

## CHEMISTRY STUDENTS' UNION

6	12.011 ±4,2	16	32.06 ±2,4,6
4470 <sup>+</sup> 4100 <sup>+</sup>	<b>C</b>	717.75 388.36	<b>S</b>
2.62	1s <sup>2</sup> 2s <sup>2</sup> 2p <sup>2</sup> Carbon	2.07	[Ne]3s <sup>2</sup> 3p <sup>4</sup> Sulfur

92	238.029 6,5,4,3
4407 1405	<b>U</b>
18.90	[Rn]5f <sup>6</sup> 6d <sup>4</sup> 7s <sup>2</sup> Uranium

Introduction

The Chemistry Students' Union (CSU) is a student run organization acting as the representative voice for all undergraduate students enrolled in a chemistry course. We hold social and academic events which strive to bring together students who share an interest in the discipline. We are always looking for more people to help out with events, so if you would like to get involved, e-mail us at [csu@chem.utoronto.ca](mailto:csu@chem.utoronto.ca). Also, e-mail us if you have any suggestions or concerns about courses, instructors or anything else on your mind and we will try our best to help.

To find out more about the CSU and our events, please visit our website at [www.chem.utoronto.ca/students/csui](http://www.chem.utoronto.ca/students/csui), and also look for our notices on upcoming events in Lash Miller.

CSU Executive

**CHM 138HF INTRODUCTORY ORGANIC CHEMISTRY I**

Instructor(s): S. Browning; A. Dicks

Enr: 480 Resp: 307 Retake: 75%

	1	2	3	4	5	6	7	Mean
<b><u>Browning:</u></b>								
Presents	0	0	0	8	22	45	22	5.8
Explains	0	0	0	4	25	40	26	5.8
Communicates	0	0	0	2	12	23	48	6.2
Teaching	0	0	0	4	19	42	32	6.0
<b><u>Dicks:</u></b>								
Presents	0	0	0	0	8	23	66	6.5
Explains	1	0	0	0	9	34	53	6.3
Communicates	1	0	0	1	10	34	51	6.3
Teaching	0	0	0	1	9	30	58	6.4
<b><u>Course:</u></b>								
Workload	0	0	0	26	33	27	11	5.2
Difficulty	0	0	1	37	35	20	4	4.9
Learn Exp	0	0	0	20	38	30	7	5.2

Browning was an enthusiastic instructor who communicated effectively and made the lectures interesting. He was humorous and he really connected with the students. His lectures were well-prepared and students appreciated his online powerpoint slides.

Dicks lectured with great enthusiasm and was very organized in presenting the material. He had a funny, interesting and altogether effective teaching style. He explained topics with clarity and with good use of examples. Many students commented that he was the best instructor so far in the university.

The labs were challenging because the material was not taught before hand. Overall, the course was fun to take and well-organized.

Instructor(s): M. Winnik

Enr: 480 Resp: 309 Retake: 78%

	1	2	3	4	5	6	7	Mean
Presents	1	0	6	19	33	28	9	5.1
Explains	1	2	3	18	27	32	14	5.2
Communicates	0	0	1	6	20	38	32	5.9
Teaching	0	0	1	13	25	40	17	5.5
Workload	0	0	0	28	37	23	8	5.1
Difficulty	0	0	1	38	36	20	3	4.8
Learn Exp	0	0	0	23	36	28	9	5.2

Overall, the course was very interesting as it was well-organized. Winnik's enthusiastic and humorous style was praised by most students. A few students wished Winnik gave more class examples. The tutorials were helpful.

Instructor(s): A. Dicks; S. Browning

Enr: 291 Resp: 193 Retake: 82%

	1	2	3	4	5	6	7	Mean
<b><u>Dicks:</u></b>								
Presents	0	0	0	0	7	25	65	6.5
Explains	0	0	0	2	10	27	58	6.4
Communicates	0	0	0	3	8	25	61	6.4
Teaching	0	0	0	0	0	25	66	6.6

**Browning:**

Presents	0	0	2	4	18	39	35	6.0
Explains	0	0	1	6	16	37	37	6.0
Communicates	0	0	1	3	10	27	57	6.4
Teaching	0	0	0	3	15	31	49	6.2

**Course:**

Workload	0	0	2	26	37	23	9	5.1
Difficulty	0	0	2	40	34	20	2	4.8
Learn Exp	0	0	2	22	25	34	15	5.4

Dicks made the course a challenging yet interesting introductory course. He was very enthusiastic and funny. His lectures were organized and the lecture notes were very well-written.

Browning was enthusiastic and made the lectures interesting. The use of the website was effective for lecture notes. His lectures were organized and neat.

The lab was difficult because it didn't reflect the lecture material. Tutorials were very helpful.

Instructor(s): M. Winnik

Enr: 291 Resp: 180 Retake: 82%

	1	2	3	4	5	6	7	Mean
Presents	1	2	5	21	23	25	20	5.2
Explains	0	0	7	16	25	28	22	5.4
Communicates	0	0	1	11	19	25	41	5.9
Teaching	0	1	2	11	22	32	30	5.7
Workload	0	0	1	30	35	26	6	5.1
Difficulty	0	0	2	39	37	18	1	4.8
Learn Exp	0	1	2	20	26	33	14	5.3

Most students found Winnik to be enthusiastic. His great sense of humour made his class very enjoyable. His material was very organized. Students also found the tutorials to be helpful for exam preparations.

Instructor(s): D. Ellis

Enr: 283 Resp: 156 Retake: 61%

	1	2	3	4	5	6	7	Mean
Presents	3	1	3	9	25	37	19	5.4
Explains	3	0	2	14	18	35	24	5.5
Communicates	5	0	6	23	25	25	12	4.9
Teaching	4	0	0	13	17	44	20	5.5
Workload	5	0	1	26	30	24	11	5.0
Difficulty	5	0	1	35	27	22	7	4.8
Learn Exp	8	0	3	31	26	21	8	4.7

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Students found the course challenging and fast-paced. He explained material very well with the use of good examples. Many felt that tutorials and labs did not reflect the lecture material very well. He was very approachable for students with extra office hours and email. Many students found the workload very high.

