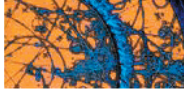# Physics and Astronomy Student Union

Introduction

The Physics & Astronomy Students' Union (PASU) represents all undergraduate students enrolled in PHY and AST courses. To find out more about PAS, drop by their office at MP 217 or visit them online at: **http://pasu.physics.utoronto.ca.**

PASU was awarded the Sanjeev Dewett Course Union of the Year Award for 2004/05. Congratulations!

Editor

AST 101H1F The Sun and Its Neighbour

Instructor(s): R. Abraham; B. Netterfield

Enr: 755   Resp: 158   Retake: 87%

	1	2	3	4	5	6	7	Mean
Abraham:								
Presents	0	0	0	5	24	36	33	6.0
Explains	0	1	0	5	20	38	34	6.0
Communicates	0	0	0	7	16	29	46	6.1
Teaching	0	0	0	5	22	36	35	6.0
Netterfield:								
Presents	0	0	0	4	25	44	25	5.9
Explains	0	0	0	2	31	37	27	5.9
Communicates	0	0	0	2	11	30	55	6.4
Teaching	0	0	0	4	20	39	35	6.1
Course:								
Workload	3	4	10	57	13	5	4	4.1
Difficulty	3	3	15	57	12	4	3	4.0
Learn Exp	0	0	2	31	27	16	21	5.2

The course was well-received. Abraham was enthusiastic and presented the material in an interesting and clear manner.

Netterfield was enthusiastic, helpful and very knowledgeable. He presented the course material with clarity and passion, which made the lectures both enjoyable and valuable.

Instructor(s): M. van Kerkwijk

Enr: 755   Resp: 130   Retake: 88%

	1	2	3	4	5	6	7	Mean
Presents	0	0	7	21	26	26	15	5.2
Explains	0	4	14	21	28	19	10	4.7
Communicates	0	1	8	18	28	20	21	5.2
Teaching	2	0	6	18	34	20	16	5.1
Workload	2	4	12	64	9	4	0	3.9
Difficulty	5	0	19	61	9	1	2	3.9
Learn Exp	1	0	3	35	23	16	20	5.1

Students felt that the material was taught too quickly but the demonstrations made the material easier to understand. The instructor spoke very enthusiastically, but spoke too softly at times.

AST 121H1S Origin and Evolution of the Universe

Instructor(s): H. Yee

Enr: 104   Resp: 33   Retake: 61%

	1	2	3	4	5	6	7	Mean
Presents	0	3	3	27	39	24	3	4.9
Explains	0	6	6	36	33	18	0	4.5
Communicates	0	0	9	21	33	27	9	5.1
Teaching	0	3	15	18	48	12	3	4.6
Workload	0	6	21	65	6	0	0	3.7
Difficulty	0	0	3	54	16	12	12	4.8
Learn Exp	3	10	7	42	17	17	0	4.1

Yee was enthusiastic about the material. Most found the course to be interesting and overall, good. Others thought that Yee was disorganized and had poor communication skills. Students commented that Yee did not make it clear to them what they should expect on the midterm. The test marking was also found to be harsh. A few found the textbook to be too advanced for this course.

AST 201H1S Stars and Galaxies

Instructor(s): R. Abraham; B. Netterfield

Enr: 934   Resp: 109   Retake: 84%

	1	2	3	4	5	6	7	Mean
Abraham:								
Presents	0	0	0	6	17	36	38	6.0
Explains	0	0	2	4	25	29	37	5.9
Communicates	0	0	0	5	9	31	52	6.3
Teaching	0	0	2	4	19	33	39	6.0
Netterfield:								
Presents	0	0	3	5	23	35	34	5.9
Explains	0	0	2	4	22	33	35	5.9
Communicates	0	0	1	2	9	30	58	6.4
Teaching	0	0	0	5	17	39	34	6.0
Course:								
Workload	1	5	14	53	13	8	1	4.0
Difficulty	2	5	9	56	12	11	1	4.1
Learn Exp	0	0	1	28	26	23	20	5.3

This course was very interesting. Some students felt that there were too many students in the class though. Both Abraham and Netterfield were very good instructors who were praised for their enthusiasm and knowledge. Lectures were also well-presented.

