CHEM 142 B
General Chemistry
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: B
Responses: 338/518 (65% high)

Taught by: Colleen Craig, Raymond Jin
Instructor Evaluated: Colleen Craig-Lecturer

Overall Summative Rating represents the combined responses of students to the four global summative items and is presented to provide an overall index of the class's quality:

Combined Median	Adjusted Combined Median
4.0	**4.7**

(0=lowest; 5=highest)

Challenge and Engagement Index (CEI) combines student responses to several *IASystem* items relating to how academically challenging students found the course to be and how engaged they were:

CEI: 5.2

(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Adjusted Median
The course as a whole was:	338	23%	37%	27%	11%	1%		3.8	4.5
The course content was:	338	22%	41%	28%	9%			3.8	4.4
The instructor's contribution to the course was:	338	43%	33%	18%	4%	1%		4.3	4.9
The instructor's effectiveness in teaching the subject matter was:	337	41%	31%	20%	5%	2%	1%	4.2	4.9

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median
Do you expect your grade in this course to be:	331	6%	19%	20%	27%	13%	7%	9%	4.3
The intellectual challenge presented was:	331	18%	33%	31%	13%	4%	1%	1%	5.5
The amount of effort you put into this course was:	332	19%	36%	27%	13%	2%	1%	1%	5.7
The amount of effort to succeed in this course was:	332	32%	35%	21%	11%	1%			6.0
Your involvement in course (doing assignments, attending classes, etc.) was:	331	25%	35%	20%	17%	2%			5.8

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?

Class median: 10.8 Hours per credit: 2.2 (N=329)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
1%	3%	8%	12%	15%	19%	13%	14%	9%	4%	2%	2%

From the total average hours above, how many do you consider were valuable in advancing your education?

Class median: 7.6 Hours per credit: 1.5 (N=329)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
3%	12%	15%	19%	19%	13%	10%	5%	2%	2%		1%

What grade do you expect in this course?

Class median: 3.2 (N=326)

A (3.9-4.0)	A- (3.5-3.8)	B+ (3.2-3.4)	B (2.9-3.1)	B- (2.5-2.8)	C+ (2.2-2.4)	C (1.9-2.1)	C- (1.5-1.8)	D+ (1.2-1.4)	D (0.9-1.1)	D- (0.7-0.8)	F (0.0)	Pass	Credit	No Credit
7%	22%	24%	14%	9%	9%	5%	5%	1%	2%	1%				

In regard to your academic program, is this course best described as:

(N=329)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
47%	27%	3%		22%	1%

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Relative Rank
Course organization was:	329	31%	35%	25%	6%	2%	1%	4.0	6
Sequential presentation of concepts was:	331	30%	38%	24%	5%	2%		4.0	8
Explanations by instructor were:	332	35%	35%	21%	7%	1%		4.1	7
Instructor's ability to present alternative explanations when needed was:	330	32%	32%	24%	9%	2%	1%	3.9	12
Instructor's use of examples and illustrations was:	331	41%	36%	16%	6%	1%		4.2	3
Instructor's enhancement of student interest in the material was:	329	29%	33%	26%	10%	1%	2%	3.9	9
Student confidence in instructor's knowledge was:	333	50%	32%	15%	2%	2%		4.5	4
Instructor's enthusiasm was:	333	58%	29%	10%	2%			4.6	1
Clarity of course objectives was:	331	34%	36%	23%	6%	2%		4.0	5
Interest level of class sessions was:	332	21%	28%	35%	12%	4%	1%	3.5	16
Availability of extra help when needed was:	332	31%	32%	28%	8%	2%		3.9	15
Use of class time was:	333	38%	33%	21%	5%	2%	1%	4.1	2
Instructor's interest in whether students learned was:	332	33%	33%	24%	7%	2%	1%	4.0	13
Amount you learned in the course was:	333	28%	35%	26%	8%	2%	1%	3.9	11
Relevance and usefulness of course content were:	333	29%	35%	26%	8%	1%		3.9	14
Evaluative and grading techniques (tests, papers, projects, etc.) were:	334	24%	27%	28%	12%	5%	3%	3.6	18
Reasonableness of assigned work was:	333	24%	32%	26%	12%	5%	2%	3.7	17
Clarity of student responsibilities and requirements was:	330	35%	33%	25%	6%	2%		4.0	10

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STANDARD OPEN-ENDED QUESTIONS

Was this class intellectually stimulating? Did it stretch your thinking? Why or why not?

1. It was a very difficult class. I had to work really, really hard.

2. It was indeed intellectually stimulating and stretched my thinking. I had to think of chemistry on both the microscopic and macroscopic levels and bring the two together for every concept.

3. Yes, it was stimulating. The textbook problems definitely stretched my thinking.

4. Yes it was intellectually stimulating because you had to think a lot about how/when to apply equations.

5. Yes, but I don't know why.

6. Yes. Learned different ways to approach problems.

7. Yes

8. Most of the material I had already covered in high school, but the parts that were new to me I found interesting.

9. The lectures were not, but the readings and labs were interesting. The lectures were very slow in pace.

10. Yes. I learned how to take college tests and do college labs.

11. Yes it was, although it covered a lot of the content I learned in my AP Chemistry course, it was very engaging and I enjoyed learning about concepts on a deeper level

12. Yup.

13. It was definitely a stretch for me. I came into the course not having a very good background in Chemistry but having a good enough understanding that I didn't want to do CHEM 110. This course definitely moves at a fast pace and crams a lot of knowledge into 10 weeks. The learning curve/relearning the material was very hard for me, but it is a very interesting and helpful course.

14. This was because at times the material was abstract and took time to understand.

16. This class was not intellectually stimulating, though it did force me to become rather resourceful and quick during test taking.

17. Yes. This class helped me understand the basics of chemistry at a much deeper level.

18. Yes, there were lots of problems that have real life application and were challenging.

19. yes because I had to approach concepts from different angles in order to understand them.

20. Yes, it was very stimulating. Professor Craig did a lot of practice problems of concepts we were learning in the lecture, so we learned the background of the concept as well as the real-world application. She also interacted with us very often- asked questions, did demonstrations, etc- so it was a very interesting class.

21. yeah it was good although i did know some of the material from high school

22. Yes, this class was intellectually stimulating in that it taught me about the many different intricacies of the surrounding world. I learned how to think about, and analyze, the natural processes that we take for granted on a day to day bases.

23. I took AP Chemistry in high school, so the topics covered in this class were not new to me, so it didn't stretch my thinking as much as I'd hope.

24. Yes. It taught me new things I did not know.

25. Yes, it went in depth into simple material

26. Yes because the test require critical thinking

27. yes it did

28. Yes. It expanded on concepts I had previously learned in AP Chem and helped clarify concepts I originally didn't understand.

29. I took general chemistry and AP chemistry in high school and I still found this class to be stimulating and rigorous enough for me to take it seriously. I am glad I now see how challenging the chemistry courses can be regardless of past knowledge.

30. This class was intellectually stimulating, albeit review in some instances. It was definitely helpful though.

31. Yes it was. I took chemistry in the past but this class went deeper into concepts than before.

32. This class was intellectually challenging in the best sense. I hadn't taken chemistry in many years, so every lecture and every unit contained material I barely recognized. However, I really did enjoy this challenge, and I think it's made me a better student.

34. yes! I think a lot when I study for it.

35. It stretched my thinking but did not necessarily capture my attention in a fascinating way.

36. Yes, I put a lot of effort in understanding all the materials and preparing for the lab.

37. Yes, although I took AP Chem in High School, it still went more in depth and was a lot more challenging than expencted.

38. Yes. Many things to remember and apply

39. Yes, the math with science tested me.

40. Yes, I didn't have much of an appreciation for chemistry before but now I know a lot more and it has greatly increased my interest in the subject.

41. Yes. I never took chemistry in high school and i learned so much intros course.

42. There was some material that was more reviewing. I learned some things a different way while taking a general chemistry prep class during running start. But there was a lot of new material that I had to learn.

43. Yes, I believe there was a lot of problem solving and difficult problems that really involved time and practice.

44. yes this class has a lot of information that definitely stretches my thinking, but it is not always relevant material

45. yes

46. Yes, even though I learned a lot of the content before, Dr. Craig and my TA both helped me relearn the topics in easily understandable ways.

47. It did

48. Dr. Craig's enthusiasm of the subject is extremely helpful in regards to my personal engagement with the material. Chemistry is one of my favorite subjects, and although the course is challenging I thoroughly enjoyed it.

49. Yes, it forced me to think of things I normally would not think about.

50. At some points, other times it was a bit boring.

51. Yes, although I learned it before in high school, we learned more in detailed in college, and often times it made me wonder and generate questions about the topics we were learning.

52. yes. combinations of both lectures and aleks

53. Yes, this class was very intellectually stimulating, as it was difficult material and required a lot of self-teaching.

54. yes, I learned a lot

55. Yes, I loved the quantum mechanics portion of this course.

56. A little. I remember learning most of the material before so the class was a bit dry at times for me.

57. yes

58. It's a very difficult and challenging class.

59. Yes. It helped me to think in different ways when understanding new and old concepts.

60. It was both intellectually stimulating and mind stretching, as the instructor kept the content interesting and asked questions for us to think.

61. It was definitely intellectually stimulating. Although I have seen some of the concepts from AP Chemistry, I was able to polish up my understanding of some of the concepts and learn new ideas.

62. Yes it was intellectually stimulating because it goes beyond what I learned in high school chemistry. I learned WHY things happened and also expanded my knowledge to the labs.

