

Item Analysis (Multiple Choice)

Exam Takers = 132

KR20 = 0.94

Stddev = 10.40

Mean = 11.36 (23.18%)

Median = 9.00

Min = 0.00

Max = 44.00

Total Pts =

Item #	Correct Responses			Disc. Index	Point Biserial	Correct Answer	Response Frequencies (*Indicates correct answer)										Avg Answer Time	
	Diff(p)	Upper	Lower				A	B	C	D	E	F	G	H	I	J		Unanswered
1	0.26	57.89%	0.00%	0.58	0.55	A	*34	73	23	2	0	0	-	-	-	-	0	00:15
-	-	-	-	-	-	% Selected	25.76	55.30	17.42	1.52	0.00	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.55	-0.27	-0.28	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.58	-0.32	-0.28	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.58	0.34	0.05	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.67	0.33	0.00	0.00	0.00	-	-	-	-	-	-

Q: (The first 19 questions pertain to the Medical Biochemistry course.) The course syllabus clearly stated the expected goals/objectives/competencies for the course. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

2	0.33	60.53%	5.13%	0.55	0.49	A	*44	67	17	2	2	0	-	-	-	-	0	00:11
-	-	-	-	-	-	% Selected	33.33	50.76	12.88	1.52	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.49	-0.37	-0.13	0.03	-0.04	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.55	-0.48	-0.08	0.03	-0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.61	0.32	0.05	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.05	0.79	0.13	0.00	0.03	0.00	-	-	-	-	-	-

Q: The course syllabus clearly outlined the grading criteria for the course. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

3	0.22	55.26%	0.00%	0.55	0.58	A	*29	69	27	5	0	2	-	-	-	-	0	00:09
-	-	-	-	-	-	% Selected	21.97	52.27	20.45	3.79	0.00	1.52	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.58	-0.20	-0.30	-0.15	0.00	0.09	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.55	-0.20	-0.31	-0.08	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.55	0.39	0.03	0.00	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.59	0.33	0.08	0.00	0.00	-	-	-	-	-	-

Q: The course addressed the competencies as outlined in the syllabus. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

4	0.14	34.21%	0.00%	0.34	0.50	A	*19	46	46	17	4	0	-	-	-	-	0	00:13
-	-	-	-	-	-	% Selected	14.39	34.85	34.85	12.88	3.03	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.50	0.10	-0.26	-0.24	-0.12	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.34	0.17	-0.23	-0.20	-0.08	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.34	0.50	0.13	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.33	0.36	0.23	0.08	0.00	-	-	-	-	-	-

Q: The course was well organized. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

5	0.11	36.84%	0.00%	0.37	0.64	A	*15	38	51	22	6	0	-	-	-	-	0	00:11
-	-	-	-	-	-	% Selected	11.36	28.79	38.64	16.67	4.55	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.64	-0.02	-0.24	-0.17	-0.06	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.37	-0.02	-0.20	-0.15	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.37	0.29	0.21	0.11	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.31	0.41	0.26	0.03	0.00	-	-	-	-	-	-

Q: Key lecture concepts were frequently summarized for emphasis * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

6	0.17	44.74%	0.00%	0.45	0.56	A	*22	47	35	24	2	2	-	-	-	-	0	00:10
-	-	-	-	-	-	% Selected	16.67	35.61	26.52	18.18	1.52	1.52	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.56	-0.09	-0.11	-0.25	-0.12	-0.04	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.45	-0.12	-0.05	-0.20	-0.05	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.45	0.29	0.21	0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.41	0.26	0.26	0.05	0.03	-	-	-	-	-	-

Q: Adequate class time was provided for questions and related discussion. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

7	0.20	60.53%	0.00%	0.61	0.67	A	*27	63	30	10	1	1	-	-	-	-	0	00:14
-	-	-	-	-	-	% Selected	20.45	47.73	22.73	7.58	0.76	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.67	-0.22	-0.27	-0.16	0.02	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.61	-0.20	-0.31	-0.08	0.00	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.61	0.34	0.05	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.54	0.36	0.08	0.00	0.03	-	-	-	-	-	-

Q: The course encouraged me to think critically about the content material. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

8	0.14	36.84%	2.56%	0.34	0.49	A	*18	43	47	13	2	9	-	-	-	-	0	00:16
-	-	-	-	-	-	% Selected	13.64	32.58	35.61	9.85	1.52	6.82	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.49	0.08	-0.29	-0.13	-0.08	-0.06	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.34	0.14	-0.33	-0.10	-0.03	-0.02	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.37	0.39	0.18	0.03	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.26	0.51	0.13	0.03	0.05	-	-	-	-	-	-

Q: Case study assignments were used effectively to deliver course content. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

9	0.11	34.21%	0.00%	0.34	0.60	A	*14	52	37	14	5	10	-	-	-	-	0	00:10
-	-	-	-	-	-	% Selected	10.61	39.39	28.03	10.61	3.79	7.58	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.60	0.03	-0.21	-0.16	-0.12	-0.12	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.34	0.17	-0.25	-0.08	-0.08	-0.10	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.34	0.47	0.11	0.03	0.00	0.05	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.31	0.36	0.10	0.08	0.15	-	-	-	-	-	-

Q: In-class presentations and demonstrations were used effectively to deliver course content. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

10	0.03	5.26%	2.56%	0.03	0.24	A	*4	22	42	33	29	2	-	-	-	-	0	00:11
-	-	-	-	-	-	% Selected	3.03	16.67	31.82	25.00	21.97	1.52	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.24	0.31	-0.09	-0.16	-0.09	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.03	0.29	-0.10	-0.20	0.00	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.05	0.34	0.29	0.18	0.13	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.05	0.38	0.38	0.13	0.03	-	-	-	-	-	-

Q: The required textbook for this course was an effective learning resource. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

11	0.07	21.05%	0.00%	0.21	0.40	A	*9	40	30	18	13	22	-	-	-	-	0	00:13
-	-	-	-	-	-	% Selected	6.82	30.30	22.73	13.64	9.85	16.67	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.40	0.00	0.05	-0.15	-0.09	-0.13	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.21	-0.02	0.08	-0.18	-0.02	-0.07	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.21	0.29	0.29	0.05	0.05	0.11	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.31	0.21	0.23	0.08	0.18	-	-	-	-	-	-

Q: Supplemental materials (e.g. books, journal articles, videos, online materials) improved my understanding of the subject matter. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

12	0.33	63.16%	2.56%	0.61	0.52	A	*43	71	11	4	2	1	-	-	-	-	0	00:09
-	-	-	-	-	-	% Selected	32.58	53.79	8.33	3.03	1.52	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.52	-0.34	-0.15	-0.12	-0.03	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.61	-0.40	-0.10	-0.05	-0.03	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.63	0.32	0.05	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.72	0.15	0.05	0.03	0.03	-	-	-	-	-	-

Q: There were opportunities for formative assessment (e.g., quizzes, discussion questions, practice questions, review questions). * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

13	0.08	23.68%	0.00%	0.24	0.43	A	*11	47	36	22	16	0	-	-	-	-	0	00:07
-	-	-	-	-	-	% Selected	8.33	35.61	27.27	16.67	12.12	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.43	0.13	-0.14	-0.09	-0.26	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.24	0.19	-0.15	-0.05	-0.23	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.24	0.47	0.18	0.11	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.28	0.33	0.15	0.23	0.00	-	-	-	-	-	-

Q: Exams accurately reflected course content. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

14	0.11	26.32%	0.00%	0.26	0.41	A	*14	23	37	27	31	0	-	-	-	-	0	00:16
-	-	-	-	-	-	% Selected	10.61	17.42	28.03	20.45	23.48	0.00	-	-	-	-	0.00	-

-	-	-	-	-	-	Point Biserial (rpb)	0.41	0.02	-0.02	-0.18	-0.12	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.26	0.11	-0.04	-0.18	-0.15	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.26	0.24	0.29	0.08	0.13	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.13	0.33	0.26	0.28	0.00	-	-	-	-	-	-	-

Q: The online quizzes were helpful in preparing for class. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

15	0.27	63.16%	0.00%	0.63	0.60	A	*35	63	30	4	0	0	-	-	-	-	-	0	00:09
-	-	-	-	-	-	% Selected	26.52	47.73	22.73	3.03	0.00	0.00	-	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.60	-0.33	-0.19	-0.11	0.00	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.63	-0.43	-0.18	-0.03	0.00	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.63	0.26	0.11	0.00	0.00	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.69	0.28	0.03	0.00	0.00	-	-	-	-	-	-	-

Q: The course included explanations or examples that illustrated the clinical relevance of the material presented. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

16	0.44	68.42%	15.38%	0.53	0.33	A	*58	42	15	11	6	0	-	-	-	-	-	0	00:12
-	-	-	-	-	-	% Selected	43.94	31.82	11.36	8.33	4.55	0.00	-	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.33	-0.26	-0.08	-0.02	-0.06	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.53	-0.41	-0.05	-0.02	-0.05	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.68	0.13	0.11	0.05	0.03	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.15	0.54	0.15	0.08	0.08	0.00	-	-	-	-	-	-	-

Q: Biochemistry should be a prerequisite for entering medical school. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

17	0.08	18.42%	5.13%	0.13	0.20	A	*10	28	38	29	27	0	-	-	-	-	-	0	00:11
-	-	-	-	-	-	% Selected	7.58	21.21	28.79	21.97	20.45	0.00	-	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.20	0.05	-0.02	-0.07	-0.10	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.13	0.06	-0.04	-0.07	-0.07	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.18	0.21	0.29	0.18	0.13	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.05	0.15	0.33	0.26	0.21	0.00	-	-	-	-	-	-	-

Q: Studying for integrated exams helped me understand the connections between the subjects better. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

18	0.58	81.58%	28.21%	0.53	0.35	A	*76	34	9	5	8	0	-	-	-	-	-	0	02:34
-	-	-	-	-	-	% Selected	57.58	25.76	6.82	3.79	6.06	0.00	-	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.35	-0.33	-0.05	-0.03	-0.05	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.53	-0.46	-0.02	0.00	-0.05	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.82	0.11	0.05	0.00	0.03	0.00	-	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.28	0.56	0.08	0.00	0.08	0.00	-	-	-	-	-	-	-

Q: Taking the integrated exams requires synthesizing a large volume of content material. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

20	0.30	71.05%	2.56%	0.68	0.62	A	*40	50	31	6	5	0	-	-	-	-	0	00:12
-	-	-	-	-	-	% Selected	30.30	37.88	23.48	4.55	3.79	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.62	-0.30	-0.28	-0.03	-0.08	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.68	-0.33	-0.33	0.03	-0.05	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.71	0.16	0.05	0.05	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.49	0.38	0.03	0.08	0.00	-	-	-	-	-	-

1. I would suggest an even a heavier emphasis on clinical material/relevance. Also perhaps a better communication of what you would like students to get from the lecture and what they should study. I feel like the course is becoming better at this but not so much in the beginning. I found the volume and speed to be too much especially when the most important part in practice will be DX and TX of the patient (although I do recognize the need knowing the pathway, I just won't be able to do anything at that level)
2. The class as a whole was set up in a very interesting manner. The amount of material given on exam three alone was absolutely horrendous. The exams should be better integrated with the other material that is being presented in our other classes. The amount of material should also be better spread out among the exams we are given. The fact that the third exam could change your entire grade for the class is a little ridiculous. Also, while the quizzes are very helpful for grading purposes, the amount of material we are expected to do to prepare for the exams is quite absurd. While medical school is demanding, I do not see how any one class can expect so much for just their subject on any one given night. I also think the quizzes were not indicative of exam type questions. The quiz questions were much harder and more time consuming than the exam questions which seems a little backwards. I do appreciate the opportunity for more points towards our grades with the quizzes and the extra material we will be doing at the end of the semester because with the way the exams are set up now I do not feel that my grade would have been an accurate reflection of my knowledge in the course.
3. I enjoyed the Biochemistry class very much. Although I felt like the exam questions were more recall-based rather than critical thinking. I feel like Biochemistry is a subject that gives opportunities to so much critical thinking that exam question can stimulate this aspect of my brain that I need to develop.
4. The course as a whole I felt was good. Honestly I feel the effectiveness of the course will be on how well it prepared me for my board exams which remains to be unseen, so I feel like after I take my boards I would be able to give a more accurate evaluation of the course.
5. Overall, I believed the course was good. The course covered basic topics that are pertinent to clinical scenarios. 2. I think there should have been a greater emphasis of ketoacidosis, acidosis and alkalosis. 3. The course instructors Dr. Bateman and Dr. Chastain were good. The only suggestion I would make would be to make more A. consistent number of slides (for example a range of 30-50 slides versus 70-80 slides and then 30 slides another time.) 4. I think in class questions with clicker participation were really valuable in my preparation for the exams. I hope the instructors continue to utilize that. 5. The organization of the course i.e. when we learn materials, and on which test was not to my liking. For example, on exam two, ~13 lectures were covered on metabolic processes. This was too much information for one examination. I would say keeping it to about 7-9 lectures per exam would be more beneficial for students to learn the

material and truly absorb it rather than regurgitate a massive amount of information. 6. I would suggest also, a change in material order. For example, instead of organizing the material as A. biomolecule and membranes B. pathways C. nucleotide metabolism D. oxygen toxicity....etc. we could have separated it by talking about lipids, which encompasses fatty acid oxidation, fatty acid synthesis. Then we could move onto sugars, and talk about glucose metabolism....etc. And then at the end we can link all the material together at another point. Having all the metabolism lectures a once was overwhelming, and in the end, I think not efficient in the purposes of learning biochemistry. 7. Overall, I really enjoyed biochemistry. I would definitely want to do research in it.

6. In the beginning of the course it was a bit of a struggle due to the amount of information and my lack of knowledge in the subject, but the instructors were helpful in providing study suggestions and were available for questions. I do think it is necessary to have some sort of background in biochemistry to do well in this course, though.
7. The biochemistry professors did a great job in incorporating clinical relevance into our course. Understandably, they were often unable to answer clinical questions that the students had. Perhaps it would be useful to have a physical guest lecture a few times to incorporate the clinical topics therefore students could have their questions addressed appropriately. Thank you.
8. The amount of course material was distributed unevenly, which was very unhelpful. 12 to 14 lectures for the first two exams while students were still adjusting to medical school and 5 lectures for the final two exams were detrimental to many students' grades. I felt like after falling behind in biochemistry my other subjects suffered as the exams were integrated. This was a year of many firsts for this program with new course structures, integrated exams, new professors, and new materials, and I feel like our class suffered for it.
9. I think this course was taught more like a graduate level research oriented biochemistry course than a medical based biochemistry course. I believe there needs to be less emphasis on very specific mechanisms (not pathways, pathways are very important) and precise structure. More emphasis needs to be placed on the overall function of important pathways and enzymes and relate this information to medical diseases. I understand that the professors are not medical doctors, but they are supposed to be teaching us to think like medical doctors and I don't think that they are accomplishing that effectively with their teaching emphasis at the moment. At the beginning of the semester, the professors stated that the online quizzes to be taken before each lecture would be able to be answered if you had read the assigned material. It was very discouraging to find out that they professors were actually pulling these questions from test bank for a textbook that we did not have because it was not a textbook for this course. The questions on the quizzes before the lecture required a higher understanding of the material that

I believe we should achieve in lecture, not by trying to read upwards of 5 chapters of material in one night.