Instructor(s): M. van Kerkwijk

Enr: 934   Resp: 108   Retake: 83%

	1	2	3	4	5	6	7	Mean
Presents	2	0	7	21	25	22	19	5.1
Explains	2	1	8	27	21	22	15	4.9
Communicates	3	0	4	21	22	23	26	5.3
Teaching	2	0	2	23	24	29	16	5.0
Workload	2	4	16	52	10	10	3	4.1
Difficulty	1	6	14	51	13	10	2	4.1
Learn Exp	1	0	2	32	22	22	17	5.1

Students generally liked this course and the material. Many students liked the online quizzes and the textbook. A few students commented that van Kerkwijk was a little difficult to understand at times.

AST 210H1F The History and Nature of Astronomical Discovery

Instructor(s): C. Clement

Enr: 189   Resp: 57   Retake: 81%

	1	2	3	4	5	6	7	Mean
Presents	5	0	10	16	26	30	10	4.9
Explains	3	1	12	16	36	14	14	4.8
Communicates	0	1	3	14	26	33	19	5.5
Teaching	3	1	1	16	32	29	14	5.2
Workload	5	1	15	64	3	3	5	3.9
Difficulty	3	3	12	54	15	3	7	4.1
Learn Exp	2	0	4	40	24	20	8	4.8

The tests were found to be difficult. Many students wished that Clement would lecture slower. Other than that, she was a knowledgeable and enjoyable instructor.

AST 210H1S The History and Nature of Astronomical Discovery

Instructor(s): C. Clement

Enr: 190   Resp: 61   Retake: 83%

	1	2	3	4	5	6	7	Mean
Presents	3	1	3	10	36	30	15	5.2
Explains	3	0	3	13	33	28	18	5.3

	1	2	3	4	5	6	7	Mean
Communicates	1	0	5	8	25	33	26	5.6
Teaching	1	1	0	6	21	41	26	5.8
Workload	3	6	23	50	11	1	1	3.7
Difficulty	1	3	28	45	13	5	1	3.9
Learn Exp	2	0	0	34	28	26	8	5.0

Students felt Clement was very enthusiastic and organized. They were quite pleased with the course, but some thought the pace was a little slow.

AST 221H1F   Solar System and Stellar Astronomy

Instructor(s): Y. Wu

Enr: 47   Resp: 27   Retake: 76%

	1	2	3	4	5	6	7	Mean
Presents	0	0	3	25	25	18	25	5.4
Explains	0	3	18	22	29	18	7	4.6
Communicates	0	0	7	3	22	37	29	5.8
Teaching	0	3	7	22	25	22	18	5.1
Workload	0	0	0	44	25	18	11	5.0
Difficulty	0	0	0	44	25	18	11	5.0
Learn Exp	0	0	8	17	30	30	13	5.2

Students felt that there should have been more theory and examples/applications. Most felt that the material was well-organized and having the lecture notes online was very useful. Many felt that the assignments and tests should have applied to lecture material more. A few students thought that Wu should have been more approachable outside of class.

AST 222H1S   Galactic and Extragalactic Astronomy

Instructor(s): J. Dubinski

Enr: 32   Resp: 21   Retake: 80%

	1	2	3	4	5	6	7	Mean
Presents	0	0	9	38	19	28	4	4.8
Explains	0	0	9	4	47	33	4	5.2
Communicates	0	0	4	4	4	42	38	5.9
Teaching	0	0	4	9	28	33	23	5.6
Workload	0	0	0	71	23	4	0	4.3
Difficulty	0	0	4	42	47	4	0	4.5
Learn Exp	0	0	0	20	25	45	10	5.4

Students generally liked Dubinski but felt his slides were not organized. Students liked his use of videos, images and examples.

AST 251H1F   Life on Other Worlds

Instructor(s): C. Matzner

Enr: 99   Resp: 69   Retake: 72%

	1	2	3	4	5	6	7	Mean
Presents	0	0	4	13	23	41	16	5.5
Explains	0	0	4	17	28	38	10	5.3
Communicates	0	0	1	1	29	31	35	6.0
Teaching	0	0	1	8	28	41	19	5.7
Workload	1	4	10	72	10	1	0	3.9
Difficulty	1	4	11	55	17	8	0	4.1
Learn Exp	0	1	5	44	20	22	5	4.7

Most students enjoyed this course and felt that the topics were interesting. Students also felt that Matzner was energetic, well-organized, and attended to students' questions. Common complaints were that there should have been a break during the 2-hour lecture and that the test did not reflect the material taught in class.