### CHM 138H1S INTRODUCTORY ORGANIC CHEMISTRY I

Instructor(s): J. Chin; S. Browning

Enr: 393	Resp: 229							Retake: 78%
	1	2	3	4	5	6	7	Mean
<b>Chin:</b>								
Presents	0	2	15	20	26	20	12	4.8
Explains	0	0	2	16	38	23	18	5.4
Communicates	0	1	7	25	30	20	13	5.0
Teaching	0	1	2	16	35	28	16	5.3
<b>Browning:</b>								
Presents	0	0	2	2	20	36	37	6.1
Explains	0	0	0	3	22	39	33	6.0
Communicates	0	0	1	2	15	29	51	6.3
Teaching	0	0	0	3	16	38	40	6.1
<b>Course:</b>								
Workload	0	0	0	43	38	13	3	4.8
Difficulty	0	0	1	46	38	11	1	4.7
Learn Exp	0	0	1	36	28	26	6	5.0

Chin was considerate and a nice instructor but a few students felt he was a little disorganized. Many students felt that he should have his own slides for lectures. Switching from his examples to another instructor's slides from the previous term was confusing. Overall, Chin performed effectively as a university teacher.

Many students found Browning to be an enthusiastic and extremely organized lecturer. Students appreciated the review session at the start of each lecture. However, some students felt that the material presented in lectures was not reflected at the same level in tests.

Instructor(s): M. Winnik

Enr: 393	Resp: 227							Retake: 77%
	1	2	3	4	5	6	7	Mean
Presents	0	0	1	11	31	34	21	5.6
Explains	0	0	1	7	25	34	30	5.8
Communicates	0	0	2	3	13	32	48	6.2
Teaching	0	0	1	7	21	37	31	5.9
Workload	0	0	1	43	35	16	3	4.8
Difficulty	0	0	1	46	35	13	2	4.7
Learn Exp	0	0	2	34	30	23	7	5.0

Winnik was a funny and enthusiastic instructor. Many wished he taught the entire course. Students felt the level of difficulty of his test questions were far greater than the material taught in class.

Overall, students enjoyed his teaching style and felt he performed effectively as a university teacher.

Instructor(s): S. Browning; J. Chin

Enr: 381	Resp: 126							Retake: 81%
	1	2	3	4	5	6	7	Mean
<b>Browning:</b>								
Presents	0	0	0	0	16	46	35	6.1
Explains	0	0	0	6	15	44	33	6.0
Communicates	0	0	0	1	11	36	50	6.3
Teaching	0	0	0	0	11	48	38	6.2
<b>Chin:</b>								
Presents	4	3	9	27	27	21	7	4.6
Explains	0	2	7	17	24	29	18	5.2
Communicates	0	4	4	22	31	24	12	5.0
Teaching	2	1	4	21	23	31	13	5.1
<b>Course:</b>								
Workload	0	0	0	38	42	15	1	4.8
Difficulty	0	0	4	50	34	7	1	4.5
Learn Exp	0	0	0	25	45	20	7	5.6

Browning performed well as an instructor. Students enjoyed his lectures.

Chin was an effective instructor. Overall, it was a wonderful course. Students suggested that the test should have covered more various topics and be less specific.

Instructor(s): M. Winnik

Enr: 381	Resp: 120							Retake: 80%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	10	33	37	18	5.6
Explains	0	0	0	4	30	39	25	5.9
Communicates	0	0	0	2	17	37	42	6.2
Teaching	0	0	0	5	24	43	25	5.9
Workload	0	0	0	37	43	14	2	4.8
Difficulty	0	0	3	51	32	9	1	4.5
Learn Exp	0	0	0	31	40	19	7	5.0

Winnik showed a great enthusiasm and passion for his work. Students enjoyed his course a lot. Some wished that they had more time for the test. Some also commented that skipping some sections made some of the material hard to understand.

### CHM 139H1F CHEMISTRY: PHYSICAL PRINCIPLES

Instructor(s): C. Goh; D. Gentleman

Enr: 389	Resp: 344							Retake: 42%
	1	2	3	4	5	6	7	Mean
<b>Goh:</b>								
Presents	3	2	7	28	33	19	5	4.7
Explains	4	3	12	31	26	18	3	4.4
Communicates	4	1	8	24	28	23	9	4.8
Teaching	3	6	8	27	31	17	5	4.5
<b>Gentleman:</b>								
Presents	3	1	4	15	27	32	15	5.2
Explains	3	3	6	18	28	27	12	5.0
Communicates	6	3	9	20	26	21	12	4.7
Teaching	4	6	6	24	28	21	7	4.6
<b>Course:</b>								
Workload	0	0	0	30	26	27	14	5.2
Difficulty	0	0	2	29	29	26	11	5.1
Learn Exp	7	4	13	44	21	7	2	4.0

Goh was attentive to students, used many examples in the class but she tended to rush and was disorganized at times. Goh's use of power-point slides was helpful but again, she tended to rush through the material. Some students felt that she was sometimes difficult to understand.

Gentleman's lecture slides were amusing to watch because he included many colourful diagrams and pictures. But many students felt that the test did not reflect the material presented in the lectures. Many students complained that the lab material should be co-ordinated with material in the lectures also. Gentleman wasn't always enthusiastic but overall he was very effective in presenting the material due to his extensive and varied use of examples.