63. EVERYTHING. it completely stretched my thinking because it was a lot of engaging and stimulating content.

64. Yes. The enthusiasm of the lecturer was appreciated, and the process of applying the knowledge we had learned was very helpful

65. Yeah it was interesting but not really applicable to everyday life. It did stretch my thinking because the class was hard

66. Yes. Forced me to engage in the material to understand the conceptual nature of the course

67. Yes. learned about more than what I should know

68. Yes it did, it forced me to make an effort to understand what I was studying and raised my level of thinking and my understanding of chemistry exponentially.

69. No, just because I had covered the material in AP Chemistry.

70. Yes it was because I have not taken chemistry since the summer of my sophomore year in high school.

71. Yes this class got me interested in chemistry and expanded my knowledge greatly.

72. Coming from AP Chem, it felt like review at many points.

73. Yes, Professor Craig made everything very interesting and made me want to learn more about it.

74. Yes, the content of the class was very interesting and made me really have to think about how the different concepts worked and fit together.

75. It was a difficult and rigorous class that definitely challenged me as a student. I had to use outside resources to fully understand the topic and therefore stretched my thinking.

76. Yes, learned a lot of techniques applicable to my major.

77. A little bit, it was mostly review for me.

78. It was pretty interesting and it did push me. Personally, I don't like chemistry that much but this class made it bearable.

79. Yes, sometimes very much so to a frustrating amount. Many of the concepts aren't something you can just slack off and do alright with, you've really got to study and work hard to master and understand the content.

80. Although most of the material in class were of things I had learned in high school, it was intellectually stimulating in being introduced and understanding the real world applications of the material through the labs. There were new concepts I hadn't learned about too, which was interesting!

81. Yes very much so. The concepts were very abstract and were definitely more advanced that what I was used to.

82. Yes it was intellectually stimulating and yes it did stretch my thinking because it was an interesting course taught in a way that made sense and was enjoyable.

83. Yes, lectures included example problems that students were supposed to respond to.

84. Yes, I am a little rusty as I have not taken chemistry since my sophomore year of High School.

86. It isnt part of my major, i had to take it for grad reqs

87. Yes, I think Prof Craig was very good at making the subjects interesting and allowed us to consider the topics intellectually.

88. Yes, the material was interesting and challenging at the same time.

89. Coming from a high level chemistry class in high school, a lot of the topics were already familiar and not too hard to pick up, but i definitely was challenged in that I had to do more than just know the material. The application and integration of multiple concepts was challenging as well as the focus on the WHY rather than just what the facts are.

90. Yes, this class was intellectually stimulating because it required making connections between course topics cumulatively.

91. It was very stimulating. I learned new things and enjoyed the class overall.

92. Yes, this class was engaging. It was apparent that Professor Craig puts a lot of time and effort into preparing for the lectures, and that made the class more interesting.

93. Yes, the topics themselves were interesting to me.

94. The book problems in the book and the kinetic theory.

95. Yes because it provoided a lot of background information on equations and on general chemistry principles.

96. yes the content was very difficult

97. It had a lot of work so I had to learn a lot, but it wasn't really stimulating or interesting.

98. Yes because it gave me valuable skills.

99. Yes, because I learned new concepts.

100. It was intellectually stimulating I believe because I found many of the topics interesting to both learn about the general concept and how to solve related problems.

101. Yes, it taught me more about chemistry than I had ever learnered.

102. The class was intellectually stimulating. There was a lot of knowledge to process though so it was difficult to keep up with the course load.

103. Yes, the class was intellectually stimulating, I had to teach myself the majority of the content.

104. Some content was certainly interesting, although I felt it was straightforward. I don't think there's much space to make the class stretch anyone's thinking.

105. Yes, this class stretched my thinking. Lecture and labs were intellectually stimulating, and had me thinking differently than I previously have.

106. No, most of the things were already learned for me, however, because of that, I didn't really give much effort, which lowered my grade

107. It was an amazing class in which I understood and really learned what was taught in the course, that was something that was extremely intellectually stimulating.

108. Yes it stretched my thinking because Aleks, the professor and the book all taught the topics a little different which made me have to think about all the different ways that a problem could be written or answered.

109. Yes it did

110. No, because most of it I learned in AP Chem.

111. In a way it did, it changed my perspective on different topics

112. no. because i study it before.

113. Yes it was as certain questions would arise during lectures.

114. Yes, because I can think how to do example questions before the answers show up.

115. Yes it was. I had taken AP Chemistry in high school and this class developed my learning of chemistry further.

116. No. This class was difficult but you could tell it was just a weed out course and the teacher didn't care if you passed or failed. also, because it was a weed out course it had a lot of topics in a short amount of time so I found myself memorizing everything and learning very little.

117. Yes, it was difficult applying concepts to various problems

118. Yes the problem built off of one another and stretched my thinking. The labs are a good example of something that stretched my thinking and made me use the concepts in class in real life.

119. sometimes, I know most of the material, so this is just review and a refresher.

120. Yes, it challenged me a lot and I was pushed to study harder than I have in the past.

121. It expanded on topics I already learned coming in to Chem 142.

122. yes, in high school, mt chemistry teacher was not good at getting the information across to students, but Professor Craig is very efficient

123. I thought this class was an excellent review of general chemistry concepts, with more difficult and in depth discussions of the background of the mathematical conclusions made, and harder math problems.

124. Definitely. Dr. Craig is a wonderful teacher; she made difficult concepts seem easy and she provided content in a variety of ways. A tough class, but well worth it.

125. This class was quite difficult. I believe i mastered every topic, but that was not shown on the tests because the grading technique in my opinion is not effective at all.

126. I took this class in high school so I did not learn many new things.

127. Yes it was very intellectually stimulating, the material was relevant and interesting. The course did not present any extreme new concepts so it did not really stretch my thinking.

128. Yes it was intellectually stimulating since it presented concepts that were new to me, however much of it was review from high school.

129. Yes. The class stretched my thinking because I was expected to think in new ways.

130. The lectures themselves were intellectually stimulating in that Craig taught very well, and provided examples within her lessons. However, I felt the tests didn't accurately test what we learned. The questions were always a lot more difficult than anything we were given, and required much more time and thought than was allowed.

131. Yes, I had to really understand concepts to answer questions.

132. Chemistry is interesting. I like solving problems.

133. Yes, it definitely was more challenging than I anticipated. Although the course content was relatively easy for me to understand, applying it was more difficult and lead to me having to put more effort in after not doing well on the first midterm.

134. Chemistry is an interesting subject and the professor explained things fairly well.

135. Yes, this is one of three of the first classes I have ever taken at UW. My previous college experience came from colleges in Oklahoma, which was considerably easier. The amount of work I had to do to even get the grade that I have was expected, but that doesn't take away from the difficulty.

136. It did not stretch my thinking. I mainly memorized and reproduced facts and processes.

137. It was a great refresher and overall a stimulating class. The material was challenging but presented in a way that was easy to make sense of.

138. This class stretched my thinking because it opened my mind to new areas of knowledge.

139. Yes it was a hard class but the issue was with ALEKs we only focused on repetitiveness not learning through application

140. Yes and no. This material is a little bit of review but it was also challenging. I needed to consider many angles when looking at concepts

141. yes

142. Yes, interesting and challenging

143. yes, lots of math applications

144. No. I had taken it before in HS.

145. The content was very difficult

146. Yes, I learned new concepts in chemistry that I did not previously know about.

147. No it was required

148. Yes. It challenged me with many concepts I did not know initially.

149. Yes. The class presented material in it's raw, technical reality. There was no mitigation of the material or softening of concepts for comprehension; but rather they were presented in the complexity of their true nature. This class was a nice wake-up call to what true science requires of the student. It definitely stretched my thinking.

150. Yes this class was stimulating because it required extra work reading and practicing problems beyond what was assigned.

151. Yes I think this class really challenging and has really stretched the way of studying and the way I think

152. This was the first time I took chem and I thought it was a very interesting subject. It helped broaden my understanding of the world and how it works.

153. Yes this class was intellectually stimulating. It stretched my thinking and made me think really hard on various problems.

154. The class was incredibly intellectually stimulating. We were not just required to memorize theoretical aspects of chemistry, we were challenged to use them in a variety of problems. This was true both during lecture, in the homework assignments, labs, and in the practice problems.

155. Yes, this chem class is very useful for future chem studies.

156. Yes it was. It made me think really hard and it definitely made me realize that chemistry is not me forte.

157. I think that the class was intellectually stimulating because it required a lot of effort to learn the concepts and understand the calculations

158. yes because it gave me a wake up call regarding how much work i have to put into college classes to do well in them.

159. This class was extremely intellectually stimulating. It forced you to actually try to understand the material and wrap your head around difficult concepts.

160. Yes the class was very hard for me so it forced me to stretch my thinking

161. Challenging at times but did not stretch my thinking because I had seen the material before.

162. I'm not particularly interested in chemistry, so no.

163. It was stimulating, but it wasn't difficult because I have experience in chemistry that made this class a little easier for me.

164. It was intellectually stimulating because I only took regular Chemistry in high school. We learned about stoichiometry, which is 1/10 of what I'm learning in Chem 142. Chem 142 stretched my thinking to understand concepts in order to apply them to questions, instead of going through a plug and chug.

165. This class was one of the most challenging courses I have ever taken. It was very stimulating because it forced me to actually think and study.

166. Yes it did because I learned about how interesting chemistry is.

167. Yes. Professor Craig asked at least once per lecture to discuss with our neighbors on a prediction of concept we were learning before she explained it.

168. Yes, it was intellectually stimulating and stretched my learning about general chemistry and build a foundation for it.