AST 320H1S   Introduction to Astrophysics

Instructor(s): M. van Kerkwijk

Enr: 18   Resp: 12   Retake: 66%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	45	54	0	0	4.5
Explains	0	0	18	36	36	9	0	4.4
Communicates	0	0	0	0	33	50	16	5.8
Teaching	0	0	0	27	54	18	0	4.9
Workload	0	0	0	50	25	25	0	4.8
Difficulty	0	0	0	8	50	33	8	5.4
Learn Exp	0	0	18	36	36	9	0	4.4

Many students found the course very difficult and would have liked more examples. However, the course handouts were useful. Despite this, students felt that van Kerkwijk was approachable for extra help.

AST 325H1F   Introduction to Practical Astronomy

Instructor(s): S. Mochnacki

Enr: 8   Resp: 6   Retake: 66%

	1	2	3	4	5	6	7	Mean
Presents	0	16	0	50	33	0	0	4.0
Explains	0	0	16	33	33	16	0	4.5
Communicates	0	0	0	0	16	50	33	6.2
Teaching	0	0	0	60	0	40	0	4.8
Workload	0	0	0	33	50	16	0	4.8
Difficulty	0	0	0	66	16	16	0	4.5
Learn Exp	0	0	0	40	40	0	20	5.0

Mochnacki was extremely enthusiastic, very interested in the course material and frequently available for individual consultation to assist students with problems relating to the material. Although his lectures were slightly disorganized, overall, students enjoyed the course.

AST 326Y1Y   Practical Astronomy

Instructor(s): S. Mochnacki

Enr: 11   Resp: 11   Retake: 81%

	1	2	3	4	5	6	7	Mean
Presents	0	18	36	27	18	0	0	3.5
Explains	0	8	45	8	36	0	0	3.7
Communicates	0	0	0	27	18	18	36	5.6
Teaching	0	0	9	18	45	27	0	4.9
Workload	0	0	18	0	27	18	36	5.5
Difficulty	0	0	18	45	9	8	9	4.5
Learn Exp	0	0	0	20	20	60	0	5.4

The most common complaint students had was that the class was disorganized and often the notes were illegible. The assignments were very lengthy but also very rewarding when completed.

AST 420H1S   Topical Astrophysics

Instructor(s): S. Rucinski

Enr: 7   Resp: 7   Retake: 83%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	33	33	33	6.0
Explains	0	0	0	0	16	50	33	6.2
Communicates	0	0	0	0	0	50	50	6.5
Teaching	0	0	0	0	16	50	33	6.2
Workload	0	0	16	33	50	0	0	4.3
Difficulty	0	0	0	66	16	16	0	4.5
Learn Exp	0	0	0	25	0	50	25	5.8

Rucinski was a very good instructor. Students enjoyed the set up of the class and learned a lot about general astronomy.

PHY 100H1F   The Magic of Physics

Instructor(s): V. Deyirmenjian

Enr: 142   Resp: 79   Retake: 85%

	1	2	3	4	5	6	7	Mean
Presents	1	0	1	7	20	45	23	5.8
Explains	0	1	0	3	19	39	33	6.0
Communicates	0	0	0	0	6	16	76	6.7
Teaching	0	0	1	1	9	53	35	6.2
Workload	0	1	19	66	8	2	1	4.0
Difficulty	2	2	10	57	12	11	2	4.2
Learn Exp	0	1	4	21	29	29	13	5.2

Most students felt that Deyirmenjian was very enthusiastic, clear, approachable and funny. Some students felt that the lecture material did not reflect the assignments and that the required textbook was not clear.

PHY 110Y1Y Basic Physics

Instructor(s): B. Logan

Enr: 154   Resp: 73   Retake: 30%

	1	2	3	4	5	6	7	Mean
Presents	4	5	23	32	23	9	1	4.0
Explains	4	1	15	27	26	12	5	4.2
Communicates	0	2	2	15	33	33	12	5.3
Teaching	0	1	13	21	32	21	8	4.8
Workload	0	5	10	67	8	8	0	4.0
Difficulty	0	5	5	54	20	12	1	4.3
Learn Exp	1	3	13	39	21	17	1	4.4

Logan was very enthusiastic about the material, he also tended to students' questions.