10. I do not believe that the amount of material covered in class was proportional to the number of questions tested on the exam. It was very difficult to study the mass volume of material for each integrated exam and only be tested on a minute amount of it. I think that the grades reflect this previous statement. If the courses were separated or if there was a larger percentage of questions per subject on each exam, I feel the grades would improve. The quizzes were not very helpful to me personally. Although they were a great way to boost my grade, I do not feel that I benefited intellectually from them. I would rather take the quizzes after the material was presented in class to gain insight into how well I understood the material and what I need to study more on.
11. I think the first two exams never really helped cover the material. The questions were too specific, and don't accurately reflect the main important concepts to be learned in biochemistry. I feel that if I study too much specific material, then I will not understand concepts and I will just be plain memorizing.
12. I feel that the information was presented in a manner that, although clear and concise, was far too condensed, especially when tested in an integrative format. Although I understand the purpose of the integrative exam system is to simulate board format, the manner in which the material was presented made understanding it fully beyond simple memorization and for the test quite difficult. I feel it would benefit future classes if the material was spread more evenly throughout the semester. Also, I think the idea of frequent quizzes is great. However, it became apparent that the questions on the quizzes did not consistently reflect the assigned reading. When this occurred, especially when we would have two quizzes in one evening, a student may spend 4 hours of reading the material and still not be able to accurately answer the questions on the quizzes. It would benefit future students if the material from the quizzes would reflect the reading, or if the assigned textbooks for the course were changed to what the instructor predominately uses for lecture/quizzes.
13. Overall I was very happy I had taken a graduate level biochemistry class before entering medical school. Many more experienced medical schools require students to take this course and I would STRONGLY recommend you add it to the list of requirements before teaching a 3 month long integrated medical biochemistry course. Also, it was very frustrating that the professors used their choice PhD level "Lehninger" textbook using images from this textbook while requiring two other textbooks for the course. This makes no logical sense to me. Luckily since I had taken biochemistry before I hardly ever used the textbooks except before taking quizzes. Lastly, having the "timers" on access to D2L power points is silly. We are adults we know how to use information, stop being so controlling.

14. Although it required a lot of work from me, I felt like the Biochemistry class was fair. After seeing my performance on the exams, I was happy that I would have extra points coming from the pre-reading quizzes on D2L. I found the quizzes to be challenging, but not impossible--given the time limit and multiple attempts. I really enjoyed the medical aspects of it--the different diseases associated with the pathways and enzyme deficiencies. That in particular made it seem like biochemistry belonged in medical school. At times I felt like there was just too much material (e.g. for exam 2, where there were so many metabolic pathways), and I felt like I was rushed for time and didn't get the clearest understanding.
15. Integrated exams were very hurtful to my studies and reflection of what I learned. 3 questions per lecture hour was not an accurate reflection of the LARGE amount of content that we were given. Also, it is very hard, almost impossible to devote studying to three subjects at one time. One or two classes always suffer. Exams would be much better separated, and more questions asked.
16. I do not believe the integrated test integrated the material well. Also do not think that the exams reflected the amount of content on them. For example, I do not believe exam 2 had enough questions to accurately reflect ones knowledge of the entire metabolism process.
17. The test questions improved over the course of the class. The lecturing also became clearer in some cases, which was very helpful. Once I understood what the instructors wanted from us, I better understood how to study for the class.
18. I feel as though this class did not integrate well with the other Dr. PHIB courses. The case studies did pull all material together from all courses, but test by test material did not correlate. The material was covered very quickly which is understandable for this type of curriculum, but it's hard to fully grasp what is needed for boards when covering material at this pace.
19. Though my grades have improved over the course of the class, I was disappointed with the grades overall. This is of course a course evaluation and not one on my end, but I bring this up to address the testing styles. There is a LOT of material to be studied for these exams, and only a few questions to test the students' general knowledge of the subject. This lead to some low scores that, in my opinion, did not reflect the time and effort put forth by some of us. The course is taught very well overall. I fear that the testing style and subsequent grades may make the teaching style look bad, and that is not the case.
20. Quizzes should be given after class, to help a student evaluate whether they did or did not understand the material presented that day in class. Giving the quizzes before class was too time consuming. I understand that as medical students we are receiving a lot of information and we should be preparing for classes. But I feel that these quizzes required almost a complete understanding of the material before the lecture was actually presented. Regarding the texts, I did very well on the first 2 exams and did not read either text because questions were coming

straight from power points. However, I did use the questions at the ends of the chapters which I think helped. I would personally rather a single text, rather than switching back and forth.

21. The class used quizzes that were derived from another textbook that we were given access to later on in the course. The assigned readings sometimes did not directly correspond to the questions being asked in the quizzes. Titles describing pathways on slides or with complete sentences would have been better for student retention of keys ideas rather than buzzwords. Presentations should have contained fewer slides with more concise content instead of 50 slides of material. The tests were divided unequally, with our last two tests worth more than the first two tests. I feel that students need time to adjust to new professors and their teaching styles. I would have recommended that the later tests should have been worth more than the first two tests. I also would have recommended that the test content be split up evenly between the four tests. When students are adjusting to an integrated testing style, the material should be balanced and more related to other course content.
22. I like the fact that most of the test was clinically related and believe it should be kept that way. However, some topics could probably go more in depth based off of what we need to know for our board exams. Therefore, I think the curriculum needs to be balanced mostly between clinical and board based questions. One of my main concerns after taking this class is how well I was actually prepared for boards. I realize that the COMLEX is not heavily weighted on Biochemistry, but as someone who plans to take the USMLE, I really do not know how prepared I am based off what I learned in this class. More emphasis needs to be given towards board prep type questions.
23. The only complaint I have is about the integrated testing systems. The first two exams did NOT integrate the information provided to us by the different classes at all. I am not a bad student, but I failed most of those exams simply due to the volume of DIFFERENT information provided. The third exam, however, did integrate most of the information. I found it easier to study for, and I felt better about the exam. Lastly, I wish the integrated case studies would provide a little more information. The questions from the case studies on each of the exams were difficult simply because they were "what if" questions.
24. When using other texts, it would be nice to know what ch/pg/fig the information is coming from to be able to use it as a study resource too.
25. I enjoyed the course and I feel both professors adapted well throughout the semester to help meet our learning needs.
26. I felt like the tests only reflected a small portion of the lectures. The amount of material for each exam was not reflected well in the number of questions on the exam. For example, Exam 3 had only 15 questions, but the amount of material covered in those 5 lectures warranted more questions. Lastly, when more than the majority of the class fails an exam there has to be

something wrong with the way the material is presented or what should be emphasized in our studying.

27. The material should be divided among the 4 integrated exams a little more evenly. One exam had 14 lectures of biochem. This is incredibly too much information to be tested on in conjunction with physiology, histology, and doctoring skills. Also, fewer questions are asked about the material covered. 39 questions for essentially most of human metabolism is not indicative of understanding the processes, but more so "luck" that you happened to have studied the "right" power point slide. The grades do not appear to be indicative of the knowledge that I have gained in the class. I very much enjoy the class and the professors. The problems I experienced may just be a necessary evil of the integration.
28. The course content was not difficult but the volume of the material in the context of other classes at COM, especially the high volume Anatomy classes made studying for this course a big challenge. Proper scheduling can be done where these high demanding classes are scheduled in a mutually exclusive manner. Ultimately we want to learn all these much necessary expertise to be successful physicians but an overload will not help that goal.
29. One of my concerns about the course is the emphasis placed on the material that will actually be tested on the board examinations. I feel like the instructors should take this into consideration when constructing their powerpoints and organizing class materials, etc. Also, the quizzes were extremely time consuming and didn't benefit me in the long run. Most of the time, my goal was to finish the quiz as quickly as possible so I could continue forward with the other subject I had to study for that night. However, I believe it is beneficial that they will contribute to 20% of our grade; but, somewhat who did poorly on them may feel otherwise. Chastain's lectures were very informative. Lectures were somewhat informative, but if the student didn't listen intently for the whole lecture, then the concept presented in the power point (mostly diagrams) would be unclear. The integrated case studies were somewhat beneficial. I believe we should be given a set of questions for each to use as a guided self-study.
30. I believe the class should be better organized in terms of content. It was a rough start to jump into large molecules which most of us didn't understand or have any clue as to what was being talked about. It seemed like we jumped into the middle of the material not getting the foundation needed. Also in terms of timeline, it seemed like all the material was packed into the first two tests, which seems counterintuitive. It takes people time to get the hang of the class and get into the groove of studying and learning the way they should. Having 85% of the material in the first two or three month's sets people up for failure and a hard path to salvage their grade. In terms of integrating classes, it worked fairly well for the first time.
31. I would suggest that the material be divided equally amongst the four exams. Rather than having 75% of the material tested in two exams and very little material in the last two. I

personally did not find the first two integrated exams to be very integrated at all. However, the third one was somewhat integrated and for that reason I was able to make more sense of the material presented to us. Finally, I suggest a smaller volume of material per exam and more effort into integrating the courses together.

32. I wish the material for the test would have been distributed more evenly and the tests would have had more questions.
33. Should probably move the quizzes to being due AFTER the lecture has been conducted
34. I think each lecture should begin with a case study. This happened only a few times. This would help students stay engaged and feel like biochemistry is more applicable to our medical education. I did not like both textbook and found myself referring to undergraduate biochemistry textbooks for reference more often. The pre-class quizzes were a waste of my valuable time and served as more of a moral/ethical quiz than a learning opportunity. I RARELY found the quizzes relevant to the reading assignments.
35. I believe the integrated is better but too much was jammed into block 2 biochem and that old lecture material did not coincide well with the current text. All emphasis should be placed on board relevant material
36. I believe that the integrated program was rushed. It is very clear that there was no group meeting of instructors. There was no attempt made to make these courses flow from one to the next. It was just one lecture after another and hopefully the student was able to put it together by him/her. I believe that the time spent talking about a specific slide often does not equate to whether or not there will be a question on it. We can spend 15-50 minutes on a slide and not necessarily see a question about it on the exam. For pathways, I believe it would be beneficial to the students to have at least one question consist of either an enzyme or an intermediate. I am a proponent of this because if you do not understand the intermediates or how the cycle works then you truly do not know the material.
37. More emphasis should be placed on clinical applications of biochemistry. This includes providing nearly all clinical vignette-style questions for exam material. The biochem faculty should make test questions that bare a very close resemblance to questions that would be at or near the level of difficulty of questions asked on the COMLEX or USMLE.
38. The class is not bad, but not great either. I feel like a lot of core concepts are slipping by a majority of the class, and that direct memorization of facts is overtaking an understanding of the underlying principles. While this will help get better grades now, I think it will be detrimental in the future for boards and pharm. I enjoy the addition of in class case studies during lecture. I think they are being well done and reflect medical scenarios in a beneficial way. Dr. Chastain has

stepped his game way up since the beginning of class and is doing a superb job. Dr. Bateman is doing fairly well also.

39. I think more questions need to be similar to board style questions
40. -the required text did not help at all within the parameters of the medical biochemistry course. The Lenihnger's text was more helpful and explanatory in teaching and integrating the material rather than what Elsevier has to offer. Most of the power points and quizzes used the other text rather than the required ones. Having two other text books as a reference posed large problems due to lack of time and no smooth transitions between texts. -taking many tests within one day poses a threat to the grades for each course since they do not coincide very well in the beginning
41. For the question about biochem being a prereq for med school. If it isn't a prereq, do not treat it like it should have been. "Learn 3 chapters of biochem on your own in three weeks" is not ok. -I think the integrated exam forced biochem to cram some of the more dense/important material into one test. Although I did well on that biochem test, it was at the expense of some of my other classes. -The online "reading" exams are not from the book. I would STRONGLY suggest that all professors get together and discuss what they expect to read. On a given night we may have 6 chapters of biochem (that must be read in order to attempt the quiz), a couple of MUST READ chapters for physiology, some of the OPP reading (it has to be broken up over the week), and whatever we are to do for Doctoring Skills. Please note that this is simply impossible. I think faculty working together would be able to alter expectations to a more reasonable level or offer different ways to present the material otherwise presented in the reading that would otherwise be expected.
42. Overall the course was good. In my opinion test 1 was a poor test. It did not test the main themes, it seemed overly difficult and it felt like the information being tested was peripheral random facts that did not represent what we had covered. Test 2 & 3 were both good tests. They tested the main themes; they were challenging but not unfair. Additionally, I enjoyed the clinical correlations and medical relevance integrated into the block 3 exams. Specifically in reference to the myogenic uricemia case study and how it related to purine degradation as well as the bioenergetics lectures.
43. The lecture content with biochem improved over the course of the semester. The online quizzes while helpful in padding our grades were oftentimes extremely time consuming and not very helpful in preparing for the days lecture and instead were hindrances on reviewing the material learned that day. Perhaps a better way they could have been done was being done after the lecture for that day then doing a quiz, forcing students to review the material learned that way and gauging how well they learned it/what they need to review. The tests were not an adequate reflection I feel of what I learned in the class, due to the fact there were so few questions for each test. The clinically relevant things however were extremely interesting to learn.

