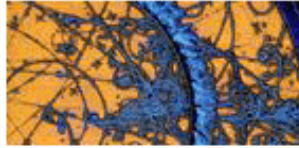# Physics and Astronomy Student Union

Introduction

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

Editor

AST 101H1F The Sun and Its Neighbours

Instructor(s): M. Reid; B. Mochnacki

Enr: 1201		Resp: 475					Retake: 86%	
	1	2	3	4	5	6	7	Mean
Reid:								
Presents	0	0	0	1	5	25	67	6.6
Explains	0	0	0	1	7	26	64	6.5
Communicates	0	0	0	1	3	16	78	6.7
Teaching	0	0	0	0	5	18	74	6.6
Mochnacki:								
Presents	6	4	14	22	23	16	12	4.5
Explains	7	7	12	28	23	12	7	4.2
Communicates	8	5	9	24	23	17	10	4.5
Teaching	6	4	8	26	22	17	14	4.6
Course:								
Workload	0	4	11	55	16	7	4	4.2
Difficulty	1	3	14	57	13	5	4	4.1
Learn Exp	1	0	3	24	22	23	25	5.4

Reid was described as an excellent instructor who taught with enthusiasm and humour. He made good use of examples to convey the material being taught.

Students felt that Mochnacki went too fast and was often unclear.

The course made many students enjoy astronomy. There were mixed feelings about the tutorials and online assignments. Some also felt that there was too much reading.

AST 121H1S Origin and Evolution of the Universe

Instructor(s): R. Abraham

Enr: 144		Resp: 45					Retake: 86%	
	1	2	3	4	5	6	7	Mean
Presents	4	0	2	4	15	36	36	5.8
Explains	2	2	2	4	13	47	27	5.8
Communicates	2	0	0	0	6	18	72	6.5
Teaching	2	0	0	0	15	36	45	6.2
Workload	9	13	20	45	6	0	4	3.5
Difficulty	9	2	11	36	25	9	6	4.2
Learn Exp	2	0	0	13	23	31	28	5.7

Abraham was very well-liked by most students, who found him to be energetic, engaging and very knowledgeable. His enthusiasm during lectures contributed greatly to the atmosphere in the class.

The students found the course material to be interesting and felt the course itself was a valuable learning experience. Some felt that the material on the tests was not indicative of the material taught in class.

AST 201H1S Stars and Galaxies

Instructor(s): S. Mochnacki; M. Reid

Enr: 1164		Resp: 224					Retake: 76%	
	1	2	3	4	5	6	7	Mean
Mochnacki:								
Presents	5	2	8	23	20	21	18	4.9
Explains	6	4	7	21	29	17	12	4.7
Communicates	4	6	5	17	30	16	19	4.9
Teaching	6	2	5	18	32	16	18	4.9
Reid:								
Presents	0	0	0	9	12	33	42	6.1
Explains	0	0	1	4	12	30	49	6.2
Communicates	0	0	0	2	12	19	64	6.4
Teaching	0	0	0	3	8	27	59	6.4
Course:								
Workload	0	5	10	59	17	2	2	4.1
Difficulty	1	2	10	57	17	5	5	4.2
Learn Exp	2	0	2	31	26	18	17	5.0

Mochnacki lectured dryly. He explained concepts in a very scientific manner, making it more difficult for some students to understand the material. Some said his instructions were mainly based on the textbook, which made his lectures a bit boring and monotonous. Some also commented that he was unclear with his explanations. Although he was not very enthusiastic in his teaching, he was clearly knowledgeable about the material.

Reid was an exceptionally effective instructor to many students. He was not only very humourous and friendly, but was also good at simplifying concepts. He addressed questions clearly.

The material was interesting. Many enjoyed drawing diagrams, having audio visuals of galaxies and stars, and doing the assignments. Some thought that the mid term test was unfairly difficult, while others thought that it measured their knowledge of astronomy adequately. A few thought that the tutorials and Blackboard forum were useful, and the observatory component was interesting. Students experience was positive overall.