PHY 138Y1Y Physics for the Life Sciences I

Instructor(s): J. Harlow

Enr: 996   Resp: 520   Retake: 28%

	1	2	3	4	5	6	7	Mean
Presents	0	0	1	12	29	36	19	5.6
Explains	0	1	2	12	29	35	18	5.5
Communicates	0	0	0	7	23	36	31	5.9
Teaching	0	0	1	11	29	36	20	5.6
Workload	0	0	0	6	22	30	39	6.0
Difficulty	0	0	0	17	28	32	19	5.5
Learn Exp	5	5	13	37	22	11	3	4.2

Students enjoyed Harlow's lectures since he was enthusiastic, provided detailed notes and explained concepts clearly. A common complaint was that the workload was much too high and that the tests did not reflect the material covered in lectures. Many felt that the labs lacked organization and were unrelated to the course.

Instructor(s): W. Trischuk; A. Key

Enr: 892   Resp: 286   Retake: 31%

	1	2	3	4	5	6	7	Mean
Trischuk:								
Presents	5	7	20	27	23	10	4	4.1
Explains	6	7	24	27	22	7	5	3.9
Communicates	7	6	19	26	23	11	6	4.1
Teaching	5	8	18	30	23	8	5	4.0
Key:								
Presents	2	1	9	24	33	18	8	4.7
Explains	2	4	12	25	32	14	7	4.5
Communicates	1	1	1	13	31	30	21	5.5
Teaching	1	2	5	22	32	24	10	5.0
Course:								
Workload	0	0	1	18	33	27	19	5.4
Difficulty	0	0	1	18	34	26	17	5.4
Learn Exp	2	5	14	47	19	6	3	4.1

Students felt that the slides were difficult to read due to the size, and colour of the font. It would have been beneficial if the lecture slides were available before the lectures. Students suggested that the lectures should have been more organized and have more problem sets.

Most felt that Key's lectures were generally well taught, organized and amusing at times. Key brought much needed humour to the class. Time that should have been dedicated to problems was often used to talk about the history of physics. Although interesting, it left students unprepared for the somewhat difficult, and sometimes long problem sets.

PHY 140Y1Y Foundations of Physics

Instructor(s): S. Morris

Enr: 130   Resp: 68   Retake: 90%

	1	2	3	4	5	6	7	Mean
Presents	0	0	2	8	27	30	29	5.8
Explains	0	0	4	11	25	26	32	5.7
Communicates	0	0	0	1	5	8	83	6.8
Teaching	0	0	0	5	10	38	44	6.2
Workload	0	0	0	21	32	30	15	5.4
Difficulty	1	0	1	32	37	22	4	4.9
Learn Exp	1	0	0	9	20	46	22	5.7

Morris was an engaging, animated, enthusiastic and informative lecturer. Many found the pizza lunches very enjoyable. Students also enjoyed the online lecture notes, although some felt they were unclear.

Instructor(s): A. Steinberg

Enr: 114   Resp: 63   Retake: 70%

	1	2	3	4	5	6	7	Mean
Presents	3	4	11	24	24	18	13	4.7
Explains	4	6	16	27	19	19	6	4.3
Communicates	0	3	1	17	25	25	25	5.5
Teaching	3	3	14	16	27	19	16	4.8
Workload	0	0	0	16	25	30	27	5.7
Difficulty	0	0	0	9	30	30	29	5.8
Learn Exp	0	4	8	14	32	34	8	5.1

The course material was difficult. Steinberg was enthusiastic about the material and approachable. Many thought his expectations were too high. They felt that the mathematics presented was beyond their level of understanding. The assignments and term test were difficult. More examples would have been nice.

PHY 238Y1Y Physics for the Life Sciences II

Instructor(s): R. Serbanescu

Enr: 39   Resp: 24   Retake: 90%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	12	50	37	6.2
Explains	0	0	0	0	16	50	33	6.2
Communicates	4	0	0	4	12	45	33	5.9
Teaching	0	0	0	0	16	41	41	6.2
Workload	0	0	21	69	4	4	0	3.9
Difficulty	0	0	13	65	13	4	4	4.2
Learn Exp	0	0	0	10	26	52	10	5.6

Serbanescu was "keen" on answering questions. Some wished that he taught the second half of the course. Some mentioned that the applications of the course were quite useful and applicable to other courses.