169. Yes because it introduced greater depth of concepts.

170. Examples in class.

171. I look Chemistry in high school, but didn't quite comprehend most concepts. Now that I have taken this course I have learned this concepts I didn't understand in high school.

172. Yes, because the course has so much material you need to know more than just the answer to a question. You need to know the concept and be able to do different variations of a problem on the test

173. good

174. Yes, this course stretched my thinking. As a prerequisite course to my major I felt it very stimulating and interesting the entire time.

175. Yes, I had not previously put much effort into mathematics in high school, so this class forced me to develop the ability to solve complex word problems. The content presented was all fairly straight forward after the mathematical symbolism was clear, though portions of chapters 12 and 15 are certainly more challenging to understand, as they are theoretical and difficult to conceptualize.

177. Yes it was pretty stimulating however some of it was review from high school which was what I was expecting

178. While stimulating I don't think it stretched my thinking because of the concrete nature of the content.

179. it stretched my thinking because i thought it was very hard and i had to learn a lot from very little background.

180. Yes I learned a lot from this course.

181. Ya

182. Yes because I had to work through problems

183. It was challenging but what was expected for an intraductora Chem course

184. Not really mostly since a lot was already covered in my high school chemistry but it was still difficult.

185. It was. I really struggle in chemistry and I really had to pay attention in class to get the material.

186. Yes. I had to do my own reading to figure out how to do the aleks homework.

187. Yes. It taught me many new things about chemistry.

188. It was very stimulating as students had to decide what to work on and when but to also be able to finish all the work given.

189. The class built off my prior knowledge and added went further in depth into the topics covering a number of challenging topics.

190. Yes, it connected to other science classes I've taken in the past

191. Yes, tests were intellectually stimulating and difficult.

192. Yes, Craig was a very engaging instructor. She apply concepts to real life models and is hilarious.

193. No, because I felt like I was just being told facts and not why or how are they important in the real world/

194. It didn't really stretch my thinking as much as it challenged my memory.

195. Yes. Colleen did a great job of explaining WHY things happened not just giving an equation and telling us how to solve the problem. She helped make the content seem more realistic and interesting by explaining the thought processes of past scientists, how things happened, why they happened and why it is important. It was much more holistic.

196. Yes I learned new topcs in a class I had already taken

197. Yes i thought it was very interesting because i could easily understand why things happened and i could also understand the equations used. Also the visual picture were very helpful

198. The class was very stimulating.

199. Yes, chemistry is very hard to imagine because we can't see a lot of things going on.

200. The content itself is stimulating. The professor plays a great role on teaching.

201. of course it stretched my thinking, its science

202. Yes, it made me think about how all of the topics relate to each other.

203. This class was unfair. Prelab assignments were extremely unfair. very difficult to focus on lab when I already know my grade will be bad. in my opinion, prelab assignments should be a -5 penalty instead of -15. 15 points is like living in a fantasy where teachers aim to fail students. it reminds me of the Holocaust in its treatment of victims. utterly poisonous.

204. Yes, I love chemistry. All the aleks stretched my thinking.

205. yes, it was challenging and in order to understand the material i had to think deeply and try to relate the content with things i do in my life in order to get a better understanding.

206. It had introduced a handful of topics in which I have not learned whatsoever, some concepts were easy to understand and some were a bit more difficult, and given the difficulty of some of the topics, it did require me to "stretch my thinking."

207. Yes it provided a deeper understanding of the natural world.

208. Yes, this class was very difficult for me to get a full grasp on. The content is difficult but possible to understand with enough time and effort.

209. Yes

210. It was intellectually stimulating quantum mechanics expecially definitely stretched my understanding of the world.

211. This class was not intellectually stimulating.

212. Yes it expanded my knowledge of chemistry, and presented new challenges that I had not seen in my high school chem class.

213. Yes there were a few concepts that were further developed.

214. yes, I learned a lot of new concepts that I had not known before

215. Yes it was. It challenged me academically and definitely expanded my knowledge of chemistry.

216. Yes. This class was challenging and required me to put in the work and think in order to understand the material. I learned the most in this class than I ever have in any other class.

217. Yes. this class builds on what I learned in AP chem in high school.

218. This class is intellectually stimulating. This class was quite difficult in a way that it challenged me more than previous classes I have taken. It forces me to this about the given information in a different way.

219. Yes. Hard concepts to grasp.

220. Yes, this was intellectually stimulating I definitely felt challenged.

221. Yes, because I've learned chemistry before but not as in depth as in this class.

222. Yes.

224. Only certain sections. Much of the course was a rehash of what I learned in high school chemistry, but I enjoyed learning the quantum mechanics section and everything about reaction rates was completely new to me as well.

225. Yes, good class and well taught

226. i took AP chem in highschool and Chem 142 is supposed to be relatively similar but we started right off the bat into the hardest unit which was unfair to a lot of students

227. Yeah it forced me to spend a lot of time thinking about the concepts to fully understand them.

228. The class as a whole being challenging was stimulating and kept challenging concepts.

229. This class was difficult as a lot of the materials I had to go over by myself. It was a tough class to tackle.

230. It was very stimulating. Lots of new concepts very quickly and quickly applied to actual problems.

231. Yes, because it introduced me to new concepts

232. It really stretched my thinking because I had to re-learn these topics from my first year of chemistry. It was better because it gave me a stronger foundation for future natural science courses.

234. Yes, it opened my eyes to the chemical reactions in the world.

235. yes

236. It was, it definitely made me think a lot, there are a lot of challenging concepts introduced.

237. This was a greatly difficult although I was not surprised on the difficulty of the class. It did stretch my thinking; I never had to deal with a high level chemistry class so it was an eye opener.

238. Yes, it was very challenging especially because the past the course was going was really fast. Also it challenged my studying skills and ability to comprehend the material.

239. It was intellectually stimulating but only because it is a subject matter that I did not have experience in.

240. Yes, chemistry is a challenging subject that requires quite a bit of effort.

241. Yes

242. Class being early in the morning.

243. Yes, added to my chemistry knowledge from high school.

244. yes, learned new topics.

245. yes

246. yes aleks was long

247. It pushed me academically I would say but it's not something I'm all that intersted in so I can't say I was stimulated.

248. yes. just needed more time to study.

249. The course was extremely challenging and I expected to do far better with the amount of time and effort I put into thoroughly learning the material.

250. Yes. There were new things that I learned and other things that I relearned.

251. This class was intellectually stimulating because it required advanced thinking of applying new knowledge concepts. When solving problems throughout the course, it helps to remember everything you have learned from day one when the course started.

252. This class was interesting because for the lack of better phrasing we actually learned why things were the way there were. For example, in high school we were just given formulas. We were never told how these formulas came to be about or how they were valid. But here we derived the formulas, we were explained how they came to be about before they were presented to us. So, I enjoyed the critical thinking aspect of this class.

253. This class helped solidify my basic understanding of Chemistry.

254. Everything about this class rammed me in a way that made me never wanna take chemistry again.

255. This class was slightly intellectually stimulating as the content was mainly about learning, understanding, and applying chemistry concepts. My thinking was only stretched when I had to apply the concepts to scenarios that weren't immediately obvious in regards to how they relate to the concept. This happened sometimes in lecture and on ALEKS.

256. The advanced topics such as the gas laws and other higher level chemistry.

257. Meh

258. For sure! Chemistry is a hard subject for me, and as the third time taking it I definitely learned much more than I thought I would.

259. not really you just have to memorize equations

260. yes but tests werent stimulating but rather details and minutia

261. Yes, I learned a lot about Chemistry and how it applies to real-life situations.

262. Somewhat. The base material, what was tested, wasn't really. Learning the concepts was what it was, some of them were kinda neat, but, pretty baseline.

263. Yes. The professor is so nice!

264. Not particularly for me as I have taken General Chemistry before in High School.

265. Yes because I had to answer my questions mainly through online resources of solving problems given in class. I didn't get much out of lectures because i thought that were very general.

266. Yes, this class was intellectually stimulating. It stretched my thinking about the microscopic and the macroscopic view of all the matters in this word which makes the world more fun!

267. Yes. Dr. Craig is an excellent professor and really helped me to learn new material that I hadn't seen before.

268. Yes, it introduced concepts of chemistry that I had not learned before, which was interesting to me.

269. Yes, because this class made me understand certain concepts so I could better comprehend our physical world.

What aspects of this class contributed most to your learning?

1. I loved the quiz sections.

2. ALEKS, lecture(though once lecture is over I somehow fail to understand the topics outside of class)

3. The lectures! I loved the professor.

4. Using ALEKS as a learning tool helped me the most I believe.

5. Lecture

6. Effective teaching style.

7. Lectures

8. The ALEKS system worked well (other than its obsessing over significant figures), and the instructor seemed to care about the class & our success.

9. Aleks and and the readings contributed most to my learning. The discussion section worksheets also helped.

10. Doing problems at home.

11. Lectures and ALEKS; lectures helped to go over information and having the recordings to revisit as needed was very helpful and convenient. ALEKS was very useful in helping to cement and review knowledge throughout the quarter.

12. Yes.

13. Learning to study for this class was a struggle but having Craige's office hours and her study tests did help.

14. The homework and the quiz sections.

15. The quiz sections definitely helped me learn, since it forced me to fully understand concepts that were the most important in the course. Also, ALEKS really helped me practice problems and concepts and really made me learn the topics.

16. I felt as though the Discussion Sections contributed most to the necessary learning.

17. The lectures and the quiz section packets contributed most to my learning.

18. The discussion sections and labs helped me the most with understanding applications of what we learned during lectures.

