064             |  |
| Assignments/homework supported my learning in the course.              | 3.73 | 4.00       | 11                | 3.44 | 4.00                   | 1760              | 3.49 | 4.00                                 | 13064             |  |
| Exams/quizzes supported my learning in the course.                     | 3.82 | 4.00       | 11                | 3.40 | 4.00                   | 1760              | 3.44 | 4.00                                 | 13064             |  |
| The course required me to apply what I learned in new ways.            | 3.91 | 4.00       | 11                | 3.54 | 4.00                   | 1760              | 3.52 | 4.00                                 | 13064             |  |
| The course challenged me intellectually.                               | 4.00 | 4.00       | 11                | 3.68 | 4.00                   | 1760              | 3.56 | 4.00                                 | 13064             |  |

# What suggestions do you have for improving this course?

#### Comments

I like this style of recitation, just wish the tegrity was more functional

Worksheets with practice problems uploaded to Blackboard that were completed during discussion (both a blank copy as well as they answer key that shows how the problem was solved).

## Please offer any additional comments and/or suggestions you wish to share about the course:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

It was very helpful that this course was also taught by the professor that taught the lecture.

The textbook had some really good examples and diagrams that show how different mechanisms work. They also have good summation tables of all the possible ways that a starting material can react to produce different products.

#### Questions about the Instructor Paul Bracher

| The instructor communicated ideas and information clearly.                                      |                   |   | The instructor demonstrated enthusiasm for the subject matter.  |                   |   |  |
|---|-------------------|---|---|-------------------|---|--|
| Options   | Count             | Percentage                              | Options   | Count             | Percentage                                  |  |
| Always<br>(4)   | 11                | 100.00%                                 | Always<br>(4)   | 11                | 100.00%                                     |  |
| Often (3)   | 0                 | 0.00%                                   | Often (3)   | 0                 | 0.00%                                       |  |
| Sometimes (2)   | 0                 | 0.00%                                   | Sometimes (2)   | 0                 | 0.00%                                       |  |
| Never (1)   | 0                 | 0.00%                                   | Never<br>(1)  | 0                 | 0.00%                                       |  |
| Statistics  |                   | Value                                   | Statistics  |                   | Value                                       |  |
| Response Count  |                   | 11                                      | Response Count  |                   | 11  |  |
| Mean  |                   | 4.00                                    | Mean  |                   | 4.00  |  |
| Median  |                   | 4.00                                    | Median  |                   | 4.00  |  |
|   |                   |   |   |                   |   |  |
| 3. The instructor provided feedback/cr subsequent work in the course.                           | ritique that help | ed me with                              | 4. The instructor treated stude                                 | nts with respect. |   |  |
|   |                   | Percentage                              | The instructor treated stude     Options                        |                   | Percentage                                  |  |
| subsequent work in the course.  |                   |   |   |                   | Percentage 100.00%                          |  |
| subsequent work in the course.  Options  Always   | Count             | Percentage                              | Options<br>Always   | Count             |   |  |
| Subsequent work in the course.  Options Always (4) Often  | Count             | Percentage 100.00%                      | Options Always (4) Often  | Count 11          | 100.00%                                     |  |
| subsequent work in the course.  Options  Always (4)  Often (3)  Sometimes                       | Count<br>11<br>0  | Percentage<br>100.00%<br>0.00%          | Options Always (4) Often (3) Sometimes                          | Count 11 0        | 100.00%                                     |  |
| subsequent work in the course.  Options Always (4) Often (3) Sometimes (2) Never                | Count 11 0 0      | Percentage<br>100.00%<br>0.00%<br>0.00% | Options Always (4) Often (3) Sometimes (2) Never                | Count 11 0        | 100.00%<br>0.00%<br>0.00%                   |  |
| subsequent work in the course.  Options Always (4) Often (3) Sometimes (2) Never (1)            | Count 11 0 0      | Percentage 100.00% 0.00% 0.00%          | Options Always (4) Often (3) Sometimes (2) Never (1)            | Count 11 0        | 100.00%<br>0.00%<br>0.00%                   |  |
| subsequent work in the course.  Options Always (4) Often (3) Sometimes (2) Never (1) Statistics | Count 11 0 0      | Percentage 100.00% 0.00% 0.00% Value    | Options Always (4) Often (3) Sometimes (2) Never (1) Statistics | Count 11 0        | 100.00%<br>0.00%<br>0.00%<br>0.00%<br>Value |  |