AST 210H1F Great Moments in Astronomy

Instructor(s): S. Mochnacki

Enr: 245		Resp: 99					Retake: 76%	
	1	2	3	4	5	6	7	Mean
Presents	5	5	2	20	40	21	4	4.7
Explains	6	5	6	16	42	19	2	4.5
Communicates	5	4	6	15	34	25	8	4.8
Teaching	4	5	3	16	31	34	4	4.9
Workload	1	3	17	58	12	3	3	4.0
Difficulty	0	6	15	60	11	3	2	4.0
Learn Exp	9	1	9	41	23	10	4	4.2

Of the students that responded with written comments, most described Mochnacki as being somewhat disorganized and unclear in explanations.

Students found the tests too long to complete within the given time, but most found them fair. Quizzes and use of the iclicker were helpful.

AST 222H1S Galaxies and Cosmology

Instructor(s): V. Dursi

Enr: 23		Resp: 18					Retake: 85%	
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	22	44	33	6.1
Explains	0	0	0	22	22	44	11	5.4
Communicates	0	0	0	0	22	55	22	6.0
Teaching	0	0	0	0	11	33	55	6.4
Workload	0	0	0	38	33	27	0	4.9
Difficulty	0	0	5	27	27	33	5	5.1
Learn Exp	0	0	0	14	14	42	28	5.9

Dursi was well-liked by many students who felt that he taught a complex course with great enthusiasm. Many liked how approachable and helpful he was.

The course was well-liked in spite of a few complaints about the length

and difficulty of the readings. Most students found the material valuable.

AST 320H1S Introduction to Astrophysics

Instructor(s): C. Matzner

Enr: 13   Resp: 10   Retake: 77%

	1	2	3	4	5	6	7	Mean
Presents	0	0	10	30	50	10	0	4.6
Explains	0	0	0	20	30	40	10	5.4
Communicates	0	0	0	0	10	10	80	6.7
Teaching	0	0	0	10	10	50	30	6.0
Workload	0	0	0	20	40	30	10	5.3
Difficulty	0	0	0	30	50	10	10	5.0
Learn Exp	0	0	0	12	50	37	0	5.2

Many thought that Matzner was a very helpful, enthusiastic, knowledgeable and approachable instructor. They really appreciated his availability to answer questions online and in person. The only thing some felt could be improved upon was the organization of lectures.

The course was found valuable and the readings interesting by most students. Some felt that the in-class problem sets were too difficult and that a different textbook might have been more relevant to the course.

AST 425Y1Y Research Topic in Astronomy

Instructor(s): S. Rucinski

Enr: 6   Resp: 6   Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	20	40	20	20	5.4
Explains	0	0	0	40	40	0	20	5.0
Communicates	0	0	0	16	33	33	16	5.5
Teaching	0	0	0	16	16	33	33	5.8
Workload	0	0	0	16	33	33	16	5.5
Difficulty	0	0	0	16	33	33	16	5.5
Learn Exp	0	0	0	0	20	40	40	6.2

PHY 100H1F The Magic of Physics

Instructor(s): K. Strong

Enr: 192   Resp: 89   Retake: 73%

	1	2	3	4	5	6	7	Mean
Presents	0	0	1	10	31	40	17	5.6
Explains	0	0	2	11	24	47	14	5.6
Communicates	0	0	1	1	17	29	50	6.3
Teaching	0	0	2	2	28	44	22	5.8
Workload	0	2	4	60	18	11	2	4.4
Difficulty	1	3	18	44	24	5	2	4.1
Learn Exp	0	0	2	33	29	22	11	5.1

Strong was described as enthusiastic, and clear. The course material was a little too difficult for arts students and the workload was overwhelming. Overall students enjoyed their experience in this class.