19. The quiz sections where we did practice problems.

20. Doing the practice problems in class definitely helped, and the graphs in the Power points were very helpful.

21. labs are great

22. The application of knowledge to the outside world.

23. The lectures and the notes provided by the professor were the most helpful.

24. The labs!!

25. The lectures were very engaging.

26. Aleks

27. lectures

28. Going to lecture. Taking a lot of notes. Doing review packets.

29. I think that the examples that Craig did were spot on and helped me understand a lot of the mathematics involved in chemistry.

30. Probably assisting me with time management. Having to accommodate the homework and labs lead to a need to schedule my days.

31. The professors presentations and lecture slides were very organized and clear. Pre- exam study resources were great

32. Reading the textbook, back of the book problems, in-class worksheets.

33. Professor Craig was very enthusiastic! She made a very hard class very enjoyable even if I didn't understand anything

34. office hours

35. lecture and ALEKS

36. Labs really help solidify my understanding as well as the worksheets.

37. lectures

38. The tests and ALEKS assignments

39. Practice problems, ALEKS

40. The lectures and quiz sections.

41. The professor organized the lecture notes and worksheet very very well. The organization and lab manual and expectations were super clear.

42. I learned more outside of class than I did in class. I got some basic knowledge of the material during lectures and had to understand most of it from getting help or through Aleks. Then we had to apply it to the worksheets.

43. I believe all aspects contributed to my learning for the subject of Chemistry.

44. help from my ta

45. basics for chem e

46. The homework assigned and examples given by the professor and lab.

47. Lecture

48. Dr. Craig's wit and humor helped me engage in the material of the class.

49. Doing the online ALEKS homework

50. Lecture and ALEKS.

51. Doing aleks and attending lectures.

52. aleks

53. Use of the textbook, ALEKS explanations and course work.

54. the lectures with Professor Craig

55. ALEKS study files

56. Worksheets done in discussion sections and end of chapter questions because they were most challenging.

57. the lectures were well organized with good examples and hands on learning.

58. Actually the work load. It was so much more than I expected and I learned how to deal with that and what needed to be prioritized.

59. The one aspect of this class that really contributed to my learning was ALEKS because the availability of the explanations. When used and read over multiple times, concepts were easy to pick up.

60. Class lectures

61. Craig's lecture notes were very helpful and I relied on her notes more than the textbook to learn the content.

62. The ALEKS homework and labs.

63. Doing the online ALEKS homework.

64. the application of knowledge accumulated in lecture to the worksheets from

65. Lecture. Craig is fantastic at teaching and her tests are very fair. 10/10 professor

66. Lectures were very useful on understanding concepts as they provided a much clearer interpretation than the textbook

67. lectures

68. Professor's explanations, ALEKS problems, lectures

69. The lectures.

70. The lectures really help

71. Professor Craig's enthusiasm and her great deal of knowledge was very beneficial. I found her office hours to be very helpful as well.

72. Going over topics in depth, and applying it to other classes, such as calculus.

73. The worksheets, ALEKS and demos during lectures.

74. The lectures and in lecture example problems were most helpful for learning, as were the practice problems and exam practices.

75. Class discussion were very helpful for the mathematical content of the course.

76. Labs, and Aleks

77. Only the readings

78. Mostly, the worksheets and lectures helped.

79. The online program ALEKS, as frustrating and time consuming it is, definitely helped a lot with understanding concepts and doing problems repetitively.

80. I believe the lectures (especially the demonstrations) and ALEKs were some of the biggest contributions to my understanding of certain concepts. Some of the labs were fun and I learned from them as well.

81. Lectures and reading from the textbook.

82. Definitely the examples and lecture notes. Being able to print off the lecture notes before had helped to understand the material instead of trying to copy down whats on the slide in a short amount of time.

83. Example problems, panopto, lecture videos and in person demonstrations

84. I actually had a lot of help going to tutoring sessions and office hours.

85. The lectures are engaging and entertaining.

86. lectures and aleks

87. I think that I did a lot of my learning doing the online assignments on ALEKS because in lecture, we mostly did examples and just went over the concepts and online I was really able to practice applying those concepts.

88. The Aleks homework

89. I really enjoyed the labs; I think they helped me understand the material the most and I was the most engaged when I was forced to apply my knowledge in a more tactile way.

90. The homework, worksheets, and office hours contributed most to my learning.

91. Lectures

92. The labs, as they allowed us to apply the knowledge we learned in class.

93. Completing Aleks.

94. The book problems.

95. ALEKS and quiz section definitely taught me the most.

96. doing the online homework alex assignments

97. Aleks

98. The studying.

99. Re-watching the lectures.

100. All aspects of the class (lecture, quiz sections, lab) contributed a great deal to my learning and I'm glad we had a variety of different mediums to learn about chemistry.

101. The EOC assigned problems

102. The lectures were exceptionally helpful and engaging. I felt like I learned more in lecture.

103. ALEKS

104. Aleks. While very annoying, it gave me a solid grasp of concepts.

105. The lectures gave me a base of information, and ALEKS helped most with my understanding of how to apply concepts to problems.

106. Aleks

107. The aleks was something that really contributed to my learning. Professor Craig was excellent in making me understand the material exposed in clase.

108. I think Aleks, reading, and doing the practice problems in the book were the most beneficial to me.

109. Discussion section and assignments

110. Lectures

111. The quiz section as a whole really contributed to my learning

112. online learning

113. The lecture material itself amd Aleks.

114. The example questions in class.

115. Craig has been a great instructor. Her enthusiasm and examples contribute a lot to my learning.

116. The TA and labs.

117. Lecture & ALEKS

118. The quiz sections and Alecks were good reviews.

119. ALEKS, which is the homework was very helpful and the professor's explanations and methods in lecture were useful.

120. The complexity of the material.

121. Detailed lectures, examples for calculations, demos

122. lecture

123. I appreciated the problems we ran through in class, Aleks, and all of the online resources posted before the exams.

124. Lectures were the most useful. Rereading notes.

125. The review sheets and office hours.

127. Probably the aspect that most contribited to my learning was the lecture and the ALEKS homework.

128. The lectures combined with the readings were the most beneficial for my learning.

129. Going to lecture and discussing with my friends.

130. The lectures, however, not much.

131. Practice questions and the textbook.

132. Doing homework I think. I learn a lot by solving problems by myself.

133. The lecture and quiz section worksheets. Sometimes ALEKS depending on what section we were learning, some sections ALEKS was useful (those that had less math calculations.

134. Watching the lectures on Panopto and doing the practice problems before tests.

135. The labs. They were very fun, interesting, and helpful.

136. Practice sheets

137. ALEKS and having an excellent professor that is willing to make sure that every question is answered.

138. Aleks was very effective in teaching me new concepts.

139. practice

140. ALEKS

142. Lectures and practice problems/test

143. completing Aleks homework every week

144. Nothing other than aleks and the book.

145. the ALEKS assignments really helped me because it walked through how to do the problems

146. I learned most from doing practice problems and, as laborious as it was, the Aleks homework

147. Lecture and Aleks

148. Quiz sections and Aleks

149. Professor Crag is one of the best teachers I've had. She is so specific and concise with her answers, and her organization is second to none. She's very enthusiastic about the material and it shows and inspires the students. It's a true challenging and interesting course.

150. The Aleks and lectures.

151. The aspect that contributes most to my learning is Aleks, its where I learn the most topics

152. enthusiastic instructor, labs, and examples for problems.

153. Problem solving and new information

154. I really enjoyed the lecturer. I was delighted to go to class and have her as a teacher.

155. Lecture, lab, worksheets.

156. the lectures and how craig taught them

157. Lecture notes

158. lectures, practice exams, and discussion sections

159. Lectures, the textbook, and ALEKS

160. I learned the most through Aleks

161. ALEKS homework.

162. Practice problems.

163. The good lectures and online assignments.

164. I think ALEKS helped me learn, and the fact that light has matter-like and particle-like characteristics boggled me.

165. The lectures were very helpful for learning this difficult subject.

166. The presentations and lectures

168. The fast pace and obligation to keep up.

169. ALEKS and lecture were most helpful.

170. The helpful videos posted on canvas.

171. Dr. Craig provided lots of videos and examples to her class in order for us the visually understand what was going on.

172. Aleks and the quiz section worksheets

173. instructor's help

174. The lectures contributed a lot to the base of what I needed to know. Also as much as I hated it, the Aleks assignments gave me the basis and practice I needed to learn in this class. The teacher was always clear on what she wanted on her assignments as well.

175. Working with Aleks was extremely helpful in figuring out how to solve mathematical chemistry problems. For me, completing Aleks and then going back to the book to read the underlying concepts was an effective way to learn. I also liked the course lectures, because Dr. Craig was an enthusiastic, unpretentious lecturer who explained concepts introduced in the chemistry textbook in a very clear, relevant, often humorous manner.

177. lectures, aleks, quiz sections

178. Quiz sections and their worksheets, as well as the online program ALEKS.

179. the lectures and aleks

180. ALEKS.

181. Panopto

182. ALEKS

183. Labs, lectures, textbook

184. The lectures

185. The examples made it much more clear.

186. Quantum mechanics

187. The way Craig used real life examples in her lectures, and explained how we would use this knowledge later on in the chem series, was really interesting.

188. The program online contributed a lot to my learning.

189. Working outside of lectures both in groups and individually to complete assignments.

190. Labs

191. ALEKS

192. Craig's lectures

193. Aleks program.

194. ALEKS

195. Lectures, practice worksheets and problems

196. Reading out of the book

197. The worksheets from quiz section. also lecture was good. ALEKs helped me alot with harder things

198. The professor.

199. Office hours were very helpful and organization of lecture slides were great.

200. textbook

201. ALEKS

202. The homework.

203. Aleks' teaching capabilities were by far the most valuable aspect of this class.

204. Reading the book and doing Aleks contributed most to my learning.

205. attending lectures and watching youtube to understand how to do some problems.