44. I would have preferred to have the online quizzes be due after the class period instead of before class. I believe this would have been more effective and appropriate use of the quizzes. I recommend moving these quizzes as post-lecture quizzes to help the student re-enforce what was presented in class. For the integrated exams, I would have preferred to have more questions per lecture than just three questions. I believe that having more questions on the exam would be a better way to evaluate if a student understood the material presented in class. I understand that this would mean longer tests (more questions) but this would allow for the student to demonstrate their understanding of the material in a more comprehensive manner. I do believe this course is moving in the correct direction, and would also suggest more clinical questions (disease questions) on the exams.
45. The evaluation method needs to be broader in these integrated courses. The room for error is very slight. Three questions per lecture are not enough to assess true understanding of the course material.
46. I understood the reasoning behind taking the quizzes for this class but they ended up being more of a stress inducer than a helpful asset for the class. Each day only has so many hours to study and those hours have to be effectively distributed over each course. I felt like the biochemistry quizzes took away some of the time I could have spent studying for other subjects.
47. Quizzes should be representative of material covered in the required text book, not other text books used in previous years. The different text books emphasized different aspects, and in some cases did not cover material asked on the quizzes
48. Overall, not a good learning experience. Very difficult subject, little enthusiasm from both instructors, no attempts to go beyond their way to teach the subject. Student questions rarely answered in class. Exam questions difficult to interpret and sometimes do not follow the lecture material. Course needs some improvement.
49. I am extremely disappointed in this course. This course should be challenging. Moreover, this course should prepare students for the boards. I understand the premise behind integrated exams; however, I feel that the integration forces students to focus on big picture items while ignoring important biochemical mechanism (which will surely be on our boards). Finally, I think the students in this course were handled with extreme sensitivity, to their detriment I may add. This is medical school. If we (collectively) can't handle a concept or a topic then we have failed, period. We shouldn't be given so many opportunities to boost our grades. We should be required to learn the material or face the consequences.
50. I don't feel that the integrated exams were truly integrated and did not really help me integrate material. I do like that it limits the number of questions each professor can ask which theoretically (although not in practice) limits the number of questions per lecture and

theoretically limits (although not in practice) questions to the most important topics covered. Again, the real experience did not match the ideal.

51. I do not feel that the integrated exams reflect how well we learned the material because of the few questions that are asked. I feel that there are not enough questions per test. 15 questions should not determine what my grade is. The quizzes I did like even though they are time consuming. I would like to have more case studies included in the class.
52. I enjoyed this class and it did help me connect biochemical processes, etc and diseases they were associated with.
53. Less homework. The amount of time that is expected to be spent on biochemistry is impossible. In doing the readings and quizzes, my other classes suffered.
54. The exams in this course seemed to be weighted unequally. The second integrated exam was extremely overwhelming and I think that some of the material could have been split up. I think the course should be more spread out, if it is a yearlong course then the material should be more evenly distributed. I would prefer to have Biochemistry every day for an hour as opposed to 2 times a day, for several weeks. It's quite overwhelming and I don't feel like I learned the material as well as I could if the material were more spread out. The quizzes are a great part of the course; I think they are helpful not only to the learning before class, but also to help pad the exam grades. If anything, the course could be improved by spreading the material out and adding more clinical applications during the lectures.
55. The quizzes are good to help boost my grade but, I feel they did not help me prepare for the exam. Reading each chapter took a large amount of time preventing me from studying other subjects. The quizzes are needed due to the low test grades but maybe link them to the exams more. I would also like to see more questions on the exams. With the amount of material on each exam it is hard to get an A with the low number of questions.
56. The most helpful advice I can give for the future course in Biochemistry would be to have the quizzes after we have the particular lecture on that subject. I know for most of the class, the quizzes were memorizing the answers from the review questions from the book and looking up the answers online on the second try. It does not prepare you for the lecture material at all because no one really reads the book to take the quizzes because it is just too much to read when you have 5 other classes you have to study for at the same time. It was a waste of my time even though the 20 points help. I would say keep the quizzes but do it after the lecture because it really did consolidate the material for me the one time we had a quiz after the lecture. I know the test grades would definitely go up if you have the quizzes after because then we are forced to look at the lecture material again after the lecture to do well on the quizzes instead of cramming everything towards the end. I really can't emphasize how much it would help us learn the material if we had the quizzes after the lecture because it is a good way to test our

knowledge and help us see what we still have trouble with. It does not in any way prepare me for class. It is more of a hassle than anything to do it the day before. Everybody is looking for the fastest way to get the answer so they can move on and study for other classes or biochemistry itself as it pertains to the exam.

57. It might be more beneficial to have additional exams instead of 4 main exams. These additional exams could have less content. In my organic chemistry class, we had an exam every Monday that went over the previous week of material, and I was able to learn the material better in chunks like that. Also I would recommend that the amount of material on each exam be more evenly distributed. For example, 15 lectures on one exam versus 5 on another were too inconsistent. I would have rather it had been more even.
58. Online Quiz: 1. consider having the online quiz for the material after the lecture. There was one quiz this semester that was given after the lecture and it was EXTREMELY helpful in reinforcing the material in lecture. This would also encourage students to pay attention during lecture and a good way to synthesize the material that was gone over during lecture. Having the quizzes before lecture was difficult because we spent time reading the book and spending hours and hours focusing on material that was not covered in class. 2. Consider having quizzes on high yield material that may not be covered in lecture be relevant to board type question (more vignette type questions). Lecture: 1. consider presenting diseases first then go over the pathway. Dr. Chastain started to do this at the end of the semester. This helps reinforce the diseases and will help us when we are studying for the boards. Many times we don't even get to the diseases which are the things that we should know. Class overall: 1. consider letting student know upfront to focus on key regulatory steps, and steps that have associated disease or medications (MTX, etc.). I studied many steps in pathways that could have been spent learning more about the high yield diseases for the board (maple syrup, etc). We breezed through these.
59. The quizzes I found were not very helpful in preparing for the class as it often seemed that the quizzes did not relate well to the reading, and merely confused the material from the reading and would become frustrating. I did find that on the few occasions that the quizzes were after the material was covered in class, the quizzes were then extremely helpful in developing an understanding of the material and provided a way to review the material. It would be better, in my opinion, if the quizzes : I understand the objective to giving online quizzes before the information was presented in class, as this was to encourage our preparation for the material. However, I found myself frequently spending hours trying to determine what would or would not be tested on the quiz instead of really trying to learn the information that I was reading from the text. This was not an effective use of my time. Biochemistry is a course in which there is an abundant amount of very difficult information. Therefore, it was hard to know where to focus for these quizzes. My recommendation is to give the quiz after the information is presented in class. Students will be better able to focus their study time reinforcing the pertinent information. If the online quizzes were put in place to encourage preparation for the upcoming

lecture then perhaps a brief study guide indicating the major areas of focus for the online quiz would be helpful. Thank you for your time in considering these suggestions.

66. I understand the objective to giving online quizzes before the information was presented in class, as this was to encourage our preparation for the material. However, I found myself frequently spending hours trying to determine what would or would not be tested on the quiz instead of really trying to learn the information that I was reading from the text. This was not an effective use of my time. Biochemistry is a course in which there is an abundant amount of very difficult information. Therefore, it was hard to know where to focus for these quizzes. My recommendation is to give the quiz after the information is presented in class. Students will be better able to focus their study time reinforcing the pertinent information. If the online quizzes were put in place to encourage preparation for the upcoming lecture then perhaps a brief study guide indicating the major areas of focus for the online quiz would be helpful. Thank you for your time in considering these suggestions.
67. I felt that the case studies included in the individual lecture presentations towards the end of the course really helped me to process the information better and give a greater relevance as to how this will be useful later in practice. I felt that the quizzes, while somewhat helpful for preparing for the next day's lecture, would have been more useful in testing my knowledge after lecture. I feel that I learned better after having the significance of what I had read in the book explained to me in lecture than just having read the book alone.
68. This was a very difficult course, in large part due to the complexity of the material. Though the material alone is challenging, the course itself was made much more difficult through various other factors. 1. The lectures seemed to be based off of Lehninger's when we were assigned reading from TWO other textbooks. Though the topics were the same, the material varied in its details, and those were the details that seemed to be emphasized the most. Why use figures and teach from a text book that isn't even assigned? 2. It was my understanding that the quizzes we were assigned were supposed to be based off the reading, in order to quiz our reading comprehension of the material. The quizzes were ALSO based on Lehninger's and were much more difficult because it covered material not in our assigned reading.
69. I believe the front loading of this class during the semester was a poor idea. Biochemistry is too important for our future understanding of the reactions happening in the body to have 20 metabolic cycles crammed together in 3 weeks. Although I do not have a strong interest in the subject, I recognize its importance to my career as a physician and feel I was cheated out of having the time to synthesize material that will be necessary in the coming years. It would be beneficial to future students if the course was spread out a little bit more, giving them time to fully understand the material. For the most part, the reading quizzes were fairly useless at preparing me for class. Many times, I would do the reading and then when taking the quiz, the questions would not be answerable from the information I read. This was frustrating and made me stop reading, as it didn't seem to matter whether I did it or not. When the quizzes did

correlate to the reading is when I got the most out of the information and felt the most prepared for class the next day. Due to the front loading of the class, this also caused the quizzes to be front loaded and overwhelming, taking a majority of my time each night to do them.

70. I like the idea of having quizzes before the class to make sure that we are keeping up with the material, however, the quizzes went into so much detail that it was hard to take them without completely mastering the material. Because of this, the only way to do well in the quizzes was to just skim and look up the material asked in the quiz. I think it would be a better tool if the questions were more generalized so that a very basic understanding of the material would suffice. As for the test questions covering the course material, I would like to see more questions for each lecture. In a 70 slide ppt, 3 questions is not enough to fully cover all the important ideas and does not allow us to fully test our knowledge of all the material covered. I would rather have 60 questions and be able to miss a few and get an ok score than have 30 questions, miss a few and fail.
71. 1. The at home quizzes, although I'm certain were meant to initiate pre-study of the material before class, were for the most part not very helpful. From my perspective, I would spend 2 hours or more doing the assigned reading to take a quiz that contained questions that were either not covered in the reading or far more in depth than what the purpose of the reading outlined. I felt as if the only way that I could succeed on the quizzes is if I invested an inordinate amount of time. Which consequently, was the case for me. As an aside, yet of great importance, the instructions for the class were to take the quizzes closed book and by yourself. I took this serious and attempted every quiz as instructed, and it may have been a detriment to me, especially in light of the communal, open book studies that many of my class mates utilized in order to complete their quizzes. 2. It may be helpful to continue to make the first test challenging, but weight it a little lighter of the overall course grade. 3. I wish we could have spread out the information a bit more. I noticed that on the second test we covered greater than 70% of the material in the board review books. Learning this much information in 3 weeks, leaves little to no room for assimilation. Thanks
72. -Biochem was done as well as I think Biochem can be done. (its just a tough, and tedious course). -The Online quizzes were a bit much. They required an incredible amount of preparation and synthesis of information without having all the pieces we read about put into context and explained in the lecture. The biochem quiz questions were not always indicative of the style of questions presented on exams and from the limited experience we have with board style questions testing biochem (very limited in BRS books and Exam master) they were not reflective of most clinical applications of the biochem. The test questions were much better. Often times, I would do the reading to find answers to the quiz. Not once did I return to the quiz for review or study for the exam. They seemed to be a bit of a waste of time in that regard. - Dr. Chastain got way better at lecturing - We need to synthesize more courses into one question,

not just test subjects simultaneously. e.g. Dr PHIB profs need to sit down and incorporate material for each of their subjects into ONE QUESTION! this would be integrated.

73. The course was very well done. everything was clearly presented and expectations understood.in the future they should encourage students to go over the recorded lectures. This was the most helpful.
74. If integrated coursework remains, then I feel it is most important that all material from all classes ends one week prior to an exam. Students need the time to critically reflect on the material, ask professor questions and make the necessary connections between the subjects for the greatest chance of success in learning/understanding!!!!!!!!!!!!!!!
75. I am happy to report that as the course went along, it improved. Dr. Chastain evolved into a rockstar. He integrated case studies into his presentations and made it medically relevant. Dr. Chastain has recently started attending some of the other course lectures. I assume that he is working to integrate biochemistry into those classes. Sidenote, Dr. Millette also makes this effort. On the contrary it seems that other professors (especially in other courses) are, unlike Dr. Chastain, not making an effort to improve their teaching/enhance our learning. Their attitude portrays that they are too proud to improve or alter their lectures from those that would be given to graduate students to those that should be given to medical students. Adding a few clinical slides at the end of an old lecture hardly counts as making the course material medically relevant.
76. Dr. Bateman and Dr. Chastain are very nice people, but I don't feel like they portrayed the clinical relevance of Biochem enough. Also, if the textbook of choice is Lehninger and most of the material covered in class is being covered from that book, I should probably have access to it. Also, I understand the need for some type of supplemental grade in this particular course, but having 2-3 quizzes per week is extremely excessive. I don't have time to spend 2 hours on a quiz every night. Even getting it down to once a week would be GREAT!
77. I found taking the biochem quizzes prior to hearing the material in class extremely time consuming and not helpful in learning the material at all. There was one quiz during the semester that was given after the material was presented in class that day. I felt this was the only quiz that I learned anything from. The quiz questions often didn't seem to relate to the material that I spent 3 hours reading beforehand, therefore, I felt that I wasted a massive amount of time this semester that could have been used studying more productively.
78. I think that a biochemistry course is useful to us, but this class had some serious problems. 1. The required textbooks were not the main texts used by the instructors. The instructors referred to and often tested from another non-required text (which frankly was better than our required text). If the professors want to use this text, it should be our required text. 2. Dr. Chastain does a

poor job at synthesizing material and highlighting the important information. 3. The readings assigned for quizzes often did little to improve understanding of tested material.

4. The material was divided extremely unevenly for the tests. Almost half of the material was covered in one out of four tests. This also included some of the most difficult material.

79. I really did appreciate the biochemistry quizzes not only for helping our grades but also to give us an idea of what material is important within each testing block. However, taking the quizzes before having the lecture material was not helpful and resulted in many students that I talked to having to use outside help or take the quiz once and look up answers later. The one quiz that we took after receiving the lecture material I was able to critically think through each question and got a 9/10 the first try. I think the quizzes should definitely stay, but maybe do the evening after the lecture material was given. The integrated case study I did not feel was really helpful to the students because of the level it was presented on and the lack of engagement by the students. Last year the case studies were presented by groups of students from the class and we were required to research the disorder, come up with COMLEX type questions and present to the class. This I felt really engaged the students and gave us a sense of "control/participation" in our course. Often times too this year's case study was rushed and last minute to the exam so we did not have the ability to synthesize. The level of information presented during the case study and then the type of questions asked on the exam did not "match up" in my opinion. I have not enjoyed the integrated exam style. I do not feel that in the bigger picture each class is truly "integrated" and covering the same/similar material that is covered in the other courses. Having almost all of the metabolism of biochemistry on one exam was exceptionally difficult to study for as this is complex material and is really important clinically. I think more time should have been spent going over this area at a slower pace. Also, only have say 15 questions for a biochemistry exam on a single test I do not feel accurately reflect my knowledge of the material from a "bottom line" grade perspective. It only takes missing a few questions before you have dropped below passing. For the first exam we had over 450 PPT slides of material that spanned under 35 questions. While some students may moan and groan about have to take a say 150 question exam for 3 hours I think in the end they will appreciate the ability to have some buffer room. Overall I think this class is rushing too fast to cover the material.