Instructor(s): D. Gentleman; C. Goh

Enr: 347	Resp: 190							Retake: 51%
	1	2	3	4	5	6	7	Mean
<b>Gentleman:</b>								
Presents	2	2	3	17	32	31	10	5.1
Explains	1	3	9	19	31	24	9	4.9
Communicates	1	2	6	22	29	26	9	4.9
Teaching	2	3	7	33	26	20	5	4.6
<b>Goh:</b>								
Presents	2	4	9	23	34	23	2	4.7
Explains	2	4	8	30	35	17	1	4.5
Communicates	0	1	4	22	32	31	8	5.1
Teaching	2	3	5	29	35	17	5	4.7
<b>Course:</b>								
Workload	1	0	1	26	33	21	16	5.2
Difficulty	1	0	3	29	32	25	7	5.0

Learn Exp 1 5 11 50 20 9 1 4.2

Gentleman's lecture was well-organized and easy to understand. However, his tests were difficult because students felt that the test did not reflect the material presented in class.

Goh was not able to explain difficult material clearly, although she was very enthusiastic about the subject matter. Students appreciated her powerpoint slides during lectures.

Instructor(s): G. Scholes

Enr: 347	Resp: 186							Retake: 52%
	1	2	3	4	5	6	7	Mean
Presents	2	5	19	34	22	11	5	4.7
Explains	0	0	8	34	31	18	7	4.8
Communicates	1	3	13	32	31	13	3	4.5
Teaching	0	0	5	28	37	19	8	5.0
Workload	0	1	0	28	29	22	16	5.2
Difficulty	0	1	1	29	33	24	8	5.0
Learn Exp	1	6	12	48	18	10	1	4.1

Scholes presented lectures in an organized, well-planned manner but students wished that he used powerpoint slides rather than hand written notes. He was very approachable and willing to answer questions during lectures.

Instructor(s): G. Scholes

Enr: 389	Resp: 301							Retake: 45%
	1	2	3	4	5	6	7	Mean
Presents	5	5	18	27	25	12	6	4.2
Explains	2	3	11	28	31	16	7	4.6
Communicates	3	6	19	33	22	11	4	4.1
Teaching	1	2	7	25	37	18	9	4.9
Workload	0	0	0	31	27	26	13	5.2
Difficulty	0	0	1	33	27	24	11	5.1
Learn Exp	6	7	10	42	22	7	2	4.0

Scholes performed effectively as a university teacher. He was approachable for asking questions in class. Students wished that he used powerpoint slides rather than the handwritten overheads.

### CHM 139H1S CHEMISTRY: PHYSICAL PRINCIPLES

Instructor(s): R.J. Miller; S. Browning

Enr: 462	Resp: 155							Retake: 65%
	1	2	3	4	5	6	7	Mean
<b>Miller:</b>								
Presents	1	0	4	18	31	25	17	5.3
Explains	0	0	5	14	25	30	23	5.5
Communicates	0	0	0	3	12	25	56	6.3
Teaching	0	0	1	11	21	42	20	5.6
<b>Browning:</b>								
Presents	0	1	0	5	20	37	35	6.0
Explains	0	0	1	4	21	43	28	5.9
Communicates	0	0	1	2	13	33	48	6.3
Teaching	0	0	0	2	16	44	34	6.1
<b>Course:</b>								
Workload	0	0	0	34	34	22	7	5.0
Difficulty	0	0	1	35	37	16	8	4.9
Learn Exp	0	2	3	31	40	18	3	4.8

Miller was enthusiastic though students felt that much of the lectures were too focussed on "extra" material. Students suggested that he shouldn't have given more references to the text so that they could study further. His lecture slides were disorganized and he tended to rush the material towards the end of the term due to poor time management.

Browning's lecture slides and his presentation was well-organized. His lecture style was clear and articulate. He was very approachable and had lots of extra office hours. However, many students complained about the lab portion of the course which required too much prep work.

The lab TA's were inconsistent in their marking.

Instructor(s): D. Farrar

Enr: 462	Resp: 112							Retake: 66%
	1	2	3	4	5	6	7	Mean
Presents	1	1	9	32	33	15	5	4.6
Explains	2	3	8	36	32	11	4	4.4
Communicates	0	2	13	34	33	10	3	4.4
Teaching	1	2	7	31	33	20	3	4.7
Workload	1	0	2	38	34	18	6	4.8
Difficulty	1	0	3	35	39	14	6	4.8
Learn Exp	1	1	1	39	35	17	2	4.7

Students commented that Farrar was a good instructor. Students found that lectures were not really necessary because all of the lecture material was in the book.

Instructor(s): S. Browning; R.J. Miller

Enr: 295	Resp: 126							Retake: 70%
	1	2	3	4	5	6	7	Mean
<b>Browning:</b>								
Presents	0	0	0	4	14	38	42	6.1
Explains	0	0	0	3	20	38	37	6.1
Communicates	0	0	0	1	13	31	53	6.3
Teaching	0	0	0	0	12	31	54	6.4
<b>Miller:</b>								
Presents	0	1	6	15	25	24	26	5.4
Explains	0	1	2	13	20	29	32	5.7
Communicates	0	0	0	3	12	27	55	6.3
Teaching	0	0	1	10	15	32	39	5.9
<b>Course:</b>								
Workload	0	0	2	34	41	18	3	4.9
Difficulty	0	0	1	43	36	12	5	4.8
Learn Exp	0	1	2	37	37	15	5	4.8

Overall, Browning was an outstanding instructor. Students complained about the lab. They said the time was too short and lab technicians and co-ordinators were not consistent with grading.

Miller exhibited great enthusiasm for the course. Students appreciated his demos and detailed explanations.