206. Being able to use panopto to listen more closely as well as the assigned readings.

207. The lectures and the reading.

208. The lectures contributed the most to my learning because the professor was able to explain in a very clear way.

209. Lecture and Aleks

210. ALEKS and Lecture

211. The lecture contributed most to my learning.

212. Doing Aleks

213. The lecture really helped teach me new concepts that I was unaware of before the class.

214. Lab, lectures, and ALEKS

215. The lectures.

216. I would say that the Aleks homework taught me the most. It was time consuming but forced me to learn the material. I was also very impressed with Professor Craig's lectures.

217. the lectures

218. I like the practice problems that the professor does in class. Craig clearly explains her methods and her thought process which helps me to understand the problem better.

219. The awesome prof. Colleen Craig has the most organized lectures. While she tends to get behind, he notes are thorough and make sense.

220. ALEKS and the panopto recordings

221. The lectures and labs.

222. lecture and practice tests.

223. ALEKS. I found this more helpful than the lectures to be honest.

224. Anything concerning quantum physics or reaction rates.

225. ALEKS and lecture

227. I hate to say this but...Aleks

228. everything

229. I think Aleks was helpful in understanding how to solve problems and improved my understanding of concepts but it was hard trying to do a little bit of it everyday as I had other homework such as English papers and essays to finish.

230. The best part was doing HW problems in the book. I felt they were the best time that I was actually able to apply the material.

231. My instructor contributed most to my learning.

232. Quiz sections/practicing the material/ALEKS

233. Dr. Craig's lectures were very lively and engaging, so I think those were the most helpful part of learning (also her jokes always made waking up early better).

234. The examples she would provide in class

235. Providing examples to problems.

236. Got a very good TA who was able to answer questions and went out of his way to do so.

237. The lectures. They were very helpful with the amount of analogies and examples that were involved. They helped me capture the lessons easier and they

238. The practice exams. ALEK's

240. The worksheets in the discussion sections were helpful applications of what we were learning in lecture.

241. The book

242. Aleks

243. Aleks

244. labs and lectures.

245. applications

246. examples

247. Aleks and the worksheets in quiz section.

248. practice exams and discussion packets

249. N/A

250. ALEKS.

251. Lectures, for sure. The lecture slides were so helpful.

252. The critical thinking aspect. I had to spend some time to fully grasp some concepts.

253. I think that the labs were well set up and very organized. This allowed us to get the most out of them in our lab section.

254. Reading the book

255. Lectures, lab sections, and ALEKS all contributed the most to my learning.

256. The in class lectures and explanations that we walked through as a class.

257. Meh

258. The way the lectures were presented- I usually cannot learn through lectures but Craig made them fun. Also, READING BEFORE THE LECTURE HELPED A LOT.

259. reading the text book.

260. good in class teaching

261. I loved the recordings and enthusiasm. She is a great person to listen to in the morning.

262. Prof. Craig is a fantastic professor, and significantly increased my enjoyment of chemistry. I'm not a big chem person, and enjoy it much more because of the way she framed the material and utilized her lectures.

263. Lectures.

264. The notes and resources provided by Doctor Craig.

265. The class discussion worksheets were so helpful.

267. Lectures, quiz section.

268. ALEKS was very useful and Dr. Craig gave very effective lectures.

269. The lecture slides or notes were very helpful in providing a general guideline for what was expected of the students.

What aspects of this class detracted from your learning?

1. Aleks was a little useless and just took up a lot of time.

2. The sheer amount of work I was expected to complete, ALEKS, and the tests.

3. Nothing honestly.

4. Class sometimes moved at a slightly slower pace than I wish it would have gone but at those times I understand there were others who needed that extra explaination, sometimes I was that person.

5. n/a

6. None.

7. Labs

8. The seemingly artificial difficulty created by the lab reports' deadlines, especially the first lab.

9. The lectures were too slow. In-class example problems did not help because they are not engaging and example problems can be found in the book and on Aleks.

10. None.

12. Oh yeah.

13. The very tight testing space and short amount of time to take tests.

14. The fast pace.

15. Sometimes, ALEKS became too tedious and time consuming, and did not really correlate completely with class and/or lab content.

16. I feel as though we spent a lot of our time on disparate topics... We would read for lecture and do objective questions then do a Lab then also do Aleks. Although the subject matter aligned, the topics rarely did.

17. I learned through all aspects of this class.

18. The largeness of the lecture.

19. nothing- it was fantastic

20. I really can't think of anything that detracted that was in any way controlled by the lecturer-mostly the fact I don't get to eat until after my lecture.

21. the homework software, aleks, is terrible

22. Nothing.

23. None.

24. Nothing in particular.

25. The class size was too big

26. Labs

27. the flow of everything

28. Aleks. I wish it lined up more closely with the content covered in lecture

29. Sometimes ALEKS takes a long time regardless of when I begin it and I could be using that time to study on my own.

30. The size, but that's not a huge issue.

31. None

32. ALEKS. While ALEKS is most of the time helpful, the amount of times you have to repeat problems to progress to the next topic can be infuriating and counterproductive.

34. huge lecture hall

35. Practice problems from the book.

37. aleks (some)

38. Focus on formatting for lab reports

39. None

40. Not really any but if I had to pick one it would be the labs.

41. long labs and not being able to sit.

42. The discussion sections helped me but did not at the same time because I was still trying to grasp the material we were working on. So it was difficult for me in those sections.

43. None I believe all aspects were relevant to the content of the class.

44. aleks was a lot and was not always relevant.

46. Not paying attention in lecture, topics that were not explained as well as others.

47. Lecture

48. The amount of ALEKS and worksheet problems distracted me from fully engaging with the textbook material and my overall concept of the covered topics.

49. Probably some of the labs, because I don't feel like I learned anything.

50. worksheets in discussion section

51. Nothing.

52. nothing

53. The difficulty of tests without criteria specified clearly

54. none

55. Lack of instruction or help in quiz sections. Poor TA help. Lack of effective resources for struggling students. The Friday 9pm ALEKS deadline was extremely difficult to manage with a heavy courseload. Lectureer falling behind on the scheduled lectures

56. Aleks mainly. It was very frustrating to do since it requires near perfection to advance.

57. none

58. The stress associated with labs.

59. The large lectures hall and the small desks made it a little hard but it wasn't something totally unmanageable.

60. None

61. At the beginning of the year, Aleks was not helpful as I was given many questions to do that were extremely easy and just consumed my time. Only during the stoichiometry, kinetics, and gas laws units did I find Aleks to be useful. The one thing I like about Aleks is that you can always ask to see how to solve the problem without penalty to your grade.

62. The CLUE sessions

63. n/a

64. nothing

65. Quiz Section

66. Aleks often forced me to have to redo topics that I knew how to do because of is very specific grading system

68. Inability to show my level of learning on tests; being surprised on tests

69. The speed of the lectures sometimes were too slow.

70. Aleks because I prefer paper homework vs online because when I do homework online, it doesn't help me learn as well

71. The large auditorium class size is bothersome.

72. Repetitive Lectures

74. Nothing really detracted from my learning, but sometimes lectures weren't extremely helpful for understanding topics and although ALEKS is somewhat helpful it is more time-consuming than anything.

75. Aleks topics that were not covered in class. Seemed like a waste of time.

76. None

77. ALEKS, it uses up a lot of my studying time.

78. ALEKS was annoying.

79. My lab partner slacked and never knew what he was doing which added to my stress and put more weight on my shoulders.

80. There are none I can specifically think of... It's minor, but the big class size during lectures does make it harder to ask questions.

81. Everything was good, but I just would've liked more practice tests (which she did deliver on) so I am happy.

82. I would say nothing detracted my learning.

83. nothing!

84. I know that the purpose of ALEKS was to practice the material we covered in class. But, personally I am not a fan of the program. I would much rather do bookwork and not worry about finishing the topics of ALEKS.

86. labs didnt seem to have a purpose towards tests

87. I didn't learn very much from the labs, however I enjoyed them!

88. Going to lecture after waking up early for rowing workouts

89. ALEKS was difficult a lot, mostly because I knew the material but ALEKS was looking for a specific format or using different versions of the same constants which often tripped me up and caused the topics to take a much longer time than they needed to.

90. The size of the class detracted from my learning occasionally but for the most part it was manageable.

91. Midterms

92. I'm not sure if quiz sections are very necessary. They are too short to truly get in depth help, if it is needed.

93. The fact we had to complete objectives on Aleks before covering them on class. Also, teacher did not have the best explanations for a lot of material covered. Outside resources were often more useful than the lectures.

94. The large class size.

95. The fact that the lectures were too fast and the slides had too much information at a time so it was impossible to follow.

96. lab

97. Historical context that just ends up confusing me.

98. Nothing.

99. ALEKS and the labs.

100. Nothing in this class detracted from my learning in any way.

101. Nothing, that I can remember right now.

102. The stress of grades made it difficult to focus on just learning. I was more worried about my overall grade rather than just learning.

103. Readings

104. Lab. The time crunch is very bothersome, and they felt like they were always a week too late, so they weren't really a learning experience.

105. The pace of some lectures was so fast I was unable to understand and then was completely lost. Also, the high number of words on some slides

106. N/A

107. Nothing

108. Craig would constantly make small errors in what she would say, but would only realize she mixed up her words after she had already taught something. So it was confusing when she would teach something and then say "oh never mind it's actually like this."