PHY 131H1F Introduction to Physics I

Instructor(s): S. Morris

Enr: 788   Resp: 689   Retake: 29%

	1	2	3	4	5	6	7	Mean
Presents	2	3	8	24	29	23	8	4.8
Explains	4	3	9	24	27	22	7	4.7
Communicates	1	0	2	10	20	30	35	5.8
Teaching	3	2	7	24	28	23	9	4.8
Workload	1	2	4	34	24	20	12	4.9
Difficulty	1	0	1	16	24	29	26	5.5
Learn Exp	9	6	17	37	18	9	2	3.9

Most of the students' comments regarding their experience were about the course and its structure, rather than the lecturers. Students felt that the large class size made for disengaged students and a poor learning experience. Many students complained that the material covered in class was not reflective of the "tricky" and "difficult" tests to follow. The problems solved in class could have been harder and more complicated to give students a better idea of tests and to prepare them better.

Whole a lot of students felt that Morris was a knowledgeable instructor, many suggested that he slow down his pace a little.

PHY 131H1S Introduction to Physics I

Instructor(s): J. Harlow

Enr: 149   Resp: 99   Retake: 56%

	1	2	3	4	5	6	7	Mean
Presents	0	0	4	13	20	29	32	5.7
Explains	1	0	4	6	22	34	31	5.8
Communicates	0	0	0	0	11	26	62	6.5
Teaching	1	2	2	8	12	35	37	5.9
Workload	2	1	2	50	24	16	3	4.6
Difficulty	2	0	4	34	34	17	7	4.8
Learn Exp	4	1	0	30	26	23	12	5.0

A number of students praised the instructor and commented that he was an effective teacher. Many students noted that the material covered during lectures did not reflect the evaluation context on the test, and that they were not adequately prepared to perform successfully on the tests. A few students indicated that they enjoyed the course.

PHY 132H1F Introduction to Physics II

Instructor(s): J. Harlow

Enr: 29   Resp: 21   Retake: 58%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	23	19	33	23	5.6
Explains	0	0	4	14	19	47	14	5.5
Communicates	0	0	0	0	14	38	47	6.3
Teaching	0	0	0	5	10	42	42	6.2
Workload	0	5	0	55	15	20	5	4.6
Difficulty	5	0	5	31	2	21	10	4.8
Learn Exp	6	0	6	6	43	31	6	5.0

Students enjoyed the enthusiasm and the approachability of the instructor. Many students responded that they learned significantly from the course and wished other physics courses were taught in the same way.

Students enjoyed the course material and were particularly excited about the use of in-class quizzes which they found to be very helpful.

PHY 132H1S Introduction to Physics II

Instructor(s): S. Morris

Enr: 548   Resp: 447   Retake: 26%

	1	2	3	4	5	6	7	Mean
Presents	3	2	8	26	32	18	7	4.7
Explains	3	4	11	30	28	14	8	4.5
Communicates	1	0	2	17	30	25	20	5.4
Teaching	4	2	8	29	28	18	7	4.6
Workload	0	1	3	38	27	15	13	4.9
Difficulty	0	1	2	20	27	24	24	5.4
Learn Exp	8	7	15	41	17	4	4	3.8

Students did not find the lectures to be particularly useful. The instructor needed to explained concepts more clearly with straightforward examples. Students felt that the material on the test did not correspond to the material taught in lectures or in the homework. Students did not like the fact that the one test was after the drop date. They would prefer to have two term tests. Also, the teaching style and course organization needs improvement.

PHY 151H1F Foundations of Physics I

Instructor(s): S. Stanley

Enr: 160   Resp: 93   Retake: 88%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	1	9	32	56	6.4
Explains	0	0	0	3	8	33	54	6.4
Communicates	0	0	0	0	4	20	75	6.7

	1	2	3	4	5	6	7	Mean
Teaching	0	0	0	0	4	30	65	6.6
Workload	0	0	2	36	29	22	8	5.0
Difficulty	0	1	2	34	32	25	4	4.9
Learn Exp	0	0	1	19	25	28	25	5.6

Almost all thought the instructor was excellent at explaining and gave engaging lectures. Some thought she was their best lecturer of the year.

Many thought that the textbook was unnecessary. Students generally thought the labs were interesting, and the demonstrators were not uniformly helpful or fair. Many would have liked more help and instruction with the computer assignments.