Instructor(s): D. Farrar

Enr: 295	Resp: 87							Retake: 68%
	1	2	3	4	5	6	7	Mean
Presents	4	1	16	28	29	11	8	4.4
Explains	3	3	12	29	32	11	6	4.5
Communicates	8	3	12	27	25	11	10	4.4
Teaching	5	3	10	26	30	12	10	4.5
Workload	1	0	1	44	30	13	7	4.8
Difficulty	1	0	3	46	20	20	6	4.7
Learn Exp	1	0	0	50	22	20	5	4.7

Instructor(s): M. Staikova; D. Gentleman

Enr: 131	Resp: 20							Retake: 61%
	1	2	3	4	5	6	7	Mean
<b>Staikova:</b>								
Presents	15	15	15	5	25	25	0	3.8
Explains	15	15	5	25	20	20	0	3.8
Communicates	20	15	10	15	20	20	0	3.6
Teaching	15	15	15	20	20	15	0	3.6
<b>Gentleman:</b>								
Presents	0	0	0	5	15	60	20	5.9
Explains	0	0	0	5	10	50	35	6.2
Communicates	0	0	0	5	20	25	50	6.2
Teaching	0	0	0	5	5	45	45	6.3
<b>Course:</b>								
Workload	0	0	0	50	10	25	15	5.1
Difficulty	0	0	0	50	15	20	15	5.0
Learn Exp	7	0	0	50	35	0	7	4.4

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Students found it difficult to understand Staikova's lectures. Also, the material was a little unclear due to lack of detailed explanations. Students complained about the amount of time it took to get back marked assignments.

Gentleman's lectures were very clear and well-planned. However, many students complained that his tests were too long and that the questions were very distant from the actual contents focussed on during the lectures.

### CHM 151Y1Y CHEMISTRY: THE MOLECULAR SCIENCE

Instructor(s): A. Woolley

Enr: 124	Resp: 72							Retake: 76%
	1	2	3	4	5	6	7	Mean
Presents	0	0	1	15	18	42	21	5.7
Explains	0	7	7	24	37	11	12	4.8
Communicates	1	4	16	27	26	16	6	4.5
Teaching	0	1	2	17	30	32	15	5.4
Workload	0	2	16	61	11	6	1	4.1
Difficulty	0	0	4	43	35	9	7	4.7
Learn Exp	0	1	5	23	38	16	13	5.1

Woolley was very good with presenting the lectures. His clear and concise style allowed the students to have a good understanding. His classes were very organized; and his notes were useful too. Students did suggest that the instructor could be more enthusiastic.

Tutorials were very helpful and informative.

Instructor(s): A. Dhirani; R. Morris

Enr: 107	Resp: 66							Retake: 65%
	1	2	3	4	5	6	7	Mean
<b>Dhirani:</b>								
Presents	0	0	0	4	31	37	26	5.9
Explains	0	0	1	12	25	35	25	5.7
Communicates	0	0	3	9	29	32	25	5.7
Teaching	0	0	1	10	29	41	16	5.6
<b>Morris:</b>								
Presents	0	0	0	10	32	38	18	5.6
Explains	0	0	3	9	30	43	13	5.6
Communicates	0	1	1	9	25	50	12	5.6
Teaching	0	0	1	10	32	46	9	5.5
<b>Course:</b>								
Workload	1	3	12	44	23	12	3	4.3
Difficulty	0	0	3	33	37	24	1	4.9
Learn Exp	0	0	1	25	35	30	8	5.2

Dhirani was highly efficient in explaining the course material. He was very helpful in answering students' questions and often made time for office appointments.

Many felt that the laboratory component was not organized with regards to the contents of the course.

Many students appreciated Morris' clear and straightforward lecture notes.

### CHM 217H1F INTRODUCTION TO ANALYTICAL CHEMISTRY

Instructor(s): D. Stone

Enr: 43	Resp: 36							Retake: 61%
	1	2	3	4	5	6	7	Mean
Presents	5	2	0	30	27	19	13	4.9
Explains	2	5	8	25	19	22	16	4.9
Communicates	0	8	2	11	19	30	27	5.4
Teaching	2	2	5	19	19	30	19	5.2
Workload	0	0	2	50	22	16	8	4.8
Difficulty	0	0	2	42	37	11	5	4.7
Learn Exp	0	7	0	38	34	15	3	4.6

Some students found Stone to be a good lecturer. His handouts and webnotes were found to be helpful. However, a few students did find him hard to approach for to ask questions.

Finally, students found the labs to be somewhat unorganized.

### CHM 220H1F PHYSICAL CHEMISTRY: THE MOLECULAR VIEWPOINT

Instructor(s): G. Scholes

Enr: 459	Resp: 345							Retake: 26%
	1	2	3	4	5	6	7	Mean
Presents	5	13	23	22	21	5	8	3.9
Explains	6	10	19	26	20	6	9	4.0
Communicates	3	7	16	27	22	11	11	4.4
Teaching	4	4	20	26	20	12	10	4.3
Workload	0	0	4	53	27	10	2	4.5
Difficulty	0	0	3	29	35	21	10	5.0
Learn Exp	9	8	27	38	11	3	1	3.5

Overall, Scholes performed effectively. Many students felt that assignment marking was not fair. Lecture notes were very helpful but students wanted them online, and to be posted before the lectures. Tutorials were very helpful.

Many students complained about the choice of the textbook used for the course. The book was difficult to read and questions were beyond the level of the course.

### CHM 221H1S PHYSICAL CHEMISTRY: THE MOLECULAR VIEWPOINT

Instructor(s): P. Brumer

Enr: 22	Resp: 13							Retake: 58%
	1	2	3	4	5	6	7	Mean
Presents	0	7	30	38	15	7	0	3.8
Explains	0	7	23	23	15	23	7	4.5
Communicates	0	0	0	23	30	7	38	5.6
Teaching	0	7	15	30	7	30	7	4.6
Workload	0	0	15	61	7	15	0	4.2
Difficulty	0	0	0	30	15	23	30	5.5
Learn Exp	0	0	10	20	30	20	20	5.2

Some students found it difficult to follow the lectures because Brumer did not give/write lecture notes and his handwriting was hard to read.