Instructor(s): P. Kushner

Enr: 35   Resp: 26   Retake: 87%

	1	2	3	4	5	6	7	Mean
Presents	3	0	19	23	26	26	0	4.5
Explains	3	3	7	19	34	30	0	4.7
Communicates	3	0	3	19	15	42	15	5.3
Teaching	3	0	7	19	38	23	7	4.9
Workload	0	0	16	56	20	8	0	4.2
Difficulty	0	0	8	64	20	8	0	4.3
Learn Exp	0	0	0	12	43	25	18	5.5

The course as a whole, was good - interactive and had a good balance between life sciences and physics. Many wondered if there was a 3rd year course similar to this one. Kushner did a good job for his first time teaching the course. He was a little disorganized at times, but many thought that with more experience, he would be a very good instructor.

PHY 251H1S Electricity and Magnetism

Instructor(s): P. Krieger

Enr: 100   Resp: 48   Retake: 74%

	1	2	3	4	5	6	7	Mean
Presents	0	0	4	12	19	46	17	5.6
Explains	2	4	10	23	19	25	14	4.9
Communicates	2	0	12	31	21	23	8	4.7
Teaching	0	0	4	8	27	36	23	5.70
Workload	0	2	4	50	25	8	10	4.6
Difficulty	2	0	12	39	25	14	6	4.5
Learn Exp	2	0	7	31	24	24	9	4.9

Krieger was very good. He was approachable, helpful and gave clear explanations. His lectures were efficient and to the point. A few thought the lectures were a little dull. Krieger followed the textbook closely, which some appreciated and others did not. The textbook was excellent. Overall, Krieger and the course were good.

PHY 252H1S Thermal Physics

Instructor(s): A. Peet

Enr: 93   Resp: 39   Retake: 39%

	1	2	3	4	5	6	7	Mean
Presents	2	0	0	2	23	41	30	5.9
Explains	2	5	12	12	38	23	5	4.7
Communicates	5	0	5	15	28	23	23	5.2
Teaching	12	2	15	28	12	17	10	4.2
Workload	0	2	2	30	12	38	12	5.2
Difficulty	0	0	0	12	17	35	33	5.9
Learn Exp	5	8	14	31	22	11	5	4.1

Peet had organized lectures but often went off topic. She allowed time for questions in class and most students liked the textbook and her online class notes. However, some complained that she was intimidating when students asked questions.

PHY 255H1F Oscillations and Waves

Instructor(s): R. Marjoribanks

Enr: 86   Resp: 55   Retake: 70%

	1	2	3	4	5	6	7	Mean
Presents	0	0	18	18	18	24	18	5.1
Explains	0	0	7	13	18	33	26	5.6
Communicates	0	0	0	13	18	33	33	5.9
Teaching	0	1	3	19	30	32	11	5.2
Workload	0	0	1	36	44	13	3	4.8
Difficulty	0	0	5	34	34	23	1	4.8
Learn Exp	0	2	6	24	24	35	6	5.0

PHY 305H1F Electronics Lab I

Instructor(s): B. Milkereit

Enr: 14   Resp: 10   Retake: 80%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	22	55	22	0	5.0
Explains	0	10	0	10	50	30	0	4.9
Communicates	0	0	0	30	50	10	10	5.0
Teaching	0	0	0	10	30	50	10	5.6
Workload	0	0	0	30	30	40	0	5.1
Difficulty	0	0	10	60	30	0	0	4.2
Learn Exp	0	0	0	12	25	37	25	5.8

Students felt that the course was well-organized but more in-lab time would have been helpful.

PHY 307H1F/407H1F Introduction to Computational Physics

Instructor(s): B. Holdom

Enr: 41   Resp: 36   Retake: 74%

	1	2	3	4	5	6	7	Mean
Presents	2	0	8	19	30	27	11	5.0
Explains	2	2	2	22	38	19	11	4.9
Communicates	2	2	8	14	34	28	8	4.9
Teaching	0	2	5	5	38	38	8	5.3
Workload	0	2	36	52	8	0	0	3.7
Difficulty	2	5	22	47	19	2	0	3.8
Learn Exp	7	3	0	26	34	11	15	4.7

Holdom was available and approachable for help. The lectures were somewhat slow. More feedback about marks would have been appreciated.

PHY 315H1S Radiation in Planetary Atmospheres

Instructor(s): K. Strong

Enr: 19   Resp: 12   Retake: 58%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	25	50	25	6.0
Explains	0	0	8	25	33	25	8	5.0
Communicates	0	0	0	8	41	16	33	5.8
Teaching	0	0	0	8	33	33	25	5.8
Workload	0	8	0	41	33	16	0	4.5
Difficulty	0	0	0	50	8	25	16	5.1
Learn Exp	0	0	8	33	25	16	16	5.0

Students generally liked Strong and the course material. Some felt that a textbook would have been useful. Many students enjoyed the online notes but felt they were hard to follow in lecture.