PHY 152H1S Foundations of Physics II

Instructor(s): S. Julian

Enr: 120 Resp: 73 Retake: 76%

	1	2	3	4	5	6	7	Mean
Presents	0	1	0	8	13	29	47	6.1
Explains	0	2	4	12	11	42	26	5.7
Communicates	1	0	1	7	21	27	41	5.9
Teaching	0	0	1	7	12	32	46	6.2
Workload	0	0	0	31	38	21	8	5.1
Difficulty	0	1	0	31	37	20	10	5.0
Learn Exp	1	0	5	22	19	36	14	5.2

Julian was described as an amazing instructor, who was enthusiastic and intelligent. His explanation of the course material was thorough and organized. Students really enjoyed his brief history lessons in the middle of the lectures.

Students would like to see some examples added to the lectures, and thought it could be helpful if the lecture notes were posted online. But overall students enjoyed this course totally.

PHY 189H1S Physics at the Cutting Edge

Instructor(s): W. Trischuk

Enr: 23 Resp: 13 Retake: 75

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	7	30	30	30	5.8
Explains	0	0	0	15	23	23	38	5.8
Communicates	0	0	0	0	30	30	38	6.1
Teaching	0	0	0	0	33	25	41	6.1
Workload	0	15	46	30	0	7	0	3.4
Difficulty	0	0	7	46	7	38	0	4.8
Learn Exp	0	0	0	16	16	33	33	5.8

PHY 201H1F Concepts of Physics

Instructor(s): J. Bayer-Carpintero

Enr: 59 Resp: 37 Retake: 64%

	1	2	3	4	5	6	7	Mean
Presents	0	5	8	8	27	37	13	5.2
Explains	0	5	5	10	32	35	10	5.2
Communicates	2	2	0	10	29	24	29	5.5
Teaching	0	5	5	8	27	35	18	5.4
Workload	0	5	16	63	11	2	0	3.9
Difficulty	0	2	8	24	43	16	5	4.8
Learn Exp	4	0	4	32	28	20	12	4.9

Many students felt that the instructor was enthusiastic and the lectures were interesting. Others felt that some lectures were hard to follow, and would have liked the quiz answers to be posted.

PHY 205H1S The Physics of Everyday Life

Instructor(s): K. Walker

Enr: 184 Resp: 38 Retake: 78%

	1	2	3	4	5	6	7	Mean
Presents	0	0	2	8	11	34	42	6.1
Explains	0	0	5	5	16	24	48	6.1
Communicates	0	0	2	2	19	27	47	6.1
Teaching	0	0	5	5	18	29	40	5.9

	1	2	3	4	5	6	7	Mean
Workload	0	0	19	38	30	8	2	4.4
Difficulty	0	5	19	44	19	8	2	4.1
Learn Exp	3	0	3	14	42	14	21	5.2

A few students commented that the course was valuable, interesting and enjoyable. It was also mentioned that the instructor's style of teaching was effective.

Instructor(s): K. Walker

Enr: 169 Resp: 26 Retake: 78%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	15	26	57	26	6.4
Explains	0	0	0	0	23	26	50	6.3
Communicates	0	0	0	4	4	36	56	6.4
Teaching	0	3	0	3	11	30	50	6.2
Workload	8	4	17	56	4	4	4	3.7
Difficulty	8	8	17	43	17	4	0	3.7
Learn Exp	5	0	5	16	22	27	22	5.2

Some students found the course interesting and valuable. A few students commented that the instructor had a good sense of humour and was an excellent instructor.

PHY 224H1F Practical Physics I

Instructor(s): R. Serbanescu

Enr: 36 Resp: 29 Retake: 66%

	1	2	3	4	5	6	7	Mean
Presents	0	3	3	6	24	37	24	5.6
Explains	3	0	3	17	27	24	24	5.3
Communicates	0	0	3	13	27	27	27	5.6
Teaching	0	0	6	6	13	44	27	5.8
Workload	0	0	0	31	34	27	6	5.1
Difficulty	0	0	6	34	37	17	3	4.8
Learn Exp	0	0	0	23	19	23	33	5.7

The class felt that the instructor answered all questions effectively and was always available. However she spoke too quietly and some felt she did not communicate the goals of the course effectively enough.