### CHM 225Y1Y INTRODUCTION TO PHYSICAL CHEMISTRY

Instructor(s): A. Dhirani

Enr: 84	Resp: 58							Retake: 50%
	1	2	3	4	5	6	7	Mean
Presents	0	3	10	17	17	25	25	5.2
Explains	0	1	17	15	17	22	24	5.2
Communicates	1	3	10	17	21	21	23	5.1
Teaching	0	1	5	21	23	25	23	5.3
Workload	0	1	0	65	16	12	3	4.5
Difficulty	0	1	1	44	27	18	5	4.8
Learn Exp	0	0	17	28	35	15	2	4.6

Students felt that Dhirani was a good lecturer. His positive attitude towards answering students' questions was liked very much. However, there were concerns about the tests, i.e. there should be less material covered. Also, the textbook used in this course had too few examples. Some found that the tutorials were essential to do well in this course.

Instructor(s): P. Brumer

Enr: 81	Resp: 44							Retake: 36%
	1	2	3	4	5	6	7	Mean
Presents	2	7	21	30	23	9	4	4.1
Explains	2	0	21	19	26	21	7	4.6
Communicates	0	0	2	14	26	29	26	5.6
Teaching	2	7	9	17	21	34	7	4.8
Workload	0	0	4	50	33	11	0	4.5
Difficulty	0	0	4	19	39	29	7	5.1
Learn Exp	0	7	18	29	25	11	7	4.4

Students found Brumer to be quite enthusiastic. However, some found his lectures to be unorganized and unclear. Some students also found tutorials to be ineffective.

**CHM 238Y1Y INTRODUCTION TO INORGANIC CHEMISTRY**

Instructor(s): I. Manners; S. Browning

Enr: 104

Resp: 63

Retake: 49%

	1	2	3	4	5	6	7	Mean
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**Manners:**

Presents	0	0	1	9	30	36	22	5.7
Explains	0	1	0	9	33	38	17	5.6
Communicates	1	0	0	18	24	27	27	5.6
Teaching	0	1	3	11	23	41	19	5.6

**Browning:**

Presents	1	0	0	11	15	39	31	5.4
Explains	0	0	3	8	22	38	27	5.8
Communicates	0	0	0	3	11	36	49	6.3
Teaching	0	0	1	7	17	41	31	5.9

**Course:**

Workload	0	1	1	22	21	22	29	5.5
Difficulty	0	0	1	32	32	22	11	5.1
Learn Exp	0	8	4	22	30	28	6	4.9

A few students felt that Manners showed little enthusiasm and therefore, his lectures were sometimes dry. However, students felt that he did explain concepts clearly and he ensured that students understood the material.

Browning explained concepts clearly and enthusiastically.

Students thought that the course could have been improved if the workload was spread out over the entire year. The amount of work in the first semester was minimal in comparison to the second term.

The lab component was difficult, and time consuming with a high workload. The material covered in the labs did not always correspond to lectures very well.

Instructor(s): H. Miguez

Enr: 104

Resp: 34

Retake: 28%

	1	2	3	4	5	6	7	Mean
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Presents	0	0	2	8	17	41	29	5.9
Explains	0	2	5	14	14	26	35	5.6
Communicates	0	0	2	8	20	44	23	5.8
Teaching	0	0	0	15	33	27	24	5.6
Workload	0	4	4	16	16	16	41	5.6
Difficulty	0	0	4	29	29	25	12	5.1
Learn Exp	6	6	6	20	13	40	6	4.7

Most of the students found Miguez to be very nice and patient although the material was challenging at times.

**CHM 247H1S INTRODUCTORY ORGANIC CHEMISTRY II**

Instructor(s): A. Dicks

Enr: 426

Resp: 364

Retake: 52%

	1	2	3	4	5	6	7	Mean
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Presents	0	0	0	1	7	27	63	6.5
Explains	0	0	0	3	13	37	44	6.2
Communicates	0	0	0	1	11	33	52	6.4
Teaching	0	0	0	2	12	36	47	6.3
Workload	0	0	0	27	31	27	12	5.2
Difficulty	0	0	0	24	35	25	12	5.2
Learn Exp	1	2	5	33	33	19	4	4.7

Dicks was a very good lecturer and very enthusiastic about the material. Students thought that the labs were useful, however, some labs did not correspond to the lecture material because they were performed prior to the lectures.

Dicks reserved his photocopied lecture notes in the library which was very helpful.

Instructor(s): A. Dicks

Enr: 416

Resp: 185

Retake: 58%

	1	2	3	4	5	6	7	Mean
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Presents	0	0	0	0	8	23	67	6.6
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Explains	0	0	0	2	13	33	50	6.3
Communicates	0	0	0	2	11	22	63	6.5
Teaching	0	0	0	1	10	34	52	6.4
Workload	0	0	0	20	37	34	6	5.2
Difficulty	0	0	1	25	33	30	9	5.2
Learn Exp	0	2	3	29	36	21	7	4.9

One of the common descriptions of Dicks was that "he was one of the best instructors I've had in university." Dicks made the classes interesting for some students even though they hated organic chemistry.

Overall, this course required a lot of hard work, but the instructor was great and explained concepts clearly.

Instructor(s): M. Lautens

Enr: 117

Resp: 22

Retake: 40%

	1	2	3	4	5	6	7	Mean
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Presents	0	0	4	18	22	50	4	5.3
Explains	0	0	0	13	40	36	9	5.4
Communicates	0	0	0	18	45	27	9	5.3
Teaching	0	0	0	13	45	40	0	5.3
Workload	0	0	0	22	31	36	9	5.3
Difficulty	0	0	0	13	18	54	13	5.7
Learn Exp	0	0	5	52	23	17	17	4.5

Lautens was funny and helpful. The students found the labs to be unclear and felt they were not given enough time to complete them. Also, proper feedback on how to write lab reports would have been beneficial.

**CHM 249H1S ORGANIC CHEMISTRY**

Instructor(s): R.A. Batey

Enr: 37

Resp: 25

Retake: 87%

	1	2	3	4	5	6	7	Mean
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Presents	0	4	8	16	20	32	20	5.3
Explains	0	0	0	16	32	24	28	5.6
Communicates	0	0	0	8	28	40	24	5.8
Teaching	0	0	0	0	33	33	33	6.0
Workload	0	0	0	52	36	8	4	4.6
Difficulty	0	0	0	40	36	24	0	4.8
Learn Exp	0	0	0	14	42	33	9	5.4

Batey was very enthusiastic and articulate which made the material very interesting. However, a few students felt that the lectures were a little disorganized and fast-paced at times.