PHY 342H1S Current Questions in Mathematics and Science

Instructor(s): A. Steinberg

Enr: 5   Resp: 5   Retake: 80%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	80	20	0	5.2
Explains	0	0	0	0	60	40	0	5.4
Communicates	0	0	0	0	40	20	40	6.0
Teaching	0	0	0	0	60	40	0	5.4
Workload	0	0	0	60	20	20	0	4.6
Difficulty	0	0	20	60	20	0	0	4.0
Learn Exp	0	0	0	0	100	0	0	5.0

PHY 346H1S Intermediate Biophysics

Instructor(s): F. Skinner; A. Barzada

Enr: 16   Resp: 10   Retake: 80%

	1	2	3	4	5	6	7	Mean
Skinner:								
Presents	0	0	0	11	55	11	22	5.4
Explains	0	0	0	0	30	40	30	6.0
Communicates	0	0	0	0	40	30	30	5.9
Teaching	0	0	0	0	50	40	10	5.6
Barzada:								
Presents	0	0	0	44	33	22	0	4.8
Explains	0	0	0	55	33	11	0	4.6
Communicates	0	0	11	33	55	0	0	4.4
Teaching	0	0	0	44	33	11	11	4.9
Course:								
Workload	0	0	20	50	30	0	0	4.1
Difficulty	0	0	20	50	30	0	0	4.1
Learn Exp	0	0	0	60	10	10	20	4.9

PHY 351H1S Classical Mechanics

Instructor(s): T. Shepherd

Enr: 71   Resp: 40   Retake: 64%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	15	30	33	20	5.6
Explains	0	7	2	33	35	15	5	4.6
Communicates	0	2	12	12	41	20	10	4.9
Teaching	0	2	2	20	33	7	39	5.2
Workload	0	0	0	20	35	41	2	5.3
Difficulty	0	0	0	12	45	25	19	5.5
Learn Exp	0	6	6	20	17	27	20	5.1

Students felt that the course covered too much material, too quickly. Many students felt that the material was very difficult and would have liked more examples.

PHY 353H1S Electromagnetic Waves

Instructor(s): D. Jones

Enr: 40   Resp: 32   Retake: 79%

	1	2	3	4	5	6	7	Mean
Presents	0	0	3	6	28	31	31	5.8
Explains	0	3	0	9	21	53	12	5.6
Communicates	0	0	0	3	21	31	43	6.2
Teaching	0	3	0	3	25	46	21	5.8
Workload	3	3	0	46	34	9	3	4.5
Difficulty	3	0	6	53	18	12	6	4.5
Learn Exp	0	3	0	22	22	37	14	5.3

Jones showed a lot of enthusiasm. He cared about the students; he wanted them to have a good understanding of the material and accessed it through midterm evaluations. He also made good use of examples which helped understand the difficult material. Many found the midterm difficult and the marking very strict.

PHY 355H1F Quantum Mechanics I

Instructor(s): J. Sipe

Enr: 117   Resp: 95   Retake: 74%

	1	2	3	4	5	6	7	Mean
Presents	0	0	1	3	24	33	37	6.0
Explains	0	2	5	10	20	34	27	5.6
Communicates	0	0	0	0	2	12	84	6.8
Teaching	0	0	1	4	12	42	39	6.1
Workload	1	2	5	20	29	30	11	5.1
Difficulty	1	0	0	4	24	41	27	5.9
Learn Exp	2	0	1	19	27	26	22	5.4

The majority of students were pleased with the lectures, as they felt that Sipe was extremely enthusiastic, very knowledgeable and presented the material in a clear and organized manner. A common complaint was that the quizzes were much too difficult and long. Students felt that problem sets, instead of quizzes, would have been beneficial. Although most felt that the material was difficult, some considered Sipe to be the best lecturer that they've ever had.

PHY 357H1S Nuclear and Particle Physics

Instructor(s): B. Orr

Enr: 15   Resp: 12   Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	8	16	41	33	6.0
Explains	0	0	0	16	33	25	25	5.6
Communicates	0	0	0	8	8	16	66	6.4
Teaching	0	0	0	0	8	50	41	6.3
Workload	0	0	0	58	33	8	0	4.5
Difficulty	0	0	0	33	50	16	0	4.8
Learn Exp	0	0	0	0	33	55	11	5.8

Students felt that the lectures were very interesting and extremely well taught. Having lecture notes online allowed students to pay more atten-tion to what was said in lectures instead of always reading off the board.