80. The online quizzes, while an asset for grading, is largely time consuming. As a result this required more time, took and away valuable study time. The questions should come from the presentation or readings, and not a random other sources as selected by professors. This can greatly increase the difficulty of learning the material, as there can be a disagreement or misunderstanding of the material between different resources.

81. I do not feel the number of questions asked and resulting grade really reflected the amount of information I know about the lectures provided.

82. The main issue was that my test grades were not indicative of my knowledge of the information presented in the course. In my opinion it is due to the fact that so few questions are asked with

the combination of having some questions on minutiae greatly decreases your chances of getting a good average on a test. What I mean by this is that if they were 60 questions it is ok to test generally and have a few questions that test on minute information. But when there are 30 questions or less missing a few questions (that could be tested from the one slide you found unimportant, or frankly if you knew all 58 slides and forgot the information on slide 59) you have automatically severely reduced your chances of getting an A, B and even a C. Also, when a majority of the class (>50%) gets the question wrong the problem is within the problem and for some of those questions the students should get credit. I would have also liked to see a curve for every test if there was going to be one provided. I think that the additional stress was not conducive to my studying and created this negative ideology that was not beneficial to any of the students.

83. The distribution of course material could be a little more spread out.
84. More clinically applicable exam questions
85. The key concepts or points emphasized in class, even said "will be on exam" never actually shows up on the exam. Instead of testing on board related topics, after looking thru multiple board review books for practice questions, the things tested are nowhere near close to the tested concepts from the board review books. In order for students to do better on the boards, we need to be tested on that stuff and only that. Having 3 questions per lecture is also kind of pointless, since sometimes slides for one PowerPoint are up to 70+ slides, and to get only 3 questions from the whole PowerPoint (that too very small minutia) is not fair. Other schools around the nation do not operate like this. The integrated exams are not involving similar content, so in effect it is just 3 separate courses sometimes 3 separate subjects/topics just all in the same day with few questions, it becomes disheartening to us who study hard day in and out to not see the results we put in. In addition, powerpoints need to be finalized and put up way farther in advance. It cannot be put up at 11pm the night before, some of us sleep by then, and don't get to preview the material, in effect making us lose more time and do poorly on exams. This is true for all our courses. The online quizzes that we were assigned were more of a chore than anything else--it would take hours to read the textbook chapters that the quizzes were based off, and it was from a textbook that was not even an assignment book for this course--which is completely unacceptable.
86. I felt that the applied principle of 3 questions per lecture hour is not an efficient way to evaluate how much of the content I learned and understand.
87. I would like to have seen a bit more time spent on clinical aspects. Also I feel that we spent more time on rare conditions and less on prevalent conditions. But overall I was very appreciative of the clinical correlations, its just I would not have minded there being more questions on the test relating to them. I did feel that as the semester progressed everything got better.

88. I believe the large amount of material for each test was not tested appropriately. The test had few questions on it that were randomly pulled from a high volume of content given. I believe that this does not allow a full accurate assumption of the student's full knowledge on the entire amount of information given and then tested on the integrated exams.
89. The amount of material presented in a particular amount of time needs to be reevaluate for this course and its integration with other courses. Considering our schedule this semester and other requirements for our courses outside of Biochemistry, the vast amount of material presented made certain demands of learning the material given in a period of time essentially impossible. I fully understand and appreciate the vast knowledge expected of a medical student to learn, but at some point it becomes unreasonable. I believe there were times this course in combination with other presented materials from other courses flirted and perhaps crossed that line. If the purpose of course integration is to aid us on the boards, but we can't fully grasp the majority of important information given due to overload, the goal of the new curriculum is no longer obtainable.
90. I think some quizzes were unnecessary, whereas others were helpful in prepping for the next day's lecture. I think the quizzes that correlated with the reading were more helpful than those that did not. I did like that we had the opportunity to do the quizzes more than once so we could correct our mistakes.
91. In regards to the "integrated" idea of biochemistry, I did not feel these matters were integrated; there was no overlap of material (except nervous tissue with physio and histo). I wish we could have incorporated more of the subjects together to help us tie things together for board questions and get a COMPLETE understanding of that matter. Also, there were a total of 99 exam questions for the entire biochemistry course. I feel this is a poor reflection of the amount of information presented. I agree with the idea of equal number of exam questions for each hour in class but I do not agree with dropping approximately 1 percentage point for EACH question missed on all the exams (not considering quiz average). I would also encourage a Biochem tutor. If a student volunteer doesn't volunteer, what about paying a private tutor 2-3 times a week to sit in a big study room and answer any questions?
92. More case studies and connection to real-life would help in the understanding of why each topic needs to be learned.
93. Need to have correct information on the powerpoints so that the students shouldn't have to wait until the next PowerPoint on a different lecture to see the corrections that were made to the previous lecture PowerPoint. The slides or teaching format should be more organize, instead of jumping around from parts and back. He knows the information really well.
94. After beginning self-study board preparatory work I noticed that the content of the Biochemistry course differs heavily from the high yield information on the boards. I think it

would be beneficial for the course directors to have more exposure to the specific material that is on the boards. I have no doubt that doctors Bateman and Chastain understand biochemistry at a very advanced level, but I feel that their focus is not on the specific material that will be tested on the boards. The integrated exam format of only allowing a small number of questions greatly lowers the chances of testing on what the student actually understands from the lectures. If the professor were to ask a minuscule detail concerning a small portion of a pathway that was discussed and the student was unable to recall the detail there is no way to recover from this lack of recall. I would rather a larger number of questions to help buffer a wrong answer.

95. I believe the course was well organized and well taught. Dr. Bateman and Dr. Chastain were really clear on the material and taught it very well.
96. The amount of material was NOT divided well throughout the semester. There was an incredibly large amount early on and very little biochem covered towards the end. It would have been better to have some more balance throughout the course.
97. For the number of questions, the content may sometimes be too specific; therefore, the examinations may not be a direct representation of the knowledge studied and learned by the student.
98. Negative Aspects: I wish the tests had equal amount of materials/questions asked. If you do have to divide the tests unequally, there should be more questions asked in the later tests. This semester, the 1st two exams were worth significantly higher points. Even if I improve drastically for my third and fourth exams, it is hard to salvage my grade from the second exam. Since most people are adjusting and improving their study habits and test skills during the first and second exams, students' grades would be much higher if they could improve their study habits and then have a very saturated exam (like the 2nd Biochem exam this semester). Positive Aspects: Otherwise, I thought the professors did a really good job integrating clinical aspects with biochemistry. I was following along in the 1st aid Review book and I noticed that we had covered most of the material in this class. The material and presentations were great!
99. The biggest problem I found with this course is that the integrated exams were not truly integrated. On the last exam we took (exam 3) there was slightly more integration than with the first two, but it was still not truly integrated. In addition, three questions per lecture hours is not an adequate representation of how well we know the subject material. When you only have 15 questions, it is very easy to fail a test based on just a few simple mistakes. Another complaint I had is the textbook. We had 2 books assigned for this course, but material was continuously pulled from a 3rd textbook that we did not have access to. This issue improved as the course progressed but it was very frustrating for the first few months. Overall, I thought both Dr. Bateman and Dr. Chastain's lectures improved dramatically. I felt like they were both approachable and really cared about the students.

100. I liked when the case studies were introduced at the beginning of the lecture. It gave me an idea of what I should be getting out of the information we were learning. I think the courses need to be more integrated and have grades be based on systems and not separate for each class.
101. The integrated exams never felt truly "integrated". It felt like three separate exams, with three completely separate question styles being thrown at us all at once. The organization of the tests, with all of the questions being presented in a random order created problems for many students as they were constantly having to switch their mind sets and analyzing techniques for each professors varying questions styles (i.e. you think one way for Histology, another for Biochemistry, while Physiology requires more analytical thinking). While I understand that currently the level of coursework may not adequately allow true integrated questions, the courses which are together also causes problems for the integrate process. I am in favor of integrated tests, as well as an integrated curriculum, but it is currently not working efficiently. Perhaps a reevaluation of which courses are thrown together for the integration is necessary. Also, the lack of question was incredibly crippling; the restriction of 3 questions per hour of lecture is not an adequate gauge of our knowledge on the material presented. The lack of questions frequently resulted in the class average of the exams being considerably lower than what it really should have been; had we been given more questions, further analyzing our comprehension of the presented information, I believe the class as a whole, as well as individuals, would have done considerably better. I felt like the biochemistry professors did not always have adequate time to explain the information they were presenting. Also, some lectures that probably required two hours were forced into one, further crippling the professor's ability to convey the information as well as the student's ability to understand and then possibly attempt to ask questions of the professor during class time.
102. I really appreciated the use of clinical case studies for purine and pyrimidine lectures because it stuck with the topic of the day throughout the lecture. That was SUPER helpful and helped it "click" a lot faster with a clinical case to refer to. I believe the quizzes were really excessive though, and because we had to take them before the subject matter was reviewed, it was a very time consuming and often fruitless endeavor because I found myself just trying to get it "over with" because I had too many other things to do. Please try and condense the resources to one main textbook. We are trying our best to synthesize loads of information, so it is not feasible to expect that we have time to read the same things from many different resources. I also really liked the suggestion of using the back of the book questions. Though it took me a while to get the hang of it. All in all, I liked the class, but please keep in mind that we are medical and not grad students. Some of the questions asked, like which glucose transporter is involved in xxxx, is not nearly as important as its role in metabolism and pathology
103. I don't feel like the exams are a good indicator of the information I have learned. Mainly for two reasons, the exams have so few questions there is no room for mistakes and the questions can't possibly cover each topic we discussed in class.

104. I came in with no background in Biochemistry and I feel like I was completely run over in the course. It was a lot of information to be taking on but the main problems I had were not with the lectures, but the quizzes that we had to take that ranged from 1-4 weekly. The quizzes took approximately 2-4 hours of reading a night. I would read through the material and the sheer amount we sometimes had to read took a lot of time! I also was not able to fully assimilate the information so that when I took the quiz the information ran together and I got very frustrated. However, there was one quiz we took after the lecture and I feel like the quiz was so much easier, it served as supplemental to the lecture and pulled the information that I was taught in lecture together.
105. Wish 1 book was used instead of 3 different. Even though Lehninger's helped, Marks and Lippincotts were required reading even though a lot of material came out of Lehninger when the focus was Mark and or Lippincotts
106. I thought that was little confluence at the beginning of the biochem course. But the material following the second exam was very well organized and was thoroughly integrated. I really feel like Dr. Chastain's lectures improved and he soon became my favorite lecturer. His lectures are concise and gave great clinical examples.
107. Perhaps changing the idea of quizzes as a pre-lecture preparing and instead having them due AFTER the lecture will allow students to understand the material and KEEP up with the material as they will be forced to go through the lecture that very same day in order to complete the quiz. This time they don't have to Google through or control F the information for the 2nd attempt and instead can take the quiz based off of the lecture that they took notes in that day. Maybe also letting us use books or the power points during the quiz or allowing us to do the quizzes with groups if we wish would be more helpful...as discussion helps some students learn? I know that's not why you implemented the quiz....but just another idea for you to think about- help solidify the learning within the same day after lecture. Also, maybe making the integrated exams have a few more questions would take a little pressure off students...? I really like the integrated approach and seeing things we learned in biochem (neurotransmitters) show up in Physio for the same test makes understanding really good!! I know biochem dept. did not do the case studies this time but those really....sucked. They were difficult to understand what you wanted us to do/understand especially when we just learned the topic that day...it's hard for us to understand the pathway....the first case study of the lady at Mass General was so interesting but the questions we got from physio department...we never got the answers to understand....Even for Dr. Priors case study..it was so old and despite his slides to accompany lecture (which is great - everyone should do that) it seemed as if the other faculty was just standing up and saying random stuff.... I just didn't think I got that much out of it... (Didn't understand?)

108. There was minimal connection between biochemistry and physiology and histology. The first round of exams need to have been integrated a lot better.
109. It would be helpful if they told us at the beginning of the semester to use Lippincott as a primary textbook and the Marks textbook as a supplement. It was also difficult to realize that the course presented the general information and then clinical correlations, but most of the assessments would focus on the clinical knowledge of the material. The limit of having three questions per lecture hour is a mixed emotion, because it does limit the exam being horribly long, but it also makes it difficult to have as much room for improvement if you do not understand a topic or do particularly poorly on one exam. So far, the integrated exams have not been truly integrated in their information, so it is not like studying for one big class as much as it is studying for three mini (yet very important) exams all on one day. Having all of the fuel metabolism information on one exam was difficult. It may be worthwhile to try to split it into two exams, because there were so many pathways and diseases to learn. It seemed like was too much content for one exam because of the complexity of the pathways, the specific points to know, and the clinical correlations.
110. Please end the class on time. Once one professor goes over the 50 minute mark, then the other professors follow suit for the rest of the day. As students, it is mandatory for us to be lecture for sometimes up to 7 hours a day. Without a ten minute break between classes, it is extremely frustrating and not promoting healthy habits. Biochemistry class is great when talking about toxins, vitamins, and diseases caused by deficiencies. However, there is no need to be tested/quizzed on all of the steps, precursors, side reactions, etc. It is just not valuable. Dr. Chastain is clear about his expectations for the class and what we should focus on for the exam. Dr. Bateman is a great speaker but he makes everything seem important, so it is not very beneficial to sit through his lectures. He puts up images of entire pathways, and it is very broad and vague
111. I think that the integrated exams were not truly integrated. It was like taking 3 exams in one day on completely different material all jammed into a two hour time block. This caused us to switch from subject to subject in random times during the test and nothing flowed. This also caused some things to be overlooked in some courses that had the exams been on different days otherwise would have been able to be mastered. For the second exam, there was not enough time for the test because there was so much information covered in all three courses and I found myself being rushed on questions that took more thought and therefore missing answers due to not enough time to adequately think about a pathway. There are also questions asked on exams that are minute details from a 40+ slide PowerPoint that on a 70 question test would be okay, but when there are only 15-25 questions on a test every question matters so much more. Therefore, asking such minor detailed questions on such a small exam does not accurately show how much material I know, but just how well I can memorize slides. There is also a disconnect between things that are emphasized in class that are going to be on the test and then what is actually tested on.