Students commented that the material covered could have been more organized by introducing the topics one by one.

**CHM 310H1S ENVIRONMENTAL CHEMISTRY**

Instructor(s): S. Mabury

Enr: 55

Resp: 33

Retake: 81%

	1	2	3	4	5	6	7	Mean
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Presents	0	0	6	18	24	24	27	5.5
Explains	0	0	3	6	21	42	27	5.8
Communicates	0	0	0	0	12	27	60	6.5
Teaching	0	0	0	12	12	33	42	6.1
Workload	0	3	0	60	24	12	0	4.4
Difficulty	0	3	3	45	27	18	3	4.6
Learn Exp	0	0	3	24	27	13	31	5.4

Many students found the course very interesting. A number of students commented it was "the most interesting chemistry course I've ever taken."

Mabury was an amazing lecturer. He was very enthusiastic and passionate. He responded to students' emails quickly which helped many students.

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### CHM 314Y1Y INTRODUCTION TO INSTRUMENTAL METHODS OF ANALYSIS

Instructor(s): M. Thompson

	Resp: 25							Retake: 83%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	4	0	12	44	32	8	5.2
Explains	0	0	4	4	32	36	24	5.7
Communicates	0	0	0	0	28	36	36	6.1
Teaching	0	0	0	8	16	20	56	6.2
Workload	0	0	8	58	25	8	0	4.3
Difficulty	0	4	4	66	16	8	0	4.2
Learn Exp	0	0	10	10	25	25	30	5.6

Most students praised Thompson. He understood students' needs and problems. The style of lecturing was very appropriate and effective. Students gained a lot of useful and practical knowledge and skills.

### CHM 325H1S MATERIALS CHEMISTRY

Instructor(s): M. Marmak; I. Manners

	Resp: 40							Retake: 61%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
<b>Marmak:</b>								
Presents	23	10	15	18	18	13	0	3.4
Explains	20	7	25	20	12	12	0	3.4
Communicates	17	12	7	30	20	10	2	3.6
Teaching	12	20	15	23	10	15	2	3.5
<b>Manners:</b>								
Presents	0	0	0	15	17	53	12	5.6
Explains	0	0	0	15	25	48	10	5.5
Communicates	0	0	0	7	20	50	22	5.9
Teaching	0	0	0	10	26	47	15	5.7
<b>Course:</b>								
Workload	0	10	15	62	10	2	0	3.8
Difficulty	2	2	5	70	12	7	0	4.1
Learn Exp	2	11	11	38	19	11	5	4.2

Marmak's lecturing style was boring, dull and not comprehensive. The lecture notes were too lengthy and very unorganized. Many students were disappointed with this section.

Manners was a good instructor who was organized and enthusiastic. He provided good examples and clearly/thoroughly explained the material.

The material taught in the first half of the course seemed to be too much and too advanced for students at this level.

### CHM 326H1F INTRODUCTORY QUANTUM MECHANICS AND SPECTROSCOPY

Instructor(s): D. Lidar

	Resp: 8							Retake: 62%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	25	12	25	37	5.8
Explains	0	0	12	12	25	25	25	5.4
Communicates	0	0	0	0	50	25	25	5.8
Teaching	0	0	0	12	25	37	25	5.8
Workload	0	0	0	12	25	37	25	5.8
Difficulty	0	0	0	12	50	25	12	5.4
Learn Exp	20	0	0	40	20	0	20	4.2

Lidar explained the course material extremely effectively and clearly. Students felt his knowledge on Chemistry was good. However, students disliked the lab component of the course. It was disorganized and too time-consuming.

### CHM 328H1S MODERN PHYSICAL CHEMISTRY

Instructor(s): C. Goh

	Resp: 6							Retake: 50%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	0	16	83	0	0	0	3.8

Explains	0	0	0	50	33	16	0	4.7
Communicates	0	0	0	0	50	16	33	5.8
Teaching	0	0	16	33	33	0	16	4.7
Workload	0	0	16	50	16	16	0	4.3
Difficulty	0	0	0	83	16	0	0	4.2
Learn Exp	16	0	0	50	16	16	0	4.0

Goh used the small class size very effectively to accommodate each student's needs. She was very approachable and willing to help students.

Students suggested a course textbook and better explanations for term tests, problem sets and lectures. The labs were very interesting.

### CHM 338H1F INTERMEDIATE INORGANIC CHEMISTRY

Instructor(s): J. Powell

	Resp: 21							Retake: 58%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	9	28	38	23	5.8
Explains	0	0	0	4	42	28	23	5.7
Communicates	0	0	0	4	19	42	33	6.0
Teaching	0	0	0	4	28	38	28	5.9
Workload	0	0	0	14	14	28	42	6.0
Difficulty	0	0	0	14	33	38	14	5.5
Learn Exp	0	0	0	26	40	20	13	5.2

Most students found the chemistry labs to be too intense and tough. It was tough course covering a lot of material. However, all liked Powell. He was praised to be very enthusiastic and his material was found to be interesting.

### CHM 345H1S MODERN ORGANIC SYNTHESIS

Instructor(s): R. Batey

	Resp: 17							Retake: 81%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	5	11	41	41	6.2
Explains	0	0	0	5	5	47	17	6.2
Communicates	0	0	0	5	0	52	41	6.3
Teaching	0	0	0	0	5	52	41	6.4
Workload	0	0	0	62	18	12	6	4.6
Difficulty	0	0	0	43	31	18	6	4.9
Learn Exp	0	0	0	50	16	16	16	5.0

The course was interesting. The test was fair but was challenging. Batey was a very good lecturer. However, the essay should have been in the course description because the assignment was unusual for a science course.