109. Na

110. Nothing

111. Big class size

112. class

113. Nothing reakly detracted from my learning

114. No detraction.

115. I find huge lecture sessions a bit distracting and somewhat difficult to focus in.

116. Aleks and worksheets in quiz section

117. None

118. The alecks hw due on Friday is difficult.

119. it is a very large class, so it can be easy to get distracted during lecture.

120. None that I can think of.

122. nothing

123. The class is large, so when Professor Craig answered one student's question, it could be boring for me if it wasn't a concern I had.

124. Sometimes the things in ALEKS didn't appear to correlate with the things we were learning about in lectures.

125. The out of lab work was unnecessarily long and the ALEKS homework takes too much time.

127. The quiz section did not really contribute to my learning. We mostly did worksheets and there was not very much instruction.

128. The amount of time preparing for lab and doing post-labs detracted from my time studying and reading the textbook to understand the material. Also the length of Aleks problem sets could be discouraging.

129. ALEKS online learning.

130. Too much material

131. Nothing, it was really engaging.

132. I often get confused with similar terms.

133. In ALEKS, getting the answer wrong due to simple calculation errors lead to some waste of time when I actually did understand the material.

134. Lecture was very big, and slow.

135. Tests. I hate tests; they are just reasons to cram information into your brain so you can forget it all later. They never, and will never, contribute to my learning. They merely deprive me of sleep for a week, and I don't seem to retain any information that I wouldn't have retained otherwise.

137. ALEKS is both a key component in learning for Chemistry but is also detracting. The knowledge checks seem uneccessary and add about 20 minutes of frustration. It makes me not want to finish my knowledge check to start my actual objective.

138. Lectures presented the material but not in a way that I could learn from.

139. unfair multiple choice test grading

140. Labs

142. Some parts of ALEKS

143. N/A

144. None.

145. Sometimes I would not understand everything because the class is so big that I would have to research a lot on what was already taught

146. Having to spend time on take home lab assignments that could have been put towards studying the material

147. None

148. None

149. Sometimes the general scale of the information was daunting and made me anxious for tests.

150. Nothing

151. the thing that detracted most from my learning is the quiz sections, I really like the worksheets but I don't really think I learn much in the quiz section.

152. I didn't find aleks to be too constructive or essential to my learning.

153. Was exposed to some things that weren't necessary.

155. None

156. too big of a lecture and too fast pace, couldn't keep up with teacher

157. Large lectures and less learning with smaller groups

158. none

159. None

160. Nothing that the professor did detracted from my learning. It was more me not keeping up with readings and getting behind on Aleks

161. Big class size, makes you not want to attend lecture.

164. I didn't like that laptop users were sitting in the front.

165. The number of stupid questions asked by colleagues.

166. Doing the Aleks because some weren't taught in the class

168. N/A

169. ALEKS objectives, at times, would take time away from lecture or test preparation.

170. no.

171. Nothing

173. nothing

174. None, this class was great.

175. The chemistry laboratory component was absolutely my least favorite aspect of the chemistry curriculum. Because the structure surrounding the chemistry labs was so strict, I found I had to dedicate all my energy to working efficiently and stressing out about doing what I was supposed to do, rather than considering the concepts involved in each lab thoroughly. The amount of time spent in labs and outside of labs preparing for them was not at all productive for me, and constituted a large potion of the time I spent working on this course. For me, it would have been much more effective to simply observe the laboratory experiments on a video and to write about them afterward.

177. no big distractions

178. Nothing substantial.

179. quiz section i didnt get as much help as i hoped

180. Lectures were monotonous and I spent a ridiculous amount of time self-teaching the concepts to myself outside of class.

181. Kane

182. at home lab reports

183. Aleks

184. Nothing I can think of

186. None

188. But also the online Aleks as it was very time consuming though it did have some things that would be good to know.

190. Aleks

191. none

192. The fear of a low grade due to this course being curved very low.

193. Not knowing what to expect on the test, unclear criteria. Some subjects that were on the tests were not covered in class/covered after the test.

194. Quiz Sections

195. Spending too much time on aleks and not having enough time to learn the actual content.

196. Labs that must be completed outside of the lab session

197. Sometimes lectures was boring

199. Large student pool

200. NA

201. the multiple choice question questions for the midterms,the lack of past midterms to study on, the fact that aleks is due 9.00 am on a friday

203. This class was unfair. Prelab assignments were extremely unfair. very difficult to focus on lab when I already know my grade will be bad. in my opinion, prelab assignments should be a -5 penalty instead of -15. 15 points is like living in a fantasy where teachers aim to fail students. it reminds me of the Holocaust in its treatment of victims. utterly poisonous.

204. The amount of Aleks due detracted a bit because of how time consuming.

205. Aleks, although it is helpful with providing problems but when we have a deadline and a large amount of topics to do in a week along with many other material to cover, it becomes less helpful because we do Aleks to get it done with most of the time rather than actually learning the material. it only takes few minuets to identify the pattern of the problem and understand how to do it, that would last for few days maybe, but after a week it is hard to do the same problem without getting it wrong.

206. ALEKS.

207. ALEKS isn't a good tool for learning.

208. The parts of this class that detracted from my learning were the discussion sections because it was sort of a study group made by the professor which many would enjoy but some as myself do not enjoy. Not that I dislike the idea of study groups but some of my groups were not very cooperative and would leave one person out.

209. Nothing

210. The book it was cconfusing and did nothing to support lecture.

211. Ales detracted from my learning.

212. nothing

213. The large lecture hall could be distracting due to talking and the disengagement of student and professor.

214. Stress caused by preforming and preparing for labs

215. None

216. I felt as if some of the labs weren't the best use of my time, but they weren't necessarily a waste of time.

217. nothing

219. Sometimes the labs were off from the lectures. Sometimes the labs included material we never learned in class.

220. ALEKS also because it took up a lot of time where I could've focused on other things

221. Aleks

222. Too much aleks due.

223. Boringness of lectures, not having the information to do more than a problem or two on the worksheets

224. Much of the course was a rehash of high school chemistry, which caused me to tune out and lose interest.

225. nothing

227. Nothing all was useful

228. nothing

229. I think the large class size detracted from my learning as sometimes it proved distracting.

230. I felt like when it came time to midterms/finals there was never enough material to study. 1 practice test was not close to enough material.

231. Nothing really detracted me

234. The constant question answering

235. Most students knew the material before the course.

236. Very large class size, certain ALEKS problems sometimes feel unnecessary.

237. It was the stress from the labs. I would worry about the labs and the lab reports and it would take a substantial amount of my studying time.

238. The environment itself since it was such a huge class setting. Other classes, not being able to get a good rest due to the machinery in north campus.

240. ALEKS. I would spend hours more on it than was necessary just because of its structure.

241. Homework

242. None

243. Aleks

244. being left behind on lectures

245. aleks

246. aleks

247. N/A

248. none

249. The short multiple choice exams were very stressful, as missing more than a couple problems has a drastic effect on one's grade.

251. Early time, caused me to doze off, but very rarely.

252. none

253. The large lectures can be difficult to find focus in but there is not much that can be done about that.

254. The lectures, you just ain't funny. God, whenever I hear your jokes they are so fucking cringey. I wish I had more time to study the book and just not attend class. God, every moment I spent in that class was fucking awful.

255. The discussion section detracted from my learning as I was not satisfied with my TA's helpfulness and attitude in section. I often left discussion section feeling very confused even after asking questions to try to understand.

256. The only thing that detracted from my learning was the weekly aleks homework that did not always line up with what we were working on in class because my aleks level was higher.

257. Labs

258. ALEKS - took up too much time..

259. Aleks was sometimes frustrating.

260. too much aleks and multiple choice knowledge level tests

261. It became very confusing and the amount of work amount became great.

262. rushing through Aleks, or not making time to complete the objectives. It's very helpful, satisfyingly applicable practice for exams.

263. ALEKS.

264. Nothing really.

265. There wasn't any that detracted me from learning.

267. None.

268. A few times (but very few) the lecture went by a little bit fast, specifically when we were introduced to rates of chemical reactions.

269. Not much.

What suggestions do you have for improving the class?

1. Allow for less tricky questions.

2. Perhaps have ALEKS lessen the workload and provide more practice problems similar to the challenge problems in the textbook.

3. More experiments and study guide questions.

4. The only part of the class that sometimes got confusing was scheduling of what we were coving when which made it hard to know when to do what sections of ALEKS.

5. n/a

6. None.

7. More homework

8. Have all lab reports be completed after-lab like the 4th one.

9. Speed up pace of lectures. Less in-class example problems.

10. Improve quality of learning in quiz sections.

11. Sometimes lectures seemed kind of rushed, I understand some topics take more time than others but maybe supplementary videos on these topics would be helpful for students who couldn't quite get the concept in class/after the reading.

12. Yes.

13. All the improvements for this course would have to do with the testing. The midterms I took I felt like I could have done much better even given 10 more minutes and a better, larger place to take the test, maybe with actual desks, though I know it is hard to find a big enough place to accommodate everyone in the class.

14. Not starting the class with quantum mechanics, because that was the most challenging concept and made the transition into the class difficult.

16. I would suggest aligning the assigned work with the work learned in class slightly better. It might also be nice to have Aleks due on Mondays/Wednesdays of the following week so that we will have learned all of the assigned topics in lectures.

17. I have no suggestions.

18. none come to mind

19. More review problems before the midterms

20. I have no suggestions- it was a truly wonderful class.

21. do homework differently

22. Effective use of video supplementation during lecture can be very effective for the visualization of complex concepts.

23. The labs should be more explicit in what they're looking for so you don't lose points for things like incorrect titling or an incorrect formatting style.