112. I have enjoyed the content presented in Biochemistry. Dr. Bateman's lectures were very straight forward and were a great start to synthesizing the information. Dr. Chastain's lectures were difficult to synthesize. It was obvious he really enjoys the material he teaches, but it seemed he had a hard time taking a section out of the material and just teaching on the section. All of the extraneous information was interesting, and I'm glad he mentioned it; however, it made the lectures very difficult to follow and synthesize. We appreciate his enthusiasm. Overall, integrated II exam was most difficult because I felt were asked to synthesize and entire semester of Biochemistry in about 3-4 weeks time. It was fun as it was all coming together, but I had to spend so much time putting it together that my studies for other courses suffered. This was definitely the least integrated exam yet. Integrated 3 was much more integrated. As for integration over all...I'm all for it! I love the idea. The problem is not the tests or the classes or the times or whatever else my classmates are complaining about. The problem is splitting the exam into 3 separate grades. This is the most nerve-wracking for me as it seems 3 questions per lecture is not sufficient to say whether I know the material or not. I am sure I know the material and could sit and explain it to you...how it's integrated from all sides, and everything else. I become very frustrated when I just can't figure out what the question is asking or maybe what the answers are saying. Normally this isn't a problem, but it becomes a huge problem when you have 16 questions and miss 2. Suddenly that's a bigger deal. Every question is a fair question. I try to study so that I can answer any question asked. I'm just a little discouraged by failing a test because I missed 5 or fewer questions
113. I feel like Biochemistry would be better presented by Dr. Bateman if he gave an additional written version of what he finds important. Most slides are pictures only and it's hard to pinpoint what we need to know on all the diagrams especially since they are chemical equations that are extremely in depth.
114. Using one primary textbook would be helpful. Also, the quizzes required a significant amount of time to prepare for and complete. This forces time to be taken away from other subjects on a regular basis. Lectures were not organized well and the required reading was TOO MUCH. Class should also focus on more clinical aspects. Quizzes did not help for the exams.
115. Biochemistry is known to be a hard course. There are many students who haven't taken the course so I think it might be more difficult for them to assimilate the material so I understand it can be a tough course and needs a lot of attention but I felt that most of my time was allocated to it in the beginning of the course. There are a few things I do appreciate, one of which is adding clinical relevance to the material. I do not like the fact that the exam did not seem to reflect that material very well. Considering how many lectures that were covered on his first two exams, I believe as a result, the exam was not indicative of the material in class. I think they material should be spread out more evenly in the course. I would also like to see more clinical applications with a focus on board type questions rather than material that the

professor feels is important. Bottom line is that I would like to feel that I am prepared for the COMLEX which at this point, I am unsure.

116. I enjoyed the class, and the professors did a good job. I would recommend for future classes that they be targeted specifically to the high yield information for boards. I realize we have to develop a baseline of understanding to integrate everything, but ultimately my concern is being able to perform well on the board exams.
117. I really wish that each department would please consider writing and binding their own notes that we could purchase from the book store so that we could have a hard copy of the notes. I also think 3 quizzes a week are a little over kill. I appreciate them helping my grade but I wish the material would be presented in class before having to take the quizzes on the subject matter
118. I believe that there should be more questions per lecture covered. Having only 3 questions per lecture makes it difficult to do well on a test even though the student may know the material. I don't think the integration is functioning the way faculty may have thought it would. There were few times where the information given in one class matched with the material given in another class. Quizzes take up too much study time to prepare for. Information is pulled from too many resources to keep up with. Some information is pulled from books we were not required to purchase.
119. The Biochemistry course did not efficiently utilize class time to emphasize important concepts that would be tested. The presenters would typically present too many slides that were congested with content that was irrelevant or excess. Clinical correlations were random and not very well explained. The textbooks, particularly Lippincot's was useful and explained the concepts well, however, the content was presented with the emphasis on the Lehninger text, to which we did not have access. Formative assessments, i.e., the quizzes were based on a wide array of material that may or may not have been presented in the texts. However, the quizzes are a pleasant buffer to a poor grade on a single exam. We were told to read the chapters in the two assigned texts for quizzes for each lecture. This meant that each day of lecture was preceded by up to 4 or 5 hours of reading and studying before taking the quiz. This is entirely too much time to spend on a single subject and lead to other courses being neglected.
120. More than 3 test questions per lecture would be helpful. Also, I don't believe someone's first medical school test should be worth more than the last two combined. I also don't like how one test would cover 13 lectures and the next only be on 4. Maybe they could find a happy medium there
121. I believe the exams should have exhibited a more even point spread. I am a person who has never taken biochemistry until this semester, and a new subject like this takes a little while to

get a grasp on the material. I felt that after the second test I now know how to study biochemistry but unfortunately we've already had nearly 80% of our test grade. There is little opportunity to come back from that.

Item Analysis (Multiple Choice)

Exam Takers = 132			KR20 = 0.94	Stdev = 10.40	Mean = 11.36 (23.18%)	Median = 9.00	Min = 0.00	Max = 44.00	Total Pts = 49.00									
20	0.30	71.05%	2.56%	0.68	0.62	A	*40	50	31	6	5	0	-	-	-	-	0	00:12
-	-	-	-	-	-	% Selected	30.30	37.88	23.48	4.55	3.79	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.62	-0.30	-0.28	-0.03	-0.08	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.68	-0.33	-0.33	0.03	-0.05	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.71	0.16	0.05	0.05	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.49	0.38	0.03	0.08	0.00	-	-	-	-	-	-

Q: (The next 15 questions pertain to Dr. Bateman.) Begins and ends class sessions on time. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

21	0.23	57.89%	0.00%	0.58	0.63	A	*30	61	34	5	2	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	22.73	46.21	25.76	3.79	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.63	-0.26	-0.26	-0.10	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.58	-0.27	-0.25	-0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.58	0.29	0.11	0.00	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.56	0.36	0.05	0.03	0.00	-	-	-	-	-	-

Q: Overall, effective as an instructor. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

22	0.20	50.00%	0.00%	0.50	0.62	A	*27	57	41	4	2	1	-	-	-	-	0	00:09
-	-	-	-	-	-	% Selected	20.45	43.18	31.06	3.03	1.52	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.62	-0.24	-0.23	-0.10	0.00	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.50	-0.22	-0.23	-0.03	0.00	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.50	0.29	0.18	0.00	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.51	0.41	0.03	0.03	0.03	-	-	-	-	-	-

Q: Effectively communicates subject matter through use of well-organized lectures. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

23	0.17	50.00%	0.00%	0.50	0.64	A	*23	55	39	9	1	5	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	17.42	41.67	29.55	6.82	0.76	3.79	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.64	-0.14	-0.28	-0.14	0.01	-0.07	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.50	-0.09	-0.31	-0.08	0.00	-0.02	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.50	0.37	0.08	0.03	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.46	0.38	0.10	0.00	0.05	-	-	-	-	-	-

Q: Effectively engages students in case-based discussions. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

24	0.22	55.26%	0.00%	0.55	0.65	A	*29	55	36	10	2	0	-	-	-	-	0	00:08
-	-	-	-	-	-	% Selected	21.97	41.67	27.27	7.58	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.65	-0.20	-0.28	-0.13	-0.06	0.00	-	-	-	-	-	-

-	-	-	-	-	-	Disc. Index	0.55	-0.17	-0.28	-0.08	-0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.55	0.26	0.13	0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.44	0.41	0.13	0.03	0.00	-	-	-	-	-	-

Q: Effectively emphasizes key learning points. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

25	0.12	36.84%	0.00%	0.37	0.64	A	*16	36	45	25	10	0	-	-	-	-	0	00:09
-	-	-	-	-	-	% Selected	12.12	27.27	34.09	18.94	7.58	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.64	0.03	-0.21	-0.27	-0.06	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.37	0.16	-0.23	-0.28	-0.02	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.37	0.37	0.18	0.05	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.21	0.41	0.33	0.05	0.00	-	-	-	-	-	-

Q: Paces instruction according to the complexity of the material. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

26	0.16	44.74%	0.00%	0.45	0.61	A	*21	58	42	6	4	1	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	15.91	43.94	31.82	4.55	3.03	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.61	-0.06	-0.35	-0.01	-0.10	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.45	0.04	-0.43	0.03	-0.05	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.45	0.42	0.08	0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.38	0.51	0.03	0.05	0.03	-	-	-	-	-	-

Q: Effectively organizes delivery of the material in a manner that is focused and succinct. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

27	0.20	52.63%	0.00%	0.53	0.64	A	*26	65	32	6	1	1	-	-	-	-	1	00:07
-	-	-	-	-	-	% Selected	19.70	49.24	24.24	4.55	0.76	0.76	-	-	-	-	0.76	-
-	-	-	-	-	-	Point Biserial (rpb)	0.64	-0.23	-0.28	-0.11	0.01	0.07	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.53	-0.21	-0.29	-0.05	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.53	0.32	0.11	0.03	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.53	0.39	0.08	0.00	0.00	-	-	-	-	-	-

Q: Effectively uses in-class demonstrations and/or clinical examples. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

28	0.35	71.05%	2.56%	0.68	0.59	A	*46	62	21	3	0	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	34.85	46.97	15.91	2.27	0.00	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.59	-0.44	-0.20	0.07	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.68	-0.51	-0.20	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.71	0.18	0.08	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.69	0.28	0.00	0.00	0.00	-	-	-	-	-	-

Q: Is responsive to student questions and interactions during class. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

29	0.22	63.16%	0.00%	0.63	0.69	A	*29	57	34	10	1	1	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	21.97	43.18	25.76	7.58	0.76	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.69	-0.21	-0.31	-0.16	0.01	-0.01	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.63	-0.17	-0.36	-0.10	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.63	0.26	0.08	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.44	0.44	0.13	0.00	0.00	-	-	-	-	-	-

Q: Encourages critical thinking and analysis during class sessions. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

30	0.55	89.47%	12.82%	0.77	0.54	A	*72	49	7	4	0	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	54.55	37.12	5.30	3.03	0.00	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.54	-0.44	-0.20	-0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.77	-0.59	-0.15	-0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.89	0.11	0.00	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.13	0.69	0.15	0.03	0.00	0.00	-	-	-	-	-	-

Q: Demonstrates courtesy and respect for students. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

31	0.34	65.79%	0.00%	0.66	0.53	A	*45	52	7	3	1	24	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	34.09	39.39	5.30	2.27	0.76	18.18	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.53	-0.34	-0.09	-0.09	-0.04	-0.14	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.66	-0.35	-0.08	-0.03	0.00	-0.20	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.66	0.21	0.03	0.00	0.00	0.11	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.56	0.10	0.03	0.00	0.31	-	-	-	-	-	-

Q: Is accessible for help outside of class during office hours or by appointment. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

32	0.27	65.79%	2.56%	0.63	0.64	A	*36	61	21	10	2	2	-	-	-	-	0	00:04
-	-	-	-	-	-	% Selected	27.27	46.21	15.91	7.58	1.52	1.52	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.64	-0.26	-0.24	-0.20	0.01	-0.12	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.63	-0.20	-0.23	-0.15	0.00	-0.05	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.66	0.29	0.05	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.49	0.28	0.15	0.00	0.05	-	-	-	-	-	-

Q: Seems to care about students' learning. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

33	0.33	76.32%	0.00%	0.76	0.66	A	*44	66	19	3	0	0	-	-	-	-	0	00:44
-	-	-	-	-	-	% Selected	33.33	59.09	14.39	2.27	0.00	0.00	-	-	-	-	0.00	1

-	-	-	-	-	-	Point Biserial (rpb)	0.66	-0.39	-0.28	-0.11	0.00	0.00	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.76	-0.46	-0.26	-0.05	0.00	0.00	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.76	0.24	0.00	0.00	0.00	0.00	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.69	0.26	0.05	0.00	0.00	-	-	-	-	-

Q: Demonstrates enthusiasm for the subject. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)



1. Thanks for the research e-mail Dr. Bateman! Also if you could put a few more words to explain the figures that you copy from Lippincott's and Marks and Langerhans on your slides that would really be helpful for those not familiar with biochem! Thanks!
2. Dr. Bateman was very helpful when I approached him for advice on upcoming exams. He has answered any questions we have had and has encouraged continual studying of the subject matter.
3. Dr. Bateman has been very consistent throughout the year. He is willing to meet with students when he can, although it is not always in a timely manner. He does try to provide feedback as to how students can improve in the course and does generally seem to want to help the us excel. While the information is conveyed in a good fashion I wish there was more clinically relevant information (like what lab tests would look like or how a patient may present in the clinic) aside from the general information that is given in the textbooks.
4. Sometimes Dr. Batemans slides are just pictures with no words and it can be hard to remember what he was talking about when reviewing the lectures.
5. Dr. Bateman did a very nice job presenting most of the material, although I feel he can present us with stimulating case study for us to think through.
6. I like the emphasis on clinical correlations and how this information could be used in my understanding of disease processes and why they are treated the way that they are.
7. Dr. Bateman was helpful and available when I had questions. I do think the quizzes were a bit excessive but like the fact that we had them. Maybe if they were more spread out (like once a week) instead of sometimes having 2 or 3 in one week, they wouldn't feel so overwhelming because it is rather time consuming trying to read and prepare for the quiz while also studying. I also found that the time we had the quiz after the lecture was a good way to test whether I understood the material.
8. Dr. Bateman has a tendency to emphasize important information for test questions that is not actually on the exam.
9. His powerpoints could definitely be more organized. I find myself taking several hours to get through one powerpoint because he jumps around in the subject matter way too much. I find that it is not organized in a linear fashion and that I have to reorganize the subject material or just rely on the textbook for learning.
10. Dr. Bateman is not very encouraging to the students. Despite the grades on the tests, he has not changed anything (i.e. teaching style, presentations, etc) to accommodate the failure. As course director, he has not "thrown out" any questions on the exam, even if more than half or 75% does not get it right.
11. I would just suggest that the teacher spends more time on clinicals and less on minute details of every pathway. Just due to the fact that we can't really treat patients with this level of knowledge bc with cant affect a change. I feel like the course is improving greatly in this respect. Also I feel like there is a threshold of knowledge
12. Dr. Bateman is one of the interesting lecture professors that helps me understand some of the material. But, it is sort of hard to find out what concepts he is emphasizing. Then, I end up reviewing too much specific material and lose the overall understanding of the concept.