### CHM 346H1S MODERN ORGANIC SYNTHESIS

Instructor(s): R. Batey

	Resp: 22							Retake: 73%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	6	26	33	33	5.9
Explains	0	0	0	0	33	40	26	5.9
Communicates	0	0	0	0	40	33	26	5.9
Teaching	0	0	0	0	40	33	26	5.9
Workload	0	0	0	43	43	12	0	4.7
Difficulty	0	0	0	31	50	18	0	4.9
Learn Exp	0	0	0	33	26	26	13	5.2

Batey was a good instructor and the material was interesting. The lectures were well-organized and Batey explained them clearly. He also gave time for questions in class.

### CHM 347H1F ORGANIC CHEMISTRY FOR BIOLOGICAL COMPOUNDS

Instructor(s): R. Kluger

	Resp: 52							Retake: 48%
	1	2	3	4	5	6	7	
	1	2	3	4	5	6	7	Mean
Presents	0	5	11	19	31	15	15	4.9
Explains	0	5	9	29	27	11	15	4.8

Communicates	0	1	1	5	29	25	35	5.8
Teaching	0	5	5	19	33	21	13	5.0
Workload	0	3	1	43	15	19	15	4.9
Difficulty	0	0	7	41	29	17	3	4.7
Learn Exp	2	4	9	48	14	9	9	4.4

There were mixed feelings toward this course. Some praised Kluger for his clear explanations in his lectures and being able to give the importance of each topic. However, others thought his tests were unfair because material tested was trivial and not emphasized during class.

#### CHM 348H1F ORGANIC REACTION MECHANISMS

Instructor(s): A. Yudin

Enr: 55	Resp: 40							Retake: 75%
	1	2	3	4	5	6	7	Mean
Presents	0	5	20	30	23	17	2	4.4
Explains	0	5	2	36	18	23	13	4.9
Communicates	0	2	2	10	28	25	30	5.6
Teaching	0	2	2	15	30	33	15	5.4
Workload	0	2	7	70	17	2	0	4.1
Difficulty	0	0	7	60	22	7	2	4.4
Learn Exp	3	0	0	46	25	17	7	4.7

Students praised Yudin's lecturing style. His lecture material and 3-D representation made his lectures more effective. He explained the material with lots of examples. Students found the course to be very interesting.

#### CHM 374H1S ORGANIC CHEMISTRY OF BIOLOGICAL COMPOUNDS

Instructor(s): R. Morris

Enr: 22	Resp: 15							Retake: 57%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	20	26	40	13	5.5
Explains	0	0	6	20	40	20	13	5.1
Communicates	0	0	20	33	33	6	6	4.5
Teaching	0	0	6	13	40	33	6	5.2
Workload	0	0	0	93	6	0	0	4.1
Difficulty	0	0	0	60	40	0	0	4.4
Learn Exp	0	11	0	33	44	11	0	4.4

Overall, students found Morris to be a good teacher, but a few felt that he lacked enthusiasm, especially in the beginning of the course. Students wanted a clearer indication of what was to be taught written in the course syllabus. Morris should also have included one mid-term for academic reasons.

#### CHM 379H1S BIOMOLECULAR CHEMISTRY

Instructor(s): G.A. Woolley; D. Zamble

Enr: 27	Resp: 15							Retake: 73%
	1	2	3	4	5	6	7	Mean

##### Woolley:

Presents	0	0	0	6	60	26	6	5.3
Explains	0	0	6	20	40	26	6	5.1
Communicates	0	0	6	40	20	26	6	4.9
Teaching	0	0	0	13	53	26	6	5.3

##### Zamble:

Presents	0	0	7	0	50	35	7	5.4
Explains	0	0	0	6	46	40	6	5.5
Communicates	0	7	0	7	50	28	7	5.1
Teaching	0	0	6	0	40	46	6	5.5

##### Course:

Workload	0	0	7	42	50	0	0	4.4
Difficulty	0	0	0	64	21	14	0	4.5
Learn Exp	0	0	0	18	63	18	0	5.0

The lectures were clear, concise and well-organized. The lab component was very interesting because the material learned was very useful. Students appreciated having to work with only one, but continuously ongoing project throughout the year.

Generally, it was a beneficial course to take for students interested in research.

#### CHM 410H1F ANALYTICAL ENVIRONMENTAL CHEMISTRY

Instructor(s): S. Mabury

Enr: 12	Resp: 10							Retake: 88%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	20	40	30	10	5.3
Explains	0	0	0	10	20	70	0	5.6
Communicates	0	0	0	0	0	30	70	6.7
Teaching	0	0	0	0	20	40	40	6.2
Workload	0	0	0	10	40	0	50	5.9
Difficulty	0	0	0	40	20	20	20	5.2
Learn Exp	0	0	0	11	44	22	22	5.6

The students who responded all enjoyed this chemistry course. Although the course material was difficult, it provided a good opportunity for students to work with complicated techniques.

Mabury was well-liked by his students.

#### CHM 414H1F DEVELOPING TECHNIQUES IN ANALYTICAL CHEMISTRY

Instructor(s): D. Stone

Enr: 23	Resp: 27							Retake: 91%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	12	24	32	32	5.8
Explains	0	0	0	7	11	53	26	6.0
Communicates	0	0	0	4	12	32	52	6.3
Teaching	0	0	0	7	26	30	34	5.9
Workload	0	4	4	78	8	4	0	4.0
Difficulty	0	4	13	52	26	4	0	4.1
Learn Exp	0	0	0	45	20	25	10	5.0

Students found the course to be very organized. Students also found the material to be very interesting, and very accessible since online notes were available.

Stone was a good lecturer, showed enthusiasm for the material and had a good sense of humour.