24. None.

25. No.

26. Test in different form to get partial credit

27. We would always have to do the Aleks topics before we learn it in class which made us basically learn how to do all the topics soley by the explainations. I feel like it would have been a lot easier if we learned the week before and did aleks the next week.

28. Have a greater correlation between Aleks and in class lectures

29. I always enjoy worksheets when I run out of past exam problems.

30. I think Colleen was a fantastic instructor. 8 honestly think most of the issues with the class (size, interest in material, etc.) are simply inherent in this type of introductory course, and Colleen did a great job in minimizing the interference from these negative aspects.

31. None

32. Lectures could be a bit vague at times. As a result, I relied a lot more on the book than on the lectures.

34. more office hours

35. Clarifying what is needed for the exam. I feel as though, now, there is some confusion and then questions on the exam in which we have not discussed.

36. Leave time to go over concept during TA sessions

38. Focus less on formatting and logistics and focus more on the content

39. None

40. Have less labs and more quiz sections.

41. The TA's were not necessarily helpful and seemed as if they didn't care. I went to the chemistry study center and the other TAs were super helpful and knew exactly what was expected in lab.

43. More examples and more more organization to the lectures.

44. Spend more time explaining relevant material and not waste time on ales or in lecture talking about things that are not useful or do not appear on the test. Focus more on what will help us do better in chemistry 142--> 162 and o chem.

46. Smaller class size. Longer quiz section where there is more time for questions and instruction. More book work vs. Aleks.

47. Slowing down the schedule, more review

48. The worksheets within the TA sections are extensive, and personally they did not aid me in my understanding of the topics (sometimes made it worse!). ALEKS is not particularly 'logical,' and the operating system is frustrating at times. This class was 100% review for me, yet I received half the score I expected on the first midterm. Although I feel I completely understand the material, I am nearly failing the class. There is help available to me, but I feel as if I don't have any questions to ask. Perhaps changing the structure of the course or the style of the tests would help in the overall success of the class. Creating an extra quiz section per week, less extensive yet more helpful worksheets, and perhaps a free-response style test (allowing them to receive partial credit for certain problems) would aid the students immensely. In addition, curving the overall class would obviously increase the pass/fail ratio of the students.

49. More practice exams?

50. Worksheets in discussion section should reflect problems found on exams.

51. Nothing

53. Weekly quizzes, tests containing more conceptual questions (as opposed to how it is mostly only problem solving now), and revising the point distributions of the course.

54. nothing - it was a good course

55. Professor lead midterm and fnal review sessions. (CLUE review sessions are more or less useless) Better and more availiable TAs' (ie TAs' should make themselves more avialiable to students with more office hours) Smaller class sizes Less long math problems on relatively short teests (ie 20 stoichiometry equations in under 50 minutes was unmanageable for the majority of CHEM 142 students, and therefore their grades did not end up reflecting their knowledge) Better test review resources

56. If discussion sections were longer, I could see myself learning more and mastering the material.

57. none

58. Less stressful labs.

59. Nothing really. Canvas was definitely confusing in the beginning but now it is not too bad at all.

60. None

61. Less stringent grading for the labs

63. n/a

65. Quiz section is not helpful but the worksheets are to an extent

66. N/a

67. smaller size lectures.

68. Make the tests more similar to the preparation materials

69. The structure is pretty good as is.

70. I prefer having paper homework over online homework because I remember and retain information better that way.

71. No suggestions.

72. More information about when certain surveys are due, and where to complete them.

74. More practice problems and examples would be helpful, but besides that, I can't think of anything.

75. Review sessions with our class.

76. It was very good, maybe more ways online for people to ask questions and get responses that other people can see

77. maybe removing ALEKS and have paper and pencil homework in which we do the work by hand and solve the problems on paper, so I could visualize how to solve them. Also, I would suggest more free responds questions on exams as it shows how much a student knows rather than by simple multiple choice questions in which a student can randomly guess and get the right answer, without showing the work.

78. Less ALEKS more worksheets.

79. Don't throw curve balls on the tests. Whatever is on the practice exam would be helpful if it was on the regular exam, meaning we don't get into the exam never having seen a problem before since it wasn't on the practice exam.

80. It would be helpful if the Chem Quiz Sections were spent on prepping for the labs. I feel like preparation for the labs are one of the big stressors of the course.

81. More practice problems in class or online to aid in concepts with calculations.

82. I don't have any.

83. Having a review session outside of class for those with extra questions before midterms.

84. I really enjoyed the class. Keep up the good work!

86. it was fine

88. Make the pre lab due date relative to the date of the lab.

89. I think less focus on ALEKS would be beneficial, as well as more real world demonstrations in lecture.

90. I would find it very helpful to have a second day of quiz section to take practice quizzes or review concepts with the TA. If not possible, a longer length of time for the one quiz section would be helpful as well.

91. More interactive quiz sections

92. Nope, I understand the necessity of quiz sections for people who need help. The lectures are very interesting, and so are labs. I can't see how the class could be improved.

93. More organized lectures and notes.

94. Make the practice tests more like the tests.

95. Less words on each slide for lectures and for the ALEKS to be at the same pace as the class so students don't have to learn majority of the content on their own.

96. more practice problems and better review for tests

97. Historical context how equations were derived are nice, but in the end they just make what I actually need to know more confusing.

98. Better understanding of what will be on the test and what to study/ what to do to study.

99. Providing more practice problems similar to the test problems.

100. Not based on personal experience, but peers have noted that some TA's are not very capable of both explaining and running experiments leading to some students not performing in labs as well as they could with a more competent TA.

101. Turning in the EOC problems for credit instead of aleks.

102. A curve would be nice.

103. N/A

104. Less calculation based. At the very core this was basically a class on applied multiplication. I felt there was too much time spent in lecture working out examples.

105. Fewer words on slides at some times would be very helpful

106. Give us more practice midterms, or give us more space during exams

107. I have no suggestions.

108. Change the format of the test, and shorten them. All multiple choice questions is bad because you could know the process of the problem, but make a small error and then get a completely wrong answer. Also we are not given enough time for all the questions. Even though the questions are multiple choice we have to work out every problem to solve the question, which is very time consuming, especially if you want to make sure to not make little mistakes.

109. Na

110. The multiple choice test is fine but only having 20 questions make the weigh on each question too high.

111. Smaller class size

112. more information

113. I have no suggestions for improving the class.

114. I hope the exam questions will not be so tricky:)

115. More study materials

116. A better program than Aleks, more extra credit opportunities, more practice tests for midterms and the final

117. More office hours please

118. Make the alecks due Sunday and put the answers to the text book questions on canvas

119. none

120. More example problems provided in lecture.

122. no suggestions

123. none.

124. Besides changing ALEKS to clearly match with the lectures, I think Dr. Craig is teaching this class perfectly!

125. The teacher should make the tests shorter or allot longer time because it is in my opinion very unfair to make each multiple choice question 5 points. There is no partial credit, so even when I would do the entire problem correctly except for a small mistake, the complete problem would be wasted. This does not show my understanding of the class because I do believe I understood every material well.

127. I suggest giving more instruction oriented material for the quiz section so that it is more engaging and instructive.

128. Perhaps correspond the information and questions in Aleks more closely to the questions asked on the exam.

129. Less online work

130. Provide more lectures

131. Continue with the enthusiasm!

132. I hope ALEKS due date would be on Sunday instead of Friday.

133. In the future, I would have liked for her to speed up the beginning of the unit when the content is simpler, that way we wouldn't get in a time crunch trying to get all the information in before the test. Sometimes some of the most important or hardest topics were not given a lot of lecture time or maybe skipped and we were told to watch them on our own, this is hard because we can't ask questions or for clarification.

134. None

135. Nothing. It's a good course. Colleen was very helpful and "peppy" every morning despite having to present the same lecture at 8:30 and 9:30. Good class overall, I enjoyed and learned a good bit from it.

136. We wasted time in class on the professor answering questions that should have been asked in office hours. This caused us to fall behind and for some of the harder topics to be only superficially covered

137. Nothing. But things that I like and I hope other students will be able to see next quarter, is Professor Craig's sense of enthusiasm and her cheesy jokes. Also, I say that I dislike ALEKS strongly with a passion, but it is absolutely neccessary for students to success

138. Having TA's teach more about the challenging sections instead of a worksheet.

139. getting rid of multiple choice tests. VERY UNFAIR. ALEKS also is not a effective teaching and homework tool

143. N/A

144. A midterm archieve would help. Also, coordinate with TA to teach the more difficult concepts instead of just doing worksheets with no instruction.

145. more pictures and visual representation, I like the comparisons to other, more relatable topics.

146. The labs did not feel relevant to the problems seen on the tests, so it would be helpful to remove the take home lab assignments because they detracted from learning the actual course material seen on exams.

147. Spend more time on light/wavelength, more review, review sessions etc.

148. More consistent aleks

149. More in-class review.

150. I would suggest continuing to show how to do more difficult example problems that will be similar to those on the test.

151. I think that the thing to improve for this class is to maybe connect the Aleks objectives better with the lectures and the other assignments. There are sometimes Aleks objectives that we never talk about in class.

152. none.

153. Give a lot of practice problems similar to exam, all kinds of problems so students will know how to tackle anything thrown at them

154. I would highly suggest a different method of testing. Multiple choice exams were incredibly stressful given the fact the smallest arithmetic error could cause one to lose a large amount of points, even when methodology and theory is correctly applied.

155. Its a really good class already.

156. slow the pace down is all but i know that is hard to do

157. Have more discussion sections and worksheets

158. there should be more practice problems during discussion section and online in canvas

159. None

160. Make Aleks due on sunday.

161. Shorter worksheets in quiz section.

162. More practice problems for midterm/final.

164. I suggest providing easy, simple concepts to explain the big picture. For example, explaining that quantum is like using pennies would have been helpful (example from Khan Academy).