PHY 358H1S Atoms, Molecules and Solids

Instructor(s): A. Griffin; B. Stoicheff

Enr: 41   Resp: 34   Retake: 50%

	1	2	3	4	5	6	7	Mean
Griffin:								
Presents	0	0	11	32	38	11	5	4.7
Explains	0	0	21	15	37	18	6	4.7
Communicates	0	0	5	2	20	47	23	5.8
Teaching	0	0	2	29	35	11	20	5.2
Stoicheff:								
Presents	8	8	26	32	20	0	2	3.6
Explains	6	9	34	12	34	3	0	3.7
Communicates	8	5	8	23	29	11	11	4.4
Teaching	6	8	15	30	15	9	6	3.8
Course:								
Workload	0	0	0	64	23	2	8	4.6
Difficulty	0	0	0	17	44	26	11	5.3
Learn Exp	0	3	13	44	31	3	3	4.3

Some felt that the midterm did not reflect the material covered in the course. The tutorial section covered material that was not part of the course. Most wanted problem set solutions to be posted on the net.

Some students felt that Stoicheff was out of practice in teaching and that he needed to present his material in a more organized manner.

PHY 359H1S Physics of the Earth

Instructor(s): J. Mitrovica

Enr: 19   Resp: 16   Retake: 87%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	6	12	25	56	6.3
Explains	0	0	0	6	12	18	62	6.4
Communicates	0	0	0	0	6	18	75	6.7
Teaching	0	0	0	0	6	20	73	6.7
Workload	0	0	6	53	23	13	0	4.5
Difficulty	0	0	13	46	20	20	0	4.5
Learn Exp	0	0	0	6	18	56	18	5.9

Students felt that Mitrovica was an excellent instructor who made the lectures very interesting. He was always available outside of class to help students on assignments.

PHY 409H1S Quantum Methods Using Computer Algebra

Instructor(s): P. Savaria

Enr: 18   Resp: 8   Retake: 57%

	1	2	3	4	5	6	7	Mean
Presents	0	12	25	12	37	12	0	4.1
Explains	0	12	50	12	12	12	0	3.6
Communicates	0	0	12	0	37	37	12	5.4
Teaching	0	12	0	37	37	0	12	4.5
Workload	0	0	0	25	25	12	37	5.6
Difficulty	0	0	0	37	50	0	12	4.9
Learn Exp	0	0	42	28	14	14	0	4.0

Savaria was very nice and approachable. He enjoyed speaking with students. The assignments were lengthy and vague. Expectations for the assignments were not clearly communicated. Examples would have helped a lot. The workload was found to be really high. Overall, the course was found to be challenging.

PHY 457H1F Quantum Mechanics II

Instructor(s): V. Deyirmenjiam

Enr: 42   Resp: 37   Retake: 82%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	2	11	45	40	6.2
Explains	0	0	0	2	20	38	38	6.1
Communicates	0	0	0	0	0	17	82	6.8

	1	2	3	4	5	6	7	Mean
Teaching	0	0	0	2	11	34	51	6.3
Workload	0	2	8	58	23	5	0	4.2
Difficulty	0	2	17	44	17	14	2	4.3
Learn Exp	0	3	6	12	32	32	12	5.2

Deyirmenjian was described as an excellent teacher who was very enthusiastic, communicated the material very clearly and was always available to help. Students appreciated his dedication and caring nature - he always make sure they understood the material and did whatever it took to help them understand. He displayed an excellent understanding of the material and kept classes interesting.

PHY 459H1F Macroscopic Physics

Instructor(s): R. Peltier

Enr: 12　　　　　Resp: 8　　　　　Retake: 25%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	50	25	12	12	4.9
Explains	12	0	25	37	0	12	12	4.0
Communicates	0	0	0	0	25	50	25	6.0
Teaching	0	0	0	37	25	25	12	5.1
Workload	0	0	0	25	25	25	25	5.5
Difficulty	0	0	0	12	0	25	62	6.4
Learn Exp	0	0	37	25	25	12	0	4.1

Students felt that the course material was very difficult to understand. However, the problem sets were fair and after class help was always available.