| 5. The instructor was available for assistance when needed. |       |            |  |  |  |  |  |
|---|-------|------------|--|--|--|--|--|
| Options   | Count | Percentage |  |  |  |  |  |
| Always<br>(4)   | 9     | 81.82%     |  |  |  |  |  |
| Often<br>(3)  | 2     | 18.18%     |  |  |  |  |  |
| Sometimes (2)   | 0     | 0.00%      |  |  |  |  |  |
| Never (1)   | 0     | 0.00%      |  |  |  |  |  |
| Statistics  |       | Value      |  |  |  |  |  |
| Response Count  |       | 11         |  |  |  |  |  |
| Mean  |       | 3.82       |  |  |  |  |  |
| Median  |       | 4.00       |  |  |  |  |  |

# **Questions about the Instructor Paul Bracher (Comments)**

The instructor communicated ideas and information clearly.

Comment

[No Response]

The instructor demonstrated enthusiasm for the subject matter.

Comment

[No Response]

The instructor provided feedback/critique that helped me with subsequent work in the course.

Comment

[No Response]

The instructor treated students with respect.

Comment

[No Response]

The instructor was available for assistance when needed.

Comment

[No Response]

# Questions about the Instructor (Dept & College Averages)

| Question   | Your Score |        |                   | Department (Chemistry) |        |                   | College (College of Arts &<br>Sciences) |        |                   |
|--|------------|--------|-------------------|------------------------|--------|-------------------|---|--------|-------------------|
| Question   | Mean       | Median | Response<br>Count | Mean                   | Median | Response<br>Count | Mean                                    | Median | Response<br>Count |
| The instructor communicated ideas and information clearly.                                   | 4.00       | 4.00   | 11                | 3.41                   | 4.00   | 2585              | 3.48                                    | 4.00   | 15108             |
| The instructor demonstrated enthusiasm for the subject matter.                               | 4.00       | 4.00   | 11                | 3.48                   | 4.00   | 2585              | 3.69                                    | 4.00   | 15108             |
| The instructor provided feedback/critique that helped me with subsequent work in the course. | 4.00       | 4.00   | 11                | 3.31                   | 4.00   | 2585              | 3.45                                    | 4.00   | 15108             |
| The instructor treated students with respect.  | 4.00       | 4.00   | 11                | 3.61                   | 4.00   | 2585              | 3.77                                    | 4.00   | 15108             |
| The instructor was available for assistance when needed.                                     | 3.82       | 4.00   | 11                | 3.47                   | 4.00   | 2585              | 3.64                                    | 4.00   | 15108             |

# Please offer any additional comments and/or suggestions you wish to share about the instructor Paul Bracher:

The system does not allow an instructor to connect ANY quantitative responses with an individual student. Unless a student identifies him or herself in the written comments, qualitative responses are similarly assured of confidentiality.

#### Comments

The recitations/problem sessions were extremely helping in understanding different ways that topics can be questioned and were very helpful for tests. They were also helpful in finding common tricks that can make complex problems a little simpler. I strongly encourage everyone to go to the problem sessions in person and not on Tegrity because many useful tips and tricks are discussed and they are really good practice problems that are very useful for exam and guizzes.

I really like that you post everything online so students can go back and review it. I really liked your class and you as a teacher because you were so enthusiastic about Organic Chemistry. My one suggestion would be to upload material in a more timely manner.

One of my favorite teachers at SLU so far.

Dr. Bracher has lots of trick questions, but is an amazing professor.

He is probably one of the most intelligent but most relatable professor I've had. Great job

Very accommodating and motivated teacher to help his students any way possible.