Students felt that the course description was misleading and said nothing about computer programming prerequisites, even though the course focussed heavily on this topic.

Instructor(s): R. Serbanescu

Enr: 41 Resp: 33 Retake: 72%

	1	2	3	4	5	6	7	Mean
Presents	0	6	3	18	24	36	12	5.2
Explains	3	6	6	9	36	33	6	4.9
Communicates	3	6	0	12	24	39	15	5.3
Teaching	0	0	3	9	33	42	12	5.5
Workload	0	3	6	36	24	18	12	4.8
Difficulty	0	0	6	36	39	12	6	4.8
Learn Exp	0	0	0	19	23	57	0	5.4

The instructor explained the concepts well and provided good examples during lectures. The TAs were very helpful. The course load was too heavy for a half course and the lab documents were confusing and lacked of physical background. Most of the students enjoyed the Python Tutorials, some, however thought more programming knowledge should be introduced.

PHY 250H1S Electricity and Magnetism

Instructor(s): P. Krieger

Enr: 94 Resp: 29 Retake: 85%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	5	41	28	25	5.7
Explains	0	0	0	12	38	28	20	5.6
Communicates	0	0	5	10	35	33	15	5.4
Teaching	0	0	0	5	30	43	20	5.8

	1	2	3	4	5	6	7	Mean
Workload	0	0	10	46	35	5	2	4.4
Difficulty	2	0	7	56	17	10	5	4.4
Learn Exp	0	0	2	26	20	44	5	5.2

Some students described the instructor as an effective teacher, who was helpful, clear and thorough during his lectures. They found the tutorials useful, enjoyed the course and found it to be of high value. A number of students were critical of the way evaluation of students' knowledge in this course was assessed. Specifically they expressed the need for greater time in order to complete the midterm.

PHY 252H1F Thermal Physics

Instructor(s): E. Poppitz

Enr: 80   Resp: 36   Retake: 75%

	1	2	3	4	5	6	7	Mean
Presents	2	5	22	17	25	25	0	4.3
Explains	3	8	11	13	33	25	5	4.6
Communicates	0	0	2	11	16	33	36	5.9
Teaching	0	0	11	22	22	37	5	5.0
Workload	0	8	8	54	22	5	0	4.1
Difficulty	0	5	0	47	33	13	0	4.5
Learn Exp	0	6	6	29	38	16	3	4.6

Poppitz was described as a very enthusiastic instructor. He answered all the questions clearly in class, however he needed to have more organized lectures.

The course was described as an interesting course, however it would have been better if it was a full year course.

PHY 254H1F Mechanics: From Oscillations to Chaos

Instructor(s): P. Kushner

Enr: 79   Resp: 36   Retake: 86%

	1	2	3	4	5	6	7	Mean
Presents	0	2	2	8	19	36	30	5.8
Explains	0	2	0	22	19	33	22	5.5
Communicates	0	0	0	8	30	44	16	5.7
Teaching	0	0	5	5	20	40	28	5.8
Workload	0	0	2	30	33	19	13	5.1
Difficulty	0	2	11	27	30	19	8	4.8
Learn Exp	0	0	5	20	44	17	11	5.1

Kushner was described as a very good instructor who was well organized and hard working. His class notes were very helpful, and the evaluations for this course were fair.

The computational part of this course received mixed comments. Some though it was helpful and interesting, but others said that it was time consuming and particularly difficult for people who had no programming background.

Overall, this course was described as a rewarding learning experience.

PHY 331H1S Introduction to Biophysics

Instructor(s): R. Serbanescu

Enr: 11   Resp: 9   Retake: 71%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	11	22	11	55	6.1
Explains	0	0	11	0	33	11	44	5.8
Communicates	0	0	22	0	22	33	22	5.3
Teaching	0	11	0	0	22	33	33	5.7
Workload	0	0	11	55	11	22	0	4.4
Difficulty	0	0	11	44	11	22	11	4.8
Learn Exp	0	0	16	16	33	16	16	5.0