13. Since we were so pressed for time with 50 minute lectures, many times Dr. Bateman seemed irritated when students would raise a hand to ask questions because he wanted to get through the material. Don't quench our thirst for knowledge, we're still fresh and want to learn, encourage this enthusiasm!
14. I thought Dr. Bateman was an effective instructor. He took his time, explained the slides clearly during lecture (even though there was often no texts accompanying figures, etc on the powerpoints---I assume that's his way of making us pay attention). There were times when I felt like he emphasized structures (which I realize are important) that were not directly tested upon. And given my limited biochemistry knowledge, I couldn't appropriately discern which structures were truly important, and which were just interesting
15. Picks very small details to be tested on- even though only three questions are given. I do not agree with not throwing out questions that more than half the class missed. Should use the books that are required instead of figures that we do not have access to.
16. Some questions are a little vague or concern very minute details on the test. Overall concepts, in my opinion, are more important. I like that he respects our time.
17. Dr. Bateman does a great job at presenting information. He emphasizes what we should know for exams.
18. Important information could have been included as bullet points in the presentation instead of large pictures. That would have been more helpful. Also, the key points <manual page break>should have been emphasized.
19. I really enjoy Dr. Bateman. He really cares about each of us and our futures, and that makes me happy. I just don't like the subject Biochemistry.
20. The powerpoint presentations were often only pictures and could have used more information on them. But overall, as a lecturer, Dr. Bateman was mostly clear on explaining the pathways.
21. The quizzes for the course should be made just before the exam. Because doing quizzes for a future lecture requires lot of study time for each 10 point quiz which leaves little time for other subjects.
22. Spreading the amount of material equally for each exam.
23. More tests with more questions would have been helpful.
24. Dr Bateman knows his biochemistry! His answers to questions are always quick and precise.
25. Dr. Bateman needs to place more emphasis on writing board-style questions for exams that accurately reflect the types of questions that we will see on either COMLEX or USMLE.
26. Dr. Bateman offers good material and has been doing well adding a medical correlation for most areas of study. I do feel like minutiae is graded heavily. Dr. Bateman looks like he enjoys teaching and wants to be here.
27. Good teacher. I learned a good amount. Most questions were similar to board style.
28. He is very nice sometimes when he feels like it
29. With the exception of Dr. Taylor in physiology the following comment pertains to all professors thus far: please try to end lecture on time. I say this for two reasons, the first being that when professors do not appropriately calculate the length of their lectures they end up speeding through slides at the end (or not finishing). If the lecture material takes longer than planned, then just finish it during the next lecture. Secondly, and most importantly, when the lecture is

running 5-8 minutes overtime and it's the 3rd lecture of the day and professors are speeding through slides, it is very difficult to maintain focus. Especially when we haven't had breaks because the professor in the class before went 8 minutes over. Anyway, I'll stop my ranting. Just know that breaks are important for students to maintain their focus, and lectures should not be rushed.

30. Dr. Bateman is a great instructor. He effectively uses his class time and tries to present clinically relevant situations to the biochem we are learning. The clinically relevant stuff is what I feel we should be strongly emphasizing.
31. Dr. Bateman was very prompt at responding to e-mails and setting up appointments. Overall, as the course progressed he became better emphasizing on key points during lecture. I would recommend that a tutor should be recruited for the incoming class.
32. Dr. Bateman is an excellent professor. I really enjoyed his lecture style. He is very good at breaking down and explaining the complex information from the textbook. He is also very good at relating the subject matter to clinical situations.
33. Biochemistry is a rather difficult subject, it is especially difficult to learn when all the instructor does is read through slides word for word with relatively no enthusiasm towards the subject. Have yet to see anything be drawn on the board or questions answered to students in class at a reasonable timeframe. The exam questions are entirely too difficult and sometimes do not reflect anything that was mentioned in lecture. Seems to show a low interest in the subject and very monotoned.
34. I have great admiration for Dr. Bateman. He truly cares about his students and the subject matter at hand. In the future, I think he should have higher expectations for his students. He provides us with the material to be successful.
35. I enjoy him as a lecturer. My only suggestion to him would be that he does not seem to understand how much time this material takes to learn (especially the quizzes). He needs to look at what is manageable for students rather than just what is nice for us to know.
36. Just wish there were more test questions.
37. Dr. Bateman has made a lot of the biochemistry material easier to learn. He really emphasized biochemical processes that were relevant to what we will see later on. On multiple occasions he has entertained questions and even taken some of the information even further based on questions I had pertaining to the material.
38. Dr. Bateman does a good job of summarizing the lectures, I find the lecture objectives helpful, but I often find myself needing more information on his PowerPoint presentations. I appreciate that he includes clinical concepts and cases, but I wish they were more involved throughout the lecture. He sometimes presents the information at a level that is difficult for me to follow because I don't have much experience with Biochemistry. He is an effective instructor, but I wish he would make the subject more applicable for medical school students.
39. If slides can be cut down more to the more relevant ones, then it would be helpful because you can spend more time explaining. I really like the explanations you give but sometimes you just don't have enough time left and you have to rush through. You are an effective teacher if you take the time with each slide like on the days when you had less slides.

40. Dr. Bateman is professional, kind, brilliant, and organized, but I would benefit more from a redistribution of content per exam, and even more focused key concepts so that I may traverse the material more efficiently. For example, a C level might be someone who understands all the clear points made in lecture and explicit in the PowerPoint. A "B level" catches some of the details and bigger picture. Finally an A level is someone who will devour the book and supplementary sources to earn such a high grade. I feel like I know a lot and am all over the place, but still just at a C level.
41. I believe moving towards more clinical cases would make the class better. I believe dr. Bateman is trying to move in that direction but I think the case could be more heavily weighted on the clinical cases for the future students.
42. The case studies are helpful and the material is presented clearly. It might be helpful to include more notes on the slide or in the notes sections of the PowerPoint, particularly on figure. Where figure legends were included in the notes section, it was easier to understand the material while studying on my own, and images or charts were less useful when the legend was not included in the notes.
43. I thought Dr. Bateman's lectures were very well presented. Also, he took the time to answer student's questions both inside and outside of class. Overall I felt that he did a very good job of relaying the material.
44. Dr. Bateman was accessible for questions and was always respectful. Though he did tend to go over on time, which caused other classes to be pushed back and our breaks to be shortened (I know that's a petty critique, but with 4 straight hours of lecture, breaks are important). Overall, he was an engaging instructor and always kind when I asked questions outside of class. Thanks, Dr. Bateman
45. Although his power points were long and he often didn't end on time, Dr. Bateman is knowledgeable of the subject matter and has organized the course fairly well. The speed of material was too quick, but the subjects seemed to flow well.
46. Dr. Bateman wears great ties.
47. Dr. Batemans lectures are great. Good amount of slides and key points were emphasized. We LOVED clinical case questions for biochem
48. Wonderful teacher
49. Dr. Bateman does a terrific job communicating the important ideas/concepts of biochemistry to his students. He is a natural when it comes to content delivery...very clear and concise with how he communicates!
50. Dr. Bateman is great... as a non clinical biochemist. I think this class needs a big injection of clinical relevance, and I don't mean spouting off diseases... especially ones that only 15 people on the planet have.
51. Needs to choose a textbook and then teach and test out of it. Could do a better job of emphasizing important points and breaking down complex issues. Did a good job with tying in interesting and relevant case studies.
52. Dr. Bateman does a great job of presenting what is by nature difficult material. I would just ask that we slow down the pace we are going and for Dr. Bateman to reconsider dropping this "post it on the forum idea". I think for class wide pertinent information it is fine to put on the class

forum, but when I email you to ask a single personal question could you not have taken the time just to answer me rather than email me back just to say put it on the forum? Maybe we are worried about what other students will think of our competency if we post what we think are "stupid, silly, obvious" questions.

53. If there are other books that deemed more useful than the designated book in vital source, please make it available or known that you not use Lippincott's often.
54. Dr. Bateman is in a tough spot to enable students to master Biochemistry and its clinically relevant components because of the heavy front end of Biochem brought on by the curriculum. It is very difficult to critical think about each cycle with the amount brought on to us.
55. Please understand were the students are coming from when they are concerned about their progress in your course. A little more communication between students and professor.
56. Very good at hitting the main points.
57. Dr. Bateman is a good professor, just does not emphasize what we need to know for the exams it is like going into the desert and looking for water. He emphasizes it but then it doesn't show up on the exam.
58. Dr. Bateman is incredibly well spoken and is even soothing to listen to. A great biochemistry professor
59. Dr. Bateman is not very encouraging and uplifting to the students who seem to be struggling. As a professor of medical students, I believe he should be encouraging and helpful, while also professional.
60. Dr. Bateman's lectures were very succinct (not too many words on the slide) and he actively engaged the students. My biggest issue was the flow and correlation of the material presented and its overall purpose/big picture idea. I think it might be easier for all the students if they were presented with the big picture idea (i.e. purpose of a metabolic pathway) prior to discussing the details. It would help tie back the details to the significance and importance of the lecture topic and its clinical significance.
61. Dr. Bateman did a great job organizing the material and making it very understandable!
62. Dr. Bateman is an excellent professor. However, more case studies would be helpful.
63. He should repeat things more clearly and not as fast, so that some people can understand what he is saying.
64. Again, even though the course director is very passionate about biochemistry as a whole, there is a severe lack of direction in what will be tested for the boards. I have no problem with teaching to the overall board concepts.
65. Dr. Bateman is really straight forward with the material and teaches it very well. I believe he has the course set up to the best that it can be at.
66. It would have been better if the clinical aspects were stressed more during lecture since. A large amount of basic science was covered and was not really tested during the exams.
67. I liked that your power points were informative but also not excessively long.
68. Dr. Bateman is an excellent professor and really cares about the students. Unfortunately, I think his teaching abilities have been limited by forcing the integrated exams and the lack of questions per lecture. Overall, he is caring professor and I have enjoyed his teaching.

69. Incorporating more clinical case studies and relevancies would be helpful, especially when learning the many different metabolic pathways. I would like the test to have more board style clinical vignettes.
70. Dr. Bateman is a very good professor in conveying the information but I feel he is limited by the lack of time he had to teach the information as well as the restriction on the number of questions he was allowed to ask per lecture hour.
71. I think it might be helpful if you could post either a brief outline (not objectives) or summary with lectures. Remember to repeat questions from students who sit in the front bc people sitting in the back cannot always hear!
72. He's a very good teacher. Very professional every time you speak to him. Sense of humor is awesome and is a great teacher overall. Has helped me think through biochemistry of the human body while relating to Histology and Physiology. Even though I might not be the topper in the class, I am still learning a lot because of the integration but this course is helping me set the basis for all the other courses. Thank you sir for all you do!
73. Dr. Bateman's lectures also become more concise following the second exam. At times the material was overwhelming. I understand that biochem is a tough subject to begin with but his enthusiasm about the subject matter was encouraging. I do suggest condensing slides at times and possibly breaking up the second block into 2 exams as it is basically test the same amount of information as an entire undergrad biochem course.
74. Dr. Bateman is very receptive to students outside of class. He holds office hours and online discussion boards to try to help us when we have questions. His slides were difficult to follow at first, but after speaking to him it is more obvious how he organizes his lectures and decides what the most important points are. I think it may be helpful if Dr. Bateman briefs the class at the beginning of the semester on how he teaches and organizes his material, so that there is not as big of a lag on figuring out how to do well in the course. Dr. Bateman clearly is an expert in what he teaches. He is knowledgeable and able to respond to all of the questions that the students have. He also is prompt about looking things up when he is unsure of the answer and replying to students via the D2L website. He also tries to insure student success and cares about students doing well.
75. Dr. Bateman is very nice and helpful. He engages students in the clinical correlations. It is just difficult because he expects us to know minute details of pathways for quizzes and exams. Also, he always says that we will learn better from reading the book, but the book does not focus on anything specific and again is even broader than his lectures. Students would like to be informed on what is critically important in becoming good physicians, not the little details of chemical basis.
76. What is emphasized in lecture needs to be tested on the test. There needs to be more words on the slides to focus our studies.
77. Dr. Bateman, Thank you. I have enjoyed your lectures. The quizzes were a bit overbearing but the course as a whole was interesting. Your teaching style seemed to match my learning style. Your powerpoints were easy for me to reformat to something I could understand and read. I also really appreciated being able to download the PowerPoint the night before for this reason.

78. Regarding the quizzes, it was stated that if you read the material it was easy to answer all the questions correctly. I and many of my peers did not find this to be the case. It came to the point where it was necessary to quit reading and guess and look up the answers that I missed. It would have been necessary to memorize all of the chapter to answer these questions. This was confirmed to me by a chemistry major that is also in the class. Regarding the lectures, a written version of notes would better explain for those of the students that aren't visual learners what you want us to learn from your lectures. Most of the lectures consist of pictures and many, many cycles and chemical formulas and it's unclear as to what level to learn these. The big cycles are obvious, but others are unclear and I think that is why most people fail the exams.
79. Dr. Bateman knows his material very well, but has to work on his pace per topics (give more time on things that are more important). Also he provides too much material that it becomes hard to decide on what to focus on. He also pulls a lot of material from Lehninger's (which is NOT a required reading book). Having 3 books is COUNTERPRODUCTIVE and makes the class more strenuous than necessary
80. Dr. Bateman is a very friendly professor. I think his lectures are well organized and focused but sometimes I feel that he spends too much time on the chemistry basis and not the clinical relevance of the material. I also think his slides are so focused and succinct that it doesn't reflect some of the important points that he wants to make...just like having a small fine print on the side and then testing us on it when the lecture might have emphasized something else.
81. Dr. Bateman did a fantastic job, but I would strongly encourage him to emphasize what material is high yield for boards.
82. I think Dr. Bateman's slides could use more words to help explain reaction processes instead of just have a figure out of the text book.
83. Too much information pulled from books we were not required to purchase.
84. Dr. Bateman places a larger emphasis on the organic chemistry instead of on the medical biochemistry. His knowledge seems limited on the clinical applications of the content.