165. Adding in more demonstrations.

166. More practice problems

168. Curved exams.

169. The use of clickers possibly.

170. no.

171. I personally liked the approach Dr. Craig took for this class.

173. very good class

174. Nope.

175. Personally, I would have preferred to cover the material presented in chapters 12 and 15 later in the introductory chemistry series. I found the sections on stoichiometry and reaction types to be extremely interesting and easy to grasp as a novice chemist, and would have appreciated more relevant macroscopic chemistry in this course in order to give the students a more clear view of the implications of chemistry in our daily lives. As for course structure, I wish the chemistry labs were structured more similarly to the biology labs at the University of Washington, where the time you spend on the lab isn't overwhelming, but enough to understand the fundamental concepts involved in the physical practice of chemistry.

176. More practice test problems

177. have the ability to review aleks topics at any point in time

178. I found the exams to be misrepresentative of my understanding of the material due to the limited time.

179. not sure it was overall good

180. Make the practice tests more similar to the tests and let us know which exceptions apply to certain rules ahead of time.

181. More Panopto

182. Make the exams weighted differently so each question doesn't cost you 5% to get wrong

183. More continuity between aleks homework and lecture material

184. Have better practice tests before midterms and final

185. Is there any way you could teach the material for aleks before assigning the objective. I would work on aleks and then come to class just to relies I learned it wrong.

186. Do not make students write lab information twice (once in the lab report, once in the notebook). For example, many of the calculations for the earlier labs were required in both, which does not contribute to our learning.

188. Less time on aleks and more on textbook.

190. Less time focused on aleks, more time focused on labs

191. more practice problems other than just ALEKS

192. Shift the focus on the material being learned rather than the stress of a grade.

193. Make a more clear criteria of what the professor expects the students to know.

194. Smaller, more frequent tests.

195. Have significantly less ALEKS topics. They can be very helpful practice problems, however there are so many topics and each topic takes a huge chunk of time and if you miss one question in the knowledge check you have to do the entire topic over again. Also, aleks questions are asked very differently than midterm questions, so it is really difficult to learn all these things that we are not being tested on.

196. Do labs that are to be completed in the lab session

197. More pictures

199. None

200. NA

201. make the tests not multiple choice, it ruins any chances for anyone that knows their stuff but get a tiny mistake while giving someone who barely knows a better chance in luck

202. Go over practice midterm problems as a class before the midterm

203. This class was unfair. Prelab assignments were extremely unfair. very difficult to focus on lab when I already know my grade will be bad. in my opinion, prelab assignments should be a -5 penalty instead of -15. 15 points is like living in a fantasy where teachers aim to fail students. it reminds me of the Holocaust in its treatment of victims. utterly poisonous

204. Potentially making the pie chart in Aleks have less topics

205. less Aleks, more actual problems on paper or printed materials.

206. Having ALEKS due date back for Sunday evening.

207. ALEKS, barely helps with reinforcing concepts.

208. Possibly shortening the discussion sections or making them less frequent.

209. Nothing

210. A less confusing book.

211. Less busy work

212. none

213. I think that someone should take a look at the ALEKS work and make sure it lines up better with the class lectures.

214. Make labs less stressful by decreasing content and/or shortening in lab report length

215. Have TAs use a quiz section for exam review.

216. I do not have any suggestions to improve this class, it was very well put together and did a great job teaching me a lot of material in a short amount of time.

217. none

219. Better pair labs with lectures.

220. To have more time for ALEKS, maybe due on Sunday or less objectives, hard to balance

221. Make the discussion sections' worksheets part of the homework instead of so much aleks.

222. Less Aleks, tell people to prepare better for 1st lab

224. Explain the underlying mechanics and physical reasons for things as opposed to just teaching rules and techniques.

225. nothing

226. Ease students into chemistry instead of trying to weed them out

227. None, Professor Craig is bomb

228. Nothing.

229. It would have been helpful to link some of the lessons to the previous lessons as it helps build a connection between information in my head.

230. More practice midterms and finals.

231. I think the quiz sections could go over the problems as a whole class.

232. More leading example problems and then giving students time to do them.

233. More office hours, because the room was often so full it was hard to get questions in

234. Making the sections smaller

235. Course should NOT be based on test taking.

237. If there is anything, the lectures can be shortened in order for students to ask more questions by the end of the lecture.

238. N/A

240. Make the ALEKS objectives more manageble.

241. Candy

242. None

243. Less Aleks

244. improve schedule.

245. find another way to do homework. Aleks did not help. It is too much of a mechanical process

246. less aleks

247. N/A

248. more practice exam problems:)

249. A completely multiple choice exam may not be the best option for measuring student learning due to a variety of factors (i.e. test anxiety, low number of questions with high weight); however, I understand that it is the most plausible way for testing so many students. More practice exams could be available to study and could be made available earlier than the week before the exam.

251. I have no suggestions I can think of at the moment.

252. none

253. I don't have any suggestions.

254. Don't try to be funny and just lecture.

255. I would suggest a more rigorous screening for TAs to ensure that they can properly teach students the necessary material. This can be done through observation of the TA's teaching by a qualified faculty member.

256. One thing that could be improved is to not have aleks due on fridays but rather on a different day of the week.

257. Meh

258. None!

259. faster pacing in lecture.

260. short answer test

261. The tests are very difficult. Perhaps making them less difficult or not having each MC question 5 points.

262. When studying for midterms, ALEKS cannot be used as the valuable studying tool it could be, because previous objective assignments that weren't completed on time are /not/ accessable, unless I complete the entire objective that is currently assigned. when trying to review past concepts over the week before the exam, it was really frustrating.

263. More explanations.

264. Less emphasis on ALEKS.

265. It really comes down to lectures i thought. Yes, Professor Craig is an amazing Professor but i thought that the lectures only skimmed through the rigorous topics of Chemistry.

267. None.

268. n/a

269. Some of the questions on ALEKS seem to be somewhat beyond or not precisely on point with the actual course material that the students are expected know on the exams.

270. Easier tests

IASystem Course Summary Reports summarize student ratings of a particular course or combination of courses. They provide a rich perspective on student views by reporting responses in three ways: as frequency distributions, average ratings, and either comparative or adjusted ratings. Remember in interpreting results that it is important to keep in mind the number of students who evaluated the course relative to the total course enrollment as shown on the upper right-hand corner of the report.

Frequency distributions. The percentage of students who selected each response choice is displayed for each item. Percentages are based on the number of students who answered the respective item rather than the number of students who evaluated the course because individual item response is optional.

Median ratings. *IASystem* reports average ratings in the form of item medians. Although means are a more familiar type of average than medians, they are less accurate in summarizing student ratings. This is because ratings distributions tend to be strongly skewed. That is, most of the ratings are at the high end of the scale and trail off to the low end.

The median indicates the point on the rating scale at which half of the students selected higher ratings, and half selected lower. Medians are computed to one decimal place by interpolation.[1] In general, higher medians reflect more favorable ratings. To interpret median ratings, compare the value of each median to the respective response scale: *Very Poor, Poor, Fair, Good, Very Good, Excellent (0-5); Never/None/Much Lower, About Half/Average, Always/Great/Much Higher (1-7); Slight, Moderate, Considerable, Extensive (1-4).*

Comparative ratings. *IASystem* provides a normative comparison for each item by reporting the decile rank of the item median. Decile ranks compare the median rating of a particular item to ratings of the same item over the previous two academic years in all classes at the institution and within the college, school, or division. Decile ranks are shown only for items with sufficient normative data.

Decile ranks range from 0 (lowest) to 9 (highest). For all items, higher medians yield higher decile ranks. The 0 decile rank indicates an item median in the lowest 10% of all scores. A decile rank of 1 indicates a median above the bottom 10% and below the top 80%. A decile rank of 9 indicates a median in the top 10% of all scores. Because average ratings tend to be high, a rating of "good" or "average" may have a low decile rank.

Adjusted ratings. Research has shown that student ratings may be somewhat influenced by factors such as class size, expected grade, and reason for enrollment. To correct for this, *IASystem* reports **adjusted medians** for summative items (items #1-4 and their combined global rating) based on regression analyses of ratings over the previous two academic years in all classes at the respective institution. If large classes at the institution tend to be rated lower than small classes, for example, the adjusted medians for large classes will be slightly higher than their unadjusted medians.

When adjusted ratings are displayed for summative items, **relative rank** is displayed for the more specific (formative) items. Rankings serve as a guide in directing instructional improvement efforts. The top ranked items (1, 2, 3, etc.) represent areas that are going well from a student perspective; whereas the bottom ranked items (18, 17, 16, etc.) represent areas in which the instructor may want to make changes. Relative ranks are computed by first standardizing each item (subtracting the overall institutional average from the item rating for the particular course, then dividing by the standard deviation of the ratings across all courses) and then ranking those standardized scores.

Challenge and Engagement Index (CEI). Several *IASystem* items ask students how academically challenging they found the course to be. *IASystem* calculates the average of these items and reports them as a single index. *The Challenge and Engagement Index (CEI)* correlates only modestly with the global rating (median of items 1-4).

Optional Items. Student responses to instructor-supplied items are summarized at the end of the evaluation report. Median responses should be interpreted in light of the specific item text and response scale used (response values 1-6 on paper evaluation forms).

[1] For the specific method, see, for example, Guilford, J.P. (1965). Fundamental statistics in psychology and education. New York: McGraw-Hill Book Company, pp. 49-53.