PHY 354H1S Classical Mechanics

Instructor(s): E. Poppitz

Enr: 63   Resp: 34   Retake: 88%

	1	2	3	4	5	6	7	Mean
Presents	0	0	2	5	20	32	38	6.0
Explains	0	0	3	6	27	27	36	5.9

	1	2	3	4	5	6	7	Mean
Communicates	0	0	0	3	9	21	66	6.5
Teaching	0	0	0	5	11	38	44	6.2
Workload	0	2	2	61	17	11	2	4.4
Difficulty	0	0	2	26	38	23	8	5.1
Learn Exp	0	3	0	26	20	33	16	5.3

Poppitz was commented as one of the best instructors they have had by the majority of the students. His enthusiasm and deep understanding of the course material were highly admirable and his lecture were full of fun. The lectures were sometimes too fast to follow and students would have liked more examples covered in classes/tutorials. Some students did not like the textbook.

PHY 356H1F Quantum Mechanics

Instructor(s): D. James

Enr: 72   Resp: 36   Retake: 90%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	8	28	37	25	5.8
Explains	0	2	14	14	20	28	20	5.2
Communicates	0	0	0	0	25	31	42	6.2
Teaching	0	0	5	11	14	45	22	5.7
Workload	0	0	8	32	35	14	8	4.8
Difficulty	0	0	6	24	30	21	18	5.2
Learn Exp	0	0	7	39	17	14	21	5.0

James was described as a very entertaining instructor, his loud and lively voice made the lectures very interesting. However he seemed to rush some difficult topics in the course and lacked time management in the course.

The course was described as very mathematical. The textbook for this course was described as one of the worst university textbooks!

PHY 357H1S Nuclear and Particle Physics

Instructor(s): R. Orr

Enr: 28   Resp: 22   Retake: 61%

	1	2	3	4	5	6	7	Mean
Presents	0	9	13	18	22	31	4	4.7
Explains	0	9	9	27	13	27	13	4.8
Communicates	0	0	4	4	9	63	18	5.9
Teaching	0	0	4	18	36	22	18	5.3
Workload	0	9	13	40	31	4	0	4.1
Difficulty	0	9	22	31	27	9	0	4.0
Learn Exp	0	0	15	26	26	10	21	4.9

Some students commented that the material on the course website could be better organized. They found that the problem sets were too long and challenging. Some students found the course fast paced, where too many topics were covered but not in depth. A few students remarked that they found the instructor helpful and considerate.

PHY 392H1S Physics of Climate

Instructor(s): D. Jones

Enr: 19   Resp: 13   Retake: 66%

	1	2	3	4	5	6	7	Mean
Presents	0	0	23	15	30	15	15	4.8
Explains	0	0	15	30	30	15	7	4.7
Communicates	0	0	7	0	15	61	15	5.8
Teaching	0	0	0	23	38	38	0	5.2
Workload	0	0	0	53	30	15	0	4.6
Difficulty	0	0	7	7	30	46	7	5.4
Learn Exp	0	0	4	45	27	0	18	4.7

A few students commented that the textbook was unhelpful and more examples were need during lectures to understand concepts more clearly.

PHY 395H1S Physics of the Earth

Instructor(s): S. Stanley

Enr: 120 Resp: 38 Retake: 90%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	2	8	41	47	6.3
Explains	0	0	0	2	2	44	50	6.4
Communicates	0	0	0	2	0	36	61	6.6
Teaching	0	0	0	2	0	36	61	6.6
Workload	0	5	11	71	5	5	0	3.9
Difficulty	2	2	13	65	13	2	0	3.9
Learn Exp	0	0	0	37	14	29	18	5.3

Many students remarked that the course was great, and some students indicated that they found the instructor's style of teaching effective.

PHY 495H1F Electronics Lab

Instructor(s): R. Edwards

Enr: 14 Resp: 8 Retake: 85%

	1	2	3	4	5	6	7	Mean
Presents	0	12	25	12	25	25	0	4.2
Explains	0	12	12	12	37	25	0	4.5
Communicates	0	0	0	12	12	37	37	6.0
Teaching	0	12	0	0	37	37	12	5.2
Workload	0	0	0	28	57	0	14	5.0
Difficulty	0	0	0	71	14	14	0	4.4
Learn Exp	0	20	0	20	60	0	0	4.2

There was not much said about Edwards this was a lab course and did not exclude many lectures.