Item Analysis (Multiple Choice)

Exam Takers = 132

KR20 = 0.94

Stdev = 10.40

Mean = 11.36 (23.18%)

Median = 9.00

Min = 0.00

Max = 44.00

Total Pts = 49.00

Item #	Correct Responses			Disc. Index	Point Biserial	Correct Answer	Response Frequencies (*Indicates correct answer)										Avg Answer Time	
	Diff(p)	Upper	Lower				A	B	C	D	E	F	G	H	I	J		Unanswered
35	0.33	68.42%	5.13%	0.63	0.57	A	*43	63	18	6	2	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	32.58	47.73	13.64	4.55	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.57	-0.35	-0.17	-0.11	-0.08	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.63	-0.40	-0.15	-0.05	-0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.68	0.24	0.05	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.05	0.64	0.21	0.08	0.03	0.00	-	-	-	-	-	-

Q: (The next 15 questions pertain to Dr. Chastain.) Begins and ends class sessions on time. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

36	0.14	44.74%	0.00%	0.45	0.67	A	*18	48	46	13	6	1	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	13.64	36.36	34.85	9.85	4.55	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.67	-0.07	-0.24	-0.18	-0.08	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.45	-0.07	-0.20	-0.13	-0.02	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.45	0.26	0.24	0.03	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.33	0.44	0.15	0.05	0.03	-	-	-	-	-	-

Q: Overall, effective as an instructor. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

37	0.12	34.21%	2.56%	0.32	0.51	A	*16	50	45	17	4	0	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	12.12	37.88	34.09	12.88	3.03	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.51	0.09	-0.26	-0.24	-0.02	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.32	0.14	-0.30	-0.15	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.34	0.42	0.18	0.03	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.28	0.49	0.18	0.03	0.00	-	-	-	-	-	-

Q: Effectively communicates subject matter through use of well-organized lectures. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

38	0.23	52.63%	2.56%	0.50	0.56	A	*30	49	38	11	3	1	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	22.73	37.12	28.79	8.33	2.27	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.56	-0.04	-0.33	-0.18	-0.06	-0.09	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.50	0.03	-0.38	-0.10	-0.03	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.53	0.34	0.13	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.03	0.31	0.51	0.10	0.03	0.03	-	-	-	-	-	-

Q: Effectively engages students in case-based discussions. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

39	0.23	55.26%	0.00%	0.55	0.65	A	*30	63	27	9	3	0	-	-	-	-	0	00:07
-	-	-	-	-	-	% Selected	22.73	47.73	20.45	6.82	2.27	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.65	-0.28	-0.23	-0.15	0.01	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.55	-0.27	-0.23	-0.08	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.55	0.32	0.08	0.03	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.59	0.31	0.10	0.00	0.00	-	-	-	-	-	-

Q: Effectively emphasizes key learning points. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

40	0.11	36.84%	0.00%	0.37	0.63	A	*15	43	36	30	8	0	-	-	-	-	0	00:07
-	-	-	-	-	-	% Selected	11.36	32.58	27.27	22.73	6.06	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.63	-0.03	-0.09	-0.28	-0.13	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.37	0.06	-0.04	-0.31	-0.08	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.37	0.32	0.26	0.05	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.26	0.31	0.36	0.08	0.00	-	-	-	-	-	-

Q: Paces instruction according to the complexity of the material. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

41	0.11	36.84%	0.00%	0.37	0.59	A	*15	46	37	24	9	1	-	-	-	-	0	00:07
-	-	-	-	-	-	% Selected	11.36	34.85	28.03	18.18	6.82	0.76	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.59	0.13	-0.25	-0.28	-0.09	-0.08	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.37	0.22	-0.25	-0.28	-0.02	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.37	0.39	0.16	0.05	0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.18	0.41	0.33	0.05	0.03	-	-	-	-	-	-

Q: Effectively organizes delivery of the material in a manner that is focused and succinct. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

42	0.26	57.89%	0.00%	0.58	0.60	A	*34	54	38	4	2	0	-	-	-	-	0	00:05
-	-	-	-	-	-	% Selected	25.76	40.91	28.79	3.03	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.60	-0.24	-0.29	-0.06	-0.05	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.58	-0.25	-0.30	0.00	-0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.58	0.29	0.13	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.54	0.44	0.00	0.03	0.00	-	-	-	-	-	-

Q: Effectively uses in-class demonstrations and/or clinical examples. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

43	0.27	63.16%	0.00%	0.63	0.63	A	*36	66	20	8	2	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	27.27	50.00	15.15	6.06	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.63	-0.34	-0.18	-0.19	-0.01	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.63	-0.38	-0.15	-0.10	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.63	0.29	0.08	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.67	0.23	0.10	0.00	0.00	-	-	-	-	-	-

Q: Is responsive to student questions and interactions during class. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

44	0.24	55.26%	0.00%	0.55	0.59	A	*32	52	31	15	2	0	-	-	-	-	0	00:06
-	-	-	-	-	-	% Selected	24.24	39.39	23.48	11.36	1.52	0.00	-	-	-	-	0.00	-
-	-	-	-	-	-	Point Biserial (rpb)	0.59	-0.12	-0.29	-0.21	-0.05	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.55	-0.09	-0.28	-0.15	-0.03	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.55	0.32	0.11	0.03	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.00	0.41	0.38	0.18	0.03	0.00	-	-	-	-	-	-

Q: Encourages critical thinking and analysis during class sessions. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

45	0.63	100.00%	17.95%	0.82	0.57	A	*83	42	4	0	0	2	-	-	-	-	1	00:05
-	-	-	-	-	-	% Selected	62.88	31.82	3.03	0.00	0.00	1.52	-	-	-	-	0.76	-
-	-	-	-	-	-	Point Biserial (rpb)	0.57	-0.49	-0.17	0.00	0.00	-0.12	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.82	-0.68	-0.08	0.00	0.00	-0.05	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	1.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.18	0.68	0.08	0.00	0.00	0.05	-	-	-	-	-	-

Q: Demonstrates courtesy and respect for students. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

46	0.31	60.53%	5.13%	0.55	0.49	A	*41	45	4	3	0	38	-	-	-	-	1	00:06
-	-	-	-	-	-	% Selected	31.06	34.09	3.03	2.27	0.00	28.79	-	-	-	-	0.76	-
-	-	-	-	-	-	Point Biserial (rpb)	0.49	-0.31	-0.05	-0.10	0.00	-0.11	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.55	-0.32	-0.03	-0.03	0.00	-0.18	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.61	0.13	0.03	0.00	0.00	0.24	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.05	0.45	0.05	0.03	0.00	0.42	-	-	-	-	-	-

Q: Is accessible for help outside of class during office hours or by appointment. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

47	0.49	89.47%	7.69%	0.82	0.61	A	*65	50	9	2	0	5	-	-	-	-	1	00:04
-	-	-	-	-	-	% Selected	49.24	37.88	6.82	1.52	0.00	3.79	-	-	-	-	0.76	-
-	-	-	-	-	-	Point Biserial (rpb)	0.61	-0.46	-0.23	-0.05	0.00	-0.05	-	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.82	-0.58	-0.18	-0.03	0.00	-0.03	-	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.89	0.08	0.00	0.00	0.00	0.03	-	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.08	0.66	0.18	0.03	0.00	0.05	-	-	-	-	-	-

Q: Seems to care about students' learning. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

48	0.57	92.11%	15.38%	0.77	0.58	A	*75	45	9	1	1	0	-	-	-	-	1	01:13
-	-	-	-	-	-	% Selected	56.82	34.09	6.82	0.76	0.76	0.00	-	-	-	-	0.76	1

-	-	-	-	-	-	Point Biserial (rpb)	0.58	-0.44	-0.23	-0.06	-0.08	0.00	-	-	-	-	-
-	-	-	-	-	-	Disc. Index	0.76	-0.58	-0.16	0.00	-0.03	0.00	-	-	-	-	-
-	-	-	-	-	-	Upper 27%	0.92	0.08	0.00	0.00	0.00	0.00	-	-	-	-	-
-	-	-	-	-	-	Lower 27%	0.16	0.66	0.16	0.00	0.03	0.00	-	-	-	-	-

Q: Demonstrates enthusiasm for the subject. * A:Strongly agree B:Agree C:Somewhat agree D:Disagree E:Strongly disagree F:Not applicable (N/A)

1. It is clear that the teacher cares about the material and teaching it. I would suggest though, that the teacher work on his public speaking skills. He seems to mumble and mispronounce words or fails to complete them. This might be due to nerves. Also the teacher has shown strong growth in lectures since the beginning
2. Dr. Chastain began the semester with very short lectures and slightly difficult to understand lectures. However, as the semester has progressed the quality of the lectures has improved drastically. I particularly enjoy, and learn a lot, from the case studies that have been implemented in each lecture. It helps to synthesize the information into understandable clinical relevance. He is also very willing to accept student feedback and change what he needs to in order to maximize students learning. Overall, I think as he gains more experience Dr. Chastain will become a very inspiring faculty member who has a profound impact on his students.
3. Dr. Chastain started giving us case study before lecturing, I thought it's a great idea. I feel he has come a long way and will be a great professor in semesters to come.
4. He has a passion for the material he is presenting but for me personally his lectures were hard to stay focused in because of the large number of slides and the fact that he went through the material so fast in order to finish on time.
5. I am so impressed with Dr. Chastain's change in lecture style. The first lecture he gave was incredibly fast, and may seem easy to him because of his background in biochemistry, but for some of us, we are trying to muddle through the mechanisms of biochemistry. I really enjoyed Dr. Chastain's enthusiasm and willingness to interact with students. He improved his slides incredibly by the end of the course by reducing the amount of information. Also on the 3rd exam block, he emphasized more clinically relevant information. He also emphasized important information. I have no doubt that Dr. Chastain will be a great medical school professor. There are still some transitions that need to be made, but overall, I think he is working in the right direction.
6. I like Dr. Chastain's enthusiasm and positive personality.
7. Dr. Chastain has improved his style of presentation over a course of a very short period. He is a highly effective instructor who seeks improvement constantly, which is reflected through his actions and teaching style. He demonstrated his care for students and our learning by incorporating highly clinical relevant material in the course. He also compared high yield board biochemistry questions in attempt to prepare us for the boards (as much as he could)- I really appreciate this (and I am sure many others do). He is fast to respond to any questions that we have and always follow up. His in class presentation has become more and more coherent and organized which is easy to understand and review. I also enjoyed his clinical scenarios which were both creative and highly relevant. Thank you!
8. Dr. Chastain is a good teacher, but it is more helpful to listen to the audio recordings than to listen during class. He tends to be quick and quiet when lecturing. Other than that, he seems to genuinely care about his students and their success.
9. He just needs to work on his delivery. He seems like a very knowledgeable person and will go above and beyond when explaining disorders and diseases to us which I appreciate, but his presentation is very flat which causes my attention to wander far more often than it should. His

slides are more organized than Dr. Bateman's, but when he reads directly from the slides, it is less effective than when he gets excited and interacts with the students.

10. Dr. Chastain is a very knowledgeable professor. He has greatly improved over the course of the semester. He truly seems to care for the students and has tried to change and adapt after every exam. I really appreciate his effort and thought he puts into each lecture. I think he has the potential to be a great professor one day. He has really grown on me over the course and I look forward to dealing with him next semester.
11. Dr. Chastain attempts to help the students learn the material, but the lectures don't grasp attention as much as Dr. Bateman's lectures
12. no comment
13. After our grades severely suffered on the first two exams, Dr. Chastain was able to adapt to a better teaching style. I made sure to thank him and encourage him by telling him his lectures had much improved and thus the grades were better. Using case studies to teach concepts of biochemistry makes way more sense to a medical student than random reactions and flow charts on a screen, it helps put it all together and should be used as frequently as possible. Secondly please change the schedule next year to students can take more time to learn glycolysis, TCA cycle, nucleotide cycle and OXPHOS more with more competency. I feel like many metabolism disorders will be covered on the boards and I was forced to "binge and purge" the information since we went so fast.
14. I thought Dr. Chastain was a very enthusiastic instructor. I wish he would slow down sometimes, and really take his time with the material. More than once, I felt like he really pushed through some material that was difficult to me. Otherwise, he was kind, courteous, funny, amiable, and generally interested in our understanding of the material. He just goes too fast sometimes
15. Very very nice, and truly seems to care about the students.
16. Dr. Chastain's lectures were difficult to follow. He flew through his powerpoints and often times I had difficulty understanding what he was saying.
17. Lectures improved dramatically throughout the course. I think this is because he become more comfortable with teaching. I like that he respects our time.
18. Dr. Chastain has been a great instructor. He initially presented a lecture with a great number of ppt slides and was able to rush through them at incredible speeds. This of course was not very helpful in explaining the complex material. Over the course of the class, he has slowed down and began taking more time to explain the more complicated topics. He is very helpful outside of class and demonstrates a sincere interest in the subject, which encourages the students to be more enthusiastic as well.
19. At first, I found it very difficult to sit through lecture and I did not really understand the main points he was emphasizing. However, as the course progressed, he got much much better. He started interacting with the class more by asking questions and really engaging us in the subject matter. Presented more questions and clinical examples.
20. Presentations could have been more concise.
21. Dr. Chastain is so sweet, and while I had trouble with his lectures initially, he got significantly better as the course progressed.

22. Dr. Chastain too often just reads off his slides and does not give further clarification on the material. The organization of his powerpoint slides could have been better. For example, he starts explaining particular parts of pathways first before explaining the overall process. So while he is explaining these small details, I often have little understand of the reason of the pathway. I think it would be beneficial to start with overall picture/pathway first and knowing what our expected outcome is and then going back and explaining details of each step.
23. The lecture slides prior to the lecture end up being different than end of lecture. Since we take notes merging pre and post lecture slides take extra bit of time.
24. His lectures were very well organized. However, he did simply read a majority of the slides toward the beginning rather than summarizing them in his own words and actually explaining them.
25. My only recommendation would be to continue to place clinical vignettes' in powerpoints. Also you did a great job adapting and coping.
26. Essay
27. I would recommend trying to present the material he thinks is important in a more efficient way. Possibly reducing the amount of slides presented by just lecturing on the important points, this way we can spend more time in class discussing the important aspects rather than everything in the test. I would also recommend that he try to speak in a more clear matter, sometimes it is difficult to understand him and pay attention in class because of that.
28. More evenly distributed material would have with tests worth about the same percent of grade would have been better.
29. Definitely improved as a lecturer throughout the course
30. I feel like he just read the slides to us. At times he was difficult to understand. I did like how he began using clinical cases throughout his presentations.
31. He seems to be a good addition to the biochem staff. He mentions boards frequently when presenting material.
32. Place more emphasis on clinical correlations when writing test questions. They should be accurate to the types of questions we will see on either COMLEX or USMLE. His later lectures did a much better job of emphasizing clinical medicine this than his first lectures. Make sure questions reflect board style questions. This should be a high priority for all biochem faculty.
33. I feel that Dr. Chastain has really improved throughout the semester. He started off really quiet and talking towards the screen, but has really opened up more in the classroom. He engages students and presents the material in a clear way.
34. Very enthusiastic towards the subject of biochemistry. I enjoyed learning from him and his teaching style. It was obvious he was new to teaching and was nervous but as the semester progressed he seemed calmer. Very good teacher and very smart.
35. He has trouble clarifying the main points of each lecture and incorporating that into his test questions. What he emphasizes in class is not what he tests on generally.
36. Very well organized lectures. Dr. Chastain uses nice clear titles and descriptions of what exactly he is talking about for each slide of his lecture.
37. Dr. Chastain has drastically improved over the semester. While he started off nervous, he has gotten more confident in his lectures and has begun organizing them more logically and started

doing more emphasis on the clinical aspects through slides and case studies which is great! Shorter powerpoints would be nice, because it would be less material to go through however I do appreciate his emphasis on the more important facts we should be learning and those being reflected in the tests.