#### CHM 415H1S ATMOSPHERIC CHEMISTRY

Instructor(s): D.J. Donaldson

Enr: 29	Resp: 19							Retake: 60%
	1	2	3	4	5	6	7	Mean
Presents	0	5	15	26	26	21	5	4.6
Explains	5	0	5	33	27	22	5	4.7
Communicates	0	0	0	21	21	36	21	5.6
Teaching	0	11	5	5	38	33	5	4.9
Workload	0	0	0	38	38	16	5	4.9
Difficulty	0	0	0	33	44	16	5	4.9
Learn Exp	0	7	7	46	15	23	0	4.4

Donaldson made the learning enjoyable and the material interesting. The online notes were helpful but they were sometimes unclear and updated very slowly. There were many problems for each problem set and they were often difficult.

#### CHM 416H1S SEPARATION SCIENCE

Instructor(s): D. Stone

Enr: 14	Resp: 9							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	33	44	11	9	5.0
Explains	0	0	0	0	55	33	11	5.6
Communicates	0	0	0	0	33	33	33	6.0
Teaching	0	0	0	0	55	22	22	5.7
Workload	0	0	11	66	22	0	0	4.1
Difficulty	0	0	12	75	12	0	0	4.0
Learn Exp	0	0	0	66	33	0	0	4.3

The course was interesting and the instructor showed great enthusi-

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asm. Students wanted more examples for numerical questions, and said assignments should have been explained earlier.

### CHM 427H1F STATISTICAL MECHANICS

Instructor(s): J. Schofield

Enr: 5	Resp: 5							Retake: 25%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	50	50	0	5.5
Explains	0	0	20	40	20	0	20	4.6
Communicates	0	0	0	0	60	20	20	5.6
Teaching	0	0	0	20	0	80	0	5.6
Workload	0	0	0	40	40	20	0	4.8
Difficulty	0	0	0	0	20	60	20	6.0
Learn Exp	0	0	25	50	0	0	25	4.5

### CHM 432H1F ORGANOMETALLIC CHEMISTRY

Instructor(s): J. Powell

Enr: 7	Resp: 7							Retake: 83%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	57	14	0	28	5.0
Explains	0	0	0	42	28	14	14	5.0
Communicates	0	0	0	28	28	0	42	5.6
Teaching	0	14	0	0	28	28	28	5.4
Workload	0	0	0	28	14	28	28	5.6
Difficulty	0	0	0	14	28	42	14	5.6
Learn Exp	0	0	0	50	0	25	25	5.2

Students found Powell to be a good lecturer. This course covered a lot of material, therefore it was challenging. Students also expressed confusion with regard to the test and assignments.

### CHM 434H1F SOLID STATE MATERIALS CHEMISTRY

Instructor(s): G. Ozin

Enr: 14	Resp 13:							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	45	36	18	5.7
Explains	0	0	0	0	22	22	55	6.3
Communicates	0	0	0	0	0	0	100	7.0
Teaching	0	0	0	0	9	54	36	6.3
Workload	0	0	7	30	38	7	15	4.9
Difficulty	0	0	7	61	23	7	0	4.3
Learn Exp	0	0	0	16	41	16	25	5.5

Students found Ozin to be a very good lecturer. His presentation of material was good and lectures were interesting. Students also liked the fact that the course material was fairly accessible.

### CHM 440H1F THE SYNTHESIS OF MODERN PHARMACEUTICAL AGENTS

Instructor(s): A. Yudin

Enr: 12	Resp: 12							Retake: 70%
	1	2	3	4	5	6	7	Mean
Presents	0	0	9	0	36	54	0	5.4
Explains	0	0	9	0	18	54	18	5.7
Communicates	0	0	0	0	9	63	27	6.2
Teaching	0	9	0	0	9	45	36	5.9
Workload	0	0	27	36	27	9	0	4.2
Difficulty	0	0	9	36	36	18	0	4.6
Learn Exp	0	0	0	16	0	66	16	5.8

### CHM 441H1F SPECTROSCOPIC ANALYSIS IN ORGANIC CHEMISTRY

Instructor(s): S. Skonieczny

Enr: 18	Resp: 18							Retake: 94%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	16	11	44	27	5.8
Explains	0	0	0	16	22	11	50	5.9

Communicates	0	0	0	11	11	33	44	6.1
Teaching	0	0	0	0	16	27	55	6.4
Workload	0	0	0	72	11	11	5	4.5
Difficulty	0	5	5	44	22	16	5	4.6
Learn Exp	0	0	0	7	30	38	23	5.8

Students found Skonieczny to be a good lecturer. The course was well-planned. Although the practical portion of the course was difficult, many students found it to be a great learning experience.

### CHM 443H1S PHYSICAL ORGANIC CHEMISTRY

Instructor(s): A. Dicks

Enr: 22	Resp: 24							Retake: 73%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	8	29	62	6.5
Explains	0	0	0	0	20	33	45	6.2
Communicates	0	0	0	0	20	41	37	6.2
Teaching	0	0	0	0	8	45	45	6.4
Workload	0	0	0	56	21	13	8	4.7
Difficulty	0	0	0	39	30	21	8	5.0
Learn Exp	0	0	0	35	11	29	23	5.4

The lecture notes were very helpful and the lectures were well-organized. Dicks was friendly and approachable.

Some students wished that part marks were given for assignments rather than just zero.

### CHM 447H1S BIO-ORGANIC CHEMISTRY

Instructor(s): D. Zamble

Enr: 31	Resp: 28							Retake: 61%
	1	2	3	4	5	6	7	Mean
Presents	0	3	0	28	42	10	14	5.0
Explains	0	0	7	17	32	28	14	5.2
Communicates	0	0	3	3	22	22	48	6.1
Teaching	0	0	0	17	21	39	21	5.6
Workload	0	0	0	40	44	11	3	4.8
Difficulty	0	0	0	33	33	25	7	5.1
Learn Exp	0	0	5	38	27	16	11	4.9

Students found Zamble to be very enthusiastic. Her uptempostyle created a good learning experience. However, a few students thought a slower pace explanation of chemistry principles may have been more effective. The recommended course textbook was not well-presented, but other recommended readings were helpful. This course was a valuable experience for some students.