The course was described as a fun course, however it would have been better if it involved more digital circuits.

PHY 407H1F Computational Physics

Instructor(s): R. Holdon

Enr: 25 Resp: 25 Retake: 86%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	12	44	28	16	5.5
Explains	0	0	0	8	25	41	25	5.8
Communicates	0	0	4	16	40	36	4	5.2
Teaching	0	0	0	4	29	50	16	5.8
Workload	0	4	16	70	8	0	0	3.8
Difficulty	0	4	33	33	25	0	4	4.0
Learn Exp	0	0	0	15	52	26	5	5.2

PHY 407H1S Time Series Analysis

Instructor(s): Q. Liu

Enr: 25 Resp: 10 Retake: 80%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	10	30	50	10	5.6
Explains	0	0	0	10	30	50	10	5.6
Communicates	0	0	0	0	30	60	10	5.8
Teaching	0	0	0	0	40	50	10	5.7
Workload	0	0	0	40	20	40	0	5.0
Difficulty	0	0	10	20	20	40	10	5.2
Learn Exp	0	0	0	28	14	14	42	5.7

PHY 431H1S Intermediate Biophysics

Instructor(s): W. Ryu

Enr: 16 Resp: 10 Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	30	20	30	20	5.4
Explains	0	0	10	10	20	30	30	5.6
Communicates	0	0	0	0	20	0	80	6.6
Teaching	0	0	0	0	40	20	40	6.0
Workload	0	0	10	70	10	10	0	4.2
Difficulty	0	0	20	50	20	10	0	4.2
Learn Exp	0	0	0	0	37	37	25	5.9

A number of students indicated that the course was fast paced and the instructor was often rushing through lecture material. Some students indicated that they enjoyed the course and found it valuable, however they also indicated that due to the fast pace of the course, clarity was frequently lacking when lecture material was being conveyed.

PHY 456H1F Quantum Mechanics II

Instructor(s): J. Sipe

Enr: 36 Resp: 23 Retake: 85%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	4	39	56	6.5
Explains	0	0	0	0	17	39	43	6.3
Communicates	0	0	0	0	0	13	86	6.9
Teaching	0	0	0	0	0	47	52	6.5
Workload	0	4	0	17	34	43	0	5.1
Difficulty	0	0	4	8	13	60	13	5.7
Learn Exp	0	0	0	19	9	47	23	5.8

The instructor was unanimously praised, and some thought he was their most inspiring teacher in physics. Most also agreed that the quizzes were very difficult. Furthermore, the group projects required mixed reviews and many did not like the textbook.

PHY 456H1S Macroscopic Physics

Instructor(s): D. Jones

Enr: 15 Resp: 7 Retake: 66%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	28	14	14	42	5.7
Explains	0	0	0	14	28	28	28	5.7
Communicates	0	0	14	0	0	57	28	5.9
Teaching	0	0	0	0	42	28	28	5.7
Workload	0	0	0	71	14	14	0	4.4
Difficulty	0	0	0	42	42	14	0	4.7
Learn Exp	0	0	16	33	33	16	0	4.5

Some students expressed the need for more time to be allocated to grasp course material, and greater use of examples. They described the instructor as an effective teacher. A number of students remarked that more time was needed to go through problem sets.

PHY 483H1F Relativity Theory I

Instructor(s): C. Dyer

Enr: 28 Resp: 22 Retake: 76%

	1	2	3	4	5	6	7	Mean
Presents	0	4	4	31	18	9	31	5.2
Explains	0	4	0	36	27	18	13	5.0
Communicates	0	0	0	0	27	22	50	6.2
Teaching	0	9	4	0	31	22	31	5.5
Workload	0	0	4	28	47	4	14	5.0
Difficulty	0	0	0	9	23	19	47	6.0
Learn Exp	0	5	11	0	29	29	23	5.4

Some students thought that this was a great course. Most agreed that the instructor was enthusiastic. However, many complained that the lectures were disorganized and unclear, in part due to having too much material for one term. Many thought that a proper textbook and more appropriate assignments would have helped.