38. Overall, Dr. Chastain was a well organized professor. I did like how he guided students with mini case studies at the beginning of lectures to present the material in a medical context. This made it learning the material more applicable and interesting.
39. Dr. Chastain improved greatly over the semester with his presentations. The clinical examples he put in his powerpoints were very helpful. You can tell he is well versed in the subject matter and that he cares about the students.
40. Speeds through slides, does not "teach" simply reads the slides and that is it. Have not noticed any enthusiasm towards the subject material. Very difficult to understand, does not answer questions effectively.
41. He has improved greatly over the semester. His enthusiasm about the content is clear and it is obvious that he wants to present the material in a consistent and relevant manner. Finally, he is always willing to answer a question and makes himself available to students throughout the day. In other words, he is very approachable.
42. Again, I enjoy him as a lecturer. The questions he chose for the quizzes however, were mastery level and beyond. Not something that I could know from reading the chapter especially if I have never had biochem before.
43. I like him!
44. Dr Chastain was an effective instructor and he was very direct with what he thought was important for us to know.
45. Dr. Chastain's lectures on purine and pyrimidine metabolism were presented extremely well. He improved his lectures significantly throughout the course. I thought that adding a case study at the beginning of the lecture and following it throughout was helpful. He also gave a good summary of the important points of each lecture. I felt that reading his powerpoints and paying attention in class was a great help to me on the third block exam. If he continues to lecture in the same fashion he can really help students learn Biochemistry. Basing the lecture on the clinical aspect made it more interesting and applicable.
46. Dr. Chastain rushes through each slide usually regardless of the complexity of the material. If you could slow down and explain more and have less slides that would be great. Sometimes, he was not able to answer many of the questions students had. Slow down and go more in depth so we can understand it. I had to often study independently and got nothing out of lecture because he just read off the slides.
47. Dr. Chastain has a lot of potential, and has gotten better over the duration of the course. However, I feel like at level such as medical school, we should have lecturers at the same caliber as Dr. Taylor, Dr. Millette, etc. I do want to reiterate that Dr. Chastain has improved and probably will continue to prove the more he lectures, but we are already "experimented on" enough.
48. Dr. Chastain's lectures improved exponentially during the semester. I think it was really helpful that Dr. Chastain tried to look at board type questions so he could start to tailor the course in

that direction so that we can start to be prepared for the board. I like the gout presentation and how he presented the disease and then made us think through the diagnosis. I will remember this patient because the way it was presented. He was also clear with what to focus on and helped with studying. If they could continue to present lectures in this manner with disease in the beginning it will draw our attention of what the lecture will be focused and focus in on the key steps.

49. The flow of the lectures could be a little smoother both in presentation and the slides, however the material presented and the learning objectives given at the beginning of the presentation are helpful in learning the material and the case studies are also helpful in helping to apply the material.
50. I feel that at the beginning of the course Dr. Chastain was difficult to follow and his lectures did not seem to flow as well as Dr. Bateman's. I think with the addition of case studies to his presentations and a more focused presentation by the end of the course, he was much better able to relay the information and give the students a better chance to ask questions and truly understand the material.
51. Dr. Chastain needs more practice. Medical school is a tough teaching gig to cut your teeth on. Not sure if it's fair to the students to have a complete novice lecturer. For all of his obvious research skills, enthusiasm for subject matter, and impressive grasp of content, speaking in front of a crowd is not an easy hurdle. Speaking in front of a crowd of med students may be even much less easy. Variations in tone, addressing the class instead of the projection screen (a function of having practiced the lecture beforehand), are both suggestions for future presentations.
52. Dr. Chastain was always respectful and helpful when asked questions outside of class. In class, the powerpoints were very long. He was difficult to understand and the lectures were often hard to follow. We are being pressed for time to submit these evaluations but Thanks Dr. Chastain
53. Although well intentioned, it took most of the semester to get used to his style of lecturing. His powerpoints seemed long many times. But he is very well intentioned and I can tell he really cares if we understand the material. He was good at emphasizing key points.
54. I would like to see more clinical points but overall a very effective teacher.
55. It would be helpful if the lectures were not merely read off of the power point, but rather interactive and engaging. 2. I appreciated the number of slides and complexity within, chiefly because it helps facilitate my learning style.
56. Chastain is great. Like his enthusiasm. Lectures got progressively better. I do well on the board practice questions that reflect the material he taught. Thanks!
57. Seems to get really technical about the data portion of the presented material. would be nice to provide more of a general approach, and concise presentations
58. Dr. Chastain is extremely caring and encouraging! We hope that he stays at WCU-COM as I feel that he is a wonderful asset to our faculty.
59. The previous replies are aimed at his later lectures that were focused around the case studies. His earlier lectures would require opposite responses on many of the questions. Good job, Dr. Chastain. You have really stepped up, and I am very proud to have you as a professor.

60. I hate to write anything negative about Dr. Chastain especially since I know he can't help it, but I can't understand a word he says half the time. He doesn't finish words. He starts them, and then they just get lost in a mush. This is especially a problem in Biochem where if you accidentally mispronounce an enzyme, you've got a whole different reaction than the one you intended for me to know.
61. Dr. Chastain is clearly very knowledgeable, and his behavior has been very professional. However, he is not an effective teacher. His lectures are not useful for learning. He simply presents the facts at the level of his own understanding. There is no breakdown of the material, no pacing, no highlighting of important points.
62. Slow down a little and speak louder!
63. In the beginning, there was more complex material covered in a short amount of time, and there was a fast pace through that material. HOWEVER, we have noticed that you have used more examples and slightly decreased the pace through the material, which has made the concepts easier to understand and grasp. Also, this has allowed us to think through the material and ask appropriate questions. Otherwise, speaking a little closer to the microphone or louder sometimes would help, it's a GREAT LECTURE.
64. I would prefer it if they would only post one ppt as I try to print them out before class to better help my learning. Reposting another ppt after class is time consuming and a waste of paper as I have to reprint and transfer my written notes into a new ppt presentation.
65. I found that many of the questions coming from Dr. Chastain's lectures on the test did not come from the things that he emphasized in his lectures (this is a very main point). There were also multiple questions that tested information but were worded/ presented on the test in such a way that even if you knew the material you were not able to answer the questions correctly. There are no clear objectives. What is tested on is not what is on the test.
66. A little green in the beginning but rounded into shape as lectures progressed.
67. Dr. Chastain reads off the slides in lecture. If we are required to attend class, then at least change from reading off the slides. We can do that on our own time at our own pace. No one gets anything out of a class where the professor just reads off of it. Or at least make attendance optional and NOT mandatory
68. Maybe try to prepare a little bit more for your lectures so everything will flow more smoothly.
69. Dr. Chastain is very helpful and a very overall effective professor. He is very helpful to students and willing to do whatever he needs to do to help the students succeed.
70. Dr. Chastain definitely encourages critical thinking during class. I appreciate the questions that he asks because they help me see the material in a different light and help me understand its relationship to other topics and its real-life significance. I do think some of the lecture slides are too wordy (full sentences) vs. key words and sometimes he does read directly off the slide, which is fine when he follows up with good critical thinking question (which he often does). The question help to integrate the information and reiterate the key points in a different way. I like the enthusiasm Dr. Chastain naturally expresses when he is teaching...it makes me more interested in the topic, even if it is something I'm hearing for the 5th time (like enzymes). I also like how he integrates clinical case studies, even though I do not think that is his cup of tea, but I appreciate that he is doing it for us as medical students. I think overall, I like Dr. Chastain's

teaching style, and I can see how it has improved since his first lecture. I also appreciate how he emphasizes the key points (test questions) multiple times throughout a lecture. That is very helpful.

71. Dr. Chastain has improved his lectures DRASTICALLY throughout the course and appeared much more organized than at the beginning of the semester. I look forward and appreciated his improvements. I like how he began to emphasize the concepts he thought were important for students to take a little more time studying. I feel this will benefit the students in the long run! Keep up the good work!
72. Dr. Chastain has become exponentially better at teaching over the course of the first half of Biochemistry. Time management (amount of time spent on each topic) could be better managed. The case studies he uses during lecture are extremely helpful.
73. Needs to change teaching style to make it more interesting. Needs to stop reading directly off the powerpoint slides. I like that he responds to the content discussion on D2L.
74. There is a lack of focus on the board pertinent material in the lectures. However, Dr. Chastain improved dramatically throughout the course. He will be better in the Spring I'm sure.
75. Dr. Chastain is also a great asset to the biochemistry department. His lecture slides are pristine with the information that we have to know and he effectively tells us what to focus on. I like his use of case studies to bring the material in to a clinical light so that we can see it at a non-textbook view.
76. I wish you would shorten your powerpoint slide numbers and make them more precise. Although you repeat a lot of information, it can become time consuming while integrating information. Having 60 slides can be very intimidating. However, I enjoyed your enthusiasm for the subject and it was very informative. Your clinical questions in the last few weeks were also very helpful.
77. Dr. Chastain is very kind and caring professor and obviously loves what he does. However, his lectures were very hard to follow initially. They have improved dramatically and I think that as time progresses he will develop into a very good professor because he cares about his students.
78. I really like how you've started including case studies at the beginning of the lecture. It helps me to understand better the clinical relevance of what we are learning. Please continue to do that. I think it is very effective. It helps me to identify and understand the importance of the small details of the material and apply them to the bigger picture.
79. Dr. Chastain is very kind and is always will to help students. At the beginning of the semester his lectures were incredibly hard to follow; however, as the semester went on, he became much better at organizing his lectures as well as conveying the important information, allowing students to be able to focus on more important information. With time I think he will become an excellent professor.
80. Your lectures on purine and pyrimidine metabolism with the use of a clinical case motif were GREAT. That helped illustrate a difficult subject well. Please try and get rid of extraneous information bc earlier lectures tended to be cumbersome.
81. I believe that Dr. Chastain has improved over the course. His last 3 lectures have improved dramatically as well as the test questions he gave. I think he has made vast improvement and will continue to get better.

82. Started out this new year with nervousness about teaching. He has improved so much that I don't want him to stop teaching at all. When he starts doing case studies before the lecture, stops, tells us the class material and then ends with that same case study from the beginning, it is the best thing ever! I love the intersection of the case study and love how he can integrate that case study with the material about to be presented. His teaching style has really improved since the beginning and that improvement has happened over a very short time. That's a very good thing. One thing I would ask is to not put a lot of material on all the slides so help us focus on what is clinically relevant and also relevant for the course. I would also say, however, that we can't just simply ignore stuff we don't want to learn so everything's important. That being said, he has done an excellent job compared to when he first started.
83. Please speak more clearly when lecturing.
84. Dr. Chastain's lecture started out a bit overwhelming but following the second exam they were very well organized. I found that his lecturing methos exponentially improved and he soon became my favorite lecturer. I enjoyed the in class clinical vignettes he used that encouraged critical thinking. I felt they gave a completeness to the material that was being taught.
85. Dr. C improved ALOT! Maybe making his powerpoints more organized would be helpful!! Also maybe practicing his lecture before he gives it will help the flow of his lecture so its not so choppy!! Great guy, seems very knowledgeable but just a little organization would make things easier. Appreciate all the words on your slide. It was less I had to search for what was important!
86. Dr. Chastain started off slow during lectures, but as the semester went on he got better about presenting lectures. Sometimes its not clear what he is trying to say, but he will be better as he teaches more
87. Dr. Chastain is passionate and committed to teaching, and it is very evident. However, there are a few items that would really be great for him to work on. Having a 70-80 slide presentation in 50 lecture minutes is simply too much information. It is difficult to get through the material. He needs to work on his pacing. Also, reading from the slides word for word seems like a less effective way of teaching. Use less words, and more examples. Use examples both in biochemistry, clinical correlations, and the real world to help students understand what is going on. Also try to not change the presentations as much right before class. It is difficult to follow his lecture when he has altered the presentation but not released the most updated version. I think Dr. Chastain is very knowledgeable and really knows his stuff. It is also apparent the improvements that Dr. Chastain has made as the semester has continued, such as better pacing and more logical presentation of the information on his powerpoints....
88. I like how the professors sit in on other lectures, it means that they are enthused to be here! Even when we aren't, haha. Dr. Chastain is very sweet and it is obvious that he cares about how well we do in the course. He emphasizes what we need to know for the test, and what will be important concepts.
89. There are too many slides for the material presented and not a clear depiction of what is going to be tested on. There is just too much information to sift through to be teaching ourselves and guessing what is and what is not important.

90. Dr. Chastain, I appreciate your enthusiasm for the material you taught. It would be helpful to have a finished version of your powerpoints the night before. I have to reformat all powerpoints to a version that I can read due to a problem I have with my eyes. It takes a lot of time and is frustrating to walk into class with a reformatted powerpoint, just to learn that there is a completely new powerpoint I need to download and format during class. It's hard to do this while I'm trying to soak in every bit of your enthusiasm for the subject. I enjoyed your case presentations and student interaction. Thank you
91. I really appreciate Dr. Chastain's enthusiasm for the subject matter, teaching, and trying to emphasize important points and discussions of clinical topics. I feel like he started a little wobbly this year but got better as the year went along and I look forward to more of his lectures. There was a good balance of picture and written information slides.
92. Dr. C needs to work on communicating the lecture material. He reads straight from the slides and has way too many slides in his presentation (we don't always finish it & if we do, don't finish on time). He knows his stuff and really cares, but he has to add more clinical cases, critical thinking on the student parts.
93. Dr. Chastain is a wonderful professor. I really liked the way he organizes his lecture materials because it is very clear and it makes sense when studying. I like that his powerpoint reflected what we needed to know in a very clear manner. The only suggestion I would have is I do wish that he would be more confident with answering questions in class. I really appreciate that he seems to care about students and always working to find ways to improve.
94. Dr. Chastain did an excellent job. Specifically the last few lectures were outstanding. Please, utilize the purine and pyrimidine format for all future lectures. The clinical correlations and high yield board info you were emphasizing for these lectures should be applied to all of the lectures. Well done.
95. Dr. Chastain's lectures are a little too wordy, I appreciate the depth of the information it is just a little too much. I think the most important aspects should be focused on instead of the entire process of a reaction (TCA cycle)
96. PowerPoints are a little on the long side.
97. Not enough time to complete comments for professors.
98. I enjoyed how he began starting each class off with a case study. It seemed he got more comfortable and confident as the year went on.