PHY 460H1S Nonlinear Physics

Instructor(s): T. Shepherd

Enr: 18　　　　　Resp: 13　　　　　Retake: 30%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	7	15	46	30	6.0
Explains	0	0	25	8	50	16	0	4.6
Communicates	0	0	0	7	23	69	0	5.6
Teaching	0	0	0	7	30	46	15	5.7
Workload	0	0	0	38	15	46	0	5.1
Difficulty	0	0	0	7	15	30	46	6.2
Learn Exp	0	15	7	30	46	0	0	4.1

Shepherd was a good instructor. He was knowledgeable, approachable and understanding. Many students felt lost throughout the course. Although the pace of lectures was found to be too quick, his notes were concise. A course textbook would have helped.

PHY 483H1F Relativity Theory I

Instructor(s): A. Peet

Enr: 28　　　　　Resp: 16　　　　　Retake: 43%

	1	2	3	4	5	6	7	Mean
Presents	0	0	6	25	31	18	18	5.2
Explains	12	25	18	12	18	12	0	3.4
Communicates	0	0	0	18	18	18	43	5.9
Teaching	0	12	18	25	12	18	12	4.4
Workload	0	0	0	6	18	25	50	6.2
Difficulty	0	0	0	0	6	33	60	6.5
Learn Exp	0	7	23	30	23	0	15	4.3

Assignments were far too difficult and lengthy. Basics should have been made clearer before obscure aspects of the course material were tackled. Many students remarked that they spent exponentially more time working on this course than all others.

PHY 484H1S Relativity Theory II

Instructor(s): C. Dyer

Enr: 6　　　　　Resp: 6　　　　　Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	16	16	33	16	16	5.0
Explains	0	0	0	0	66	0	33	5.7

	1	2	3	4	5	6	7	Mean
Communicates	0	0	0	0	0	50	50	6.5
Teaching	0	0	0	0	50	33	16	5.7
Workload	20	0	40	40	0	0	0	3.0
Difficulty	0	0	0	20	20	20	40	5.8
Learn Exp	0	0	0	0	25	0	75	6.5

Students liked the course material and felt Dyer was good at presenting it in an effective manner.

PHY 485H1F Modern Optics

Instructor(s): R. Marjoribanks

Enr: 18　　　　　Resp: 14　　　　　Retake: 61%

	1	2	3	4	5	6	7	Mean
Presents	0	7	14	28	14	28	7	4.6
Explains	0	7	7	21	0	50	14	5.2
Communicates	0	0	0	21	21	50	7	5.4
Teaching	0	0	15	30	7	30	15	5.0
Workload	0	0	7	14	35	21	21	5.4
Difficulty	0	0	14	28	7	28	21	5.1
Learn Exp	0	0	18	18	36	18	9	4.8

The instructor made good use of in-class demonstrations and videos. The problem sets were poorly worded and vague. Marjoribanks was sometimes hard to find outside class hours. The course taught at a level geared more towards the graduate students. It would have been better to have been taught more modern/quantum optics rather than focussing on classical optics. Tutorials would have been beneficial, especially for the undergraduates. A few did find the course enjoyable and well taught.

PHY 491H1S Current Interpretations of Quantum Mechanics

Instructor(s): J. Sipe

Enr: 10　　　　　Resp: 7　　　　　Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	14	57	28	6.1
Explains	0	0	0	0	42	42	14	5.7
Communicates	0	0	0	0	0	28	71	6.7
Teaching	0	0	0	0	14	42	42	6.3
Workload	0	0	0	28	28	28	14	5.3
Difficulty	0	0	0	14	28	42	14	5.6
Learn Exp	0	0	0	14	14	42	28	5.9

Sipe was a very good and enthusiastic instructor. The course was found to be fascinating yet challenging. It would have been nice to have course notes for the entire course. For sections without course notes, the instructor went through the overhead slides too quickly and the references given were hard to decipher.

PHY 489H1F Introduction to High Energy Physics

Instructor(s): W. Trischuk

Enr: 14　　　　　Resp: 10　　　　　Retake: 77%

	1	2	3	4	5	6	7	Mean
Presents	0	10	10	0	40	40	0	4.9
Explains	0	10	10	10	60	0	10	4.6
Communicates	0	0	0	20	30	20	10	5.2
Teaching	0	10	0	20	10	60	0	5.1
Workload	0	0	0	66	22	11	0	4.4
Difficulty	0	0	0	55	33	11	0	4.6
Learn Exp	0	12	0	25	25	37	0	4.8

Students suggested that the course should have been taught at a slower pace and should have covered basic concepts more thoroughly.