PHY 484H1S Relativity Theory II

Instructor(s): C. Dyer

Enr: 12 Resp: 11 Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	9	45	18	27	5.6
Explains	0	0	0	9	45	27	18	5.5
Communicates	0	0	0	9	9	18	63	6.4
Teaching	0	0	0	9	27	45	18	5.7
Workload	0	0	10	50	20	20	0	4.5
Difficulty	0	0	0	30	30	40	0	5.1

| Learn Exp | 0 | 0 | 0 | 0 | 37 | 25 | 37 | 6.0 |

PHY 485H1F Modern Optics

Instructor(s): H. Van Driel

Enr: 6   Resp: 3   Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	33	33	33	6.0
Explains	0	0	0	0	0	100	0	6.0
Communicates	0	0	0	0	0	33	66	6.7
Teaching	0	0	0	0	33	66	0	5.7
Workload	0	0	0	66	33	0	0	4.3
Difficulty	0	0	0	100	0	0	0	4.0
Learn Exp	0	0	0	0	0	100	0	6.0

Van Driel was described as a well-organized talented lecturer. However, he did not use enough examples in the online notes.

PHY 487H1F Condensed Matter Physics

Instructor(s): K. Burch

Enr: 11   Resp: 6   Retake: 20%

	1	2	3	4	5	6	7	Mean
Presents	0	40	40	20	0	0	0	2.8
Explains	60	0	0	40	0	0	0	2.2
Communicates	0	0	20	20	20	40	0	4.8
Teaching	0	33	16	33	16	0	0	3.3
Workload	0	0	16	66	16	0	0	4.0
Difficulty	0	0	20	0	20	60	0	5.2
Learn Exp	016	16	16	50	0	0	0	3.0

Some thought the material was interesting. The use of powerpoint slides went a little too fast, were vague and hard to follow. Students also felt that the lectures left them unprepared for the quizzes and homework, which were not well defined.

PHY 489H1S Introduction to High Energy Physics

Instructor(s): P. Krieger

Enr: 16   Resp: 10   Retake: 80%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	20	30	40	10	5.4
Explains	0	0	10	30	30	20	10	4.9
Communicates	0	0	0	30	30	30	0	5.2
Teaching	0	0	0	10	40	40	10	5.5
Workload	0	0	10	40	50	0	0	4.4
Difficulty	0	0	10	30	40	10	10	4.8
Learn Exp	0	0	20	0	40	30	10	5.1

A number of students described the instructor as helpful. Some students indicated that more time was needed to practice course material, and to perform successfully on evaluations.

PHY 491H1S Current Interpretations of Quantum Mechanics

Instructor(s): J. Sipe

Enr: 8   Resp: 6   Retake: 100%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	0	66	33	6.3
Explains	0	0	0	0	0	83	16	6.2
Communicates	0	0	0	0	0	16	83	6.8
Teaching	0	0	0	0	0	50	50	6.5
Workload	0	0	0	33	33	33	0	5.0
Difficulty	0	0	0	50	16	33	0	4.8
Learn Exp	0	0	0	0	0	50	50	6.5

Sipe's enthusiasm for the course material and for teaching and inspiring students was admirable. His grasp of the subject matter was impressive and he kept a good balance between philosophy and physics in this course.

The course load was a little overwhelming and the problem sets were extremely challenging. Students found this course an enjoyable experience.

PHY 493H1F Geophysical Imaging I

Instructor(s): B. Milkereit

Enr: 6   Resp: 4   Retake: 50%

	1	2	3	4	5	6	7	Mean
Presents	0	0	0	25	75	0	0	4.8
Explains	0	0	0	75	25	0	0	4.2
Communicates	0	0	0	0	75	25	0	5.2
Teaching	0	0	0	75	0	25	0	4.5
Workload	0	0	0	50	50	0	0	4.5
Difficulty	0	0	50	50	0	0	0	3.5
Learn Exp	0	0	0	75	0	25	0	4.5