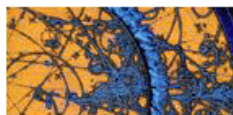


# Physics and Astronomy Student Union



## 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

Editor

## AST 101H1F The Sun and It's Neighbours

Instructor(s): M. Reid; M. van Kerkwijk

Enr: 1258	Resp: 627							Retake: 81%
	1	2	3	4	5	6	7	Mean
<u>Reid:</u>								
Presents	0	0	0	6	16	31	44	6.1
Explains	0	0	0	2	9	27	59	6.4
Communicates	0	0	0	1	5	24	68	6.6
Teaching	0	0	0	1	7	22	67	6.5
<u>van Kerkwijk:</u>								
Presents	4	6	12	20	23	18	14	4.7
Explains	5	6	14	20	22	17	13	4.5
Communicates	2	0	3	9	17	23	41	5.8
Teaching	3	4	8	20	23	20	19	5.0
<u>Course:</u>								
Workload	1	6	11	55	15	5	3	4.1
Difficulty	2	6	13	50	16	6	3	4.1
Learn Exp	0	1	1	26	20	27	22	5.4

Reid was outstanding, many saying that he was their favourite instructor. Not only was he enthusiastic and fun, his lectures were clear, effective and interesting. His knowledge, and passion made his classes very enjoyable. He was also very caring and helpful.

Students found van Kerkwijk to be an enthusiastic instructor, but had some issues with his teaching. Many found him difficult to understand at times. His lectures were unclear and confusing and students found it hard to follow. He used many scientific words that they didn't understand and would have appreciated it if he could have simplified the material. He was knowledgeable, but many students commented that they did not learn much from his lectures.

The course material was very interesting and students found it informative. They found the clicker questions and online assignments helpful for capturing the course content. Some commented that the tests were challenging, especially for those with no science background. They would have preferred a smaller class size, because every class was noisy and students talked during lectures, and many found this very distracting. Overall, this was a great course.

## AST 121H1S Origin and Evolution of the Universe

Instructor(s): Y. Wu

Enr: 124	Resp: 38							Retake: 62%
	1	2	3	4	5	6	7	Mean
Presents	5	0	5	13	39	18	18	5.1
Explains	7	0	5	18	26	28	13	4.9
Communicates	0	5	0	7	31	21	34	5.7
Teaching	5	0	2	7	39	31	13	5.2
Workload	0	2	18	42	21	7	7	4.4
Difficulty	0	2	10	21	26	8	21	5.1
Learn Exp	3	0	3	35	22	16	19	5.0

Students found that the assignments were hard and did not reflect the lecture material. Students also wished they had better access to the solu-

tions for the weekly problem sets.

Students said Wu was good and enthusiastic, and answered questions well. Some wished lectures explained concepts more explicitly.

## AST 201H1S Stars and Galaxies

Instructor(s): M. Reid

Enr: 1292	Resp: 568							Retake: 85%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	1	7	22	67	6.6
Explains	0	0	0	1	6	24	67	6.6
Communicates	0	0	0	0	4	15	79	6.7
Teaching	0	0	0	1	4	19	74	6.7
Workload	1	6	11	57	13	4	5	4.1
Difficulty	1	4	12	51	17	7	5	4.2
Learn Exp	0	0	1	18	21	24	33	5.7

Students highly praised Reid, describing him as "amazing" and among the best instructors of their university experience. They thought Reid was extremely enthusiastic which helped keep students interested, and that he was adept at explaining the concepts to the students. Students found the course very enjoyable and attributed this to Reid's teaching.

A small minority of students complained that the tests were very difficult for non-science students and that the workload was high.

## AST 210H1F Great Moments in Astronomy

Instructor(s): S. Mochnacki

Enr: 94	Resp: 24							Retake: 66%
	1	2	3	4	5	6	7	Mean
Presents	0	4	8	20	50	12	4	4.7
Explains	0	0	8	16	45	20	8	5.0
Communicates	0	0	0	8	25	54	12	5.7
Teaching	0	4	0	12	37	37	8	5.3
Workload	0	4	0	83	12	0	0	4.0
Difficulty	0	4	0	58	20	16	0	4.5
Learn Exp	6	0	0	56	25	0	12	4.4

## AST 221H1S Stars and Planets

Instructor(s): S. Mochnacki

Enr: 26	Resp: 12							Retake: 66%
	1	2	3	4	5	6	7	Mean
Presents	8	0	33	25	16	0	16	4.1
Explains	8	25	16	16	16	0	16	3.8
Communicates	8	0	0	16	16	16	41	5.5
Teaching	8	8	8	33	8	16	16	4.4
Workload	0	0	0	16	50	25	8	5.2
Difficulty	0	0	0	16	8	50	25	5.8
Learn Exp	12	0	0	25	12	37	12	4.9

## AST 251H1S Life on Other Worlds

Instructor(s): H. Pfeiffer

Enr: 318	Resp: 105							Retake: 88%
	1	2	3	4	5	6	7	Mean
Presents	0	0	1	11	31	29	24	5.6
Explains	0	1	1	6	27	34	27	5.7
Communicates	0	0	1	10	20	34	30	5.8
Teaching	0	0	1	9	22	43	22	5.7
Workload	3	7	18	58	4	2	2	3.7
Difficulty	6	5	22	54	3	1	3	3.6
Learn Exp	1	0	2	29	30	22	13	5.1

Students thought the course content was very interesting. However, some had issues with the Peer Scholar program for essays.

While many thought Pfeiffer was a good instructor, some felt he read too much from his slides which made lectures boring.

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### AST 320H1S Introduction to Astrophysics

Instructor(s): C. Matzner

Enr: 20	Resp: 15							Retake: 64%
	1	2	3	4	5	6	7	Mean
Presents	6	13	20	33	20	6	0	3.7
Explains	6	13	13	20	33	13	0	4.0
Communicates	0	0	0	0	20	33	46	6.3
Teaching	0	6	6	33	26	20	6	4.7
Workload	0	0	0	7	50	14	28	5.6
Difficulty	0	0	7	21	35	28	7	5.1
Learn Exp	8	16	16	0	41	8	8	4.1

The course was said to be challenging, and the workload heavy. However, Matzner was helpful, if a bit disorganized.

### AST 325H1F Introduction to Practical Astronomy

Instructor(s): J. Graham

Enr: 6	Resp: 4							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	25	25	25	25	5.5
Explains	0	0	0	0	50	0	50	6.0
Communicates	0	0	0	0	0	25	75	6.8
Teaching	0	0	0	0	0	50	50	6.5
Workload	0	0	0	0	25	0	75	6.5
Difficulty	0	0	0	0	25	50	25	6.0
Learn Exp	0	0	0	0	0	0	100	7.0

Graham was an excellent instructor!

### AST 326Y1Y Practical Astronomy

Instructor(s): J. Graham

Enr: 10	Resp: 9							Retake: 75%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	11	22	33	33	5.9
Explains	0	0	0	0	22	44	33	6.1
Communicates	0	0	0	0	11	22	66	6.6
Teaching	0	0	0	0	33	22	44	6.1
Workload	0	0	0	0	33	55	11	5.8
Difficulty	0	0	0	11	33	55	0	5.4
Learn Exp	0	0	0	16	33	16	33	5.7

This was a very good course. Graham was wonderful and the practical labs were outstanding.

### AST 425Y1Y Research Topic in Astronomy

Instructor(s): M. van Kerkwijk

Enr: 7	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	28	42	28	6.0
Communicates	0	0	0	0	0	28	71	6.7
Teaching	0	0	0	0	14	14	71	6.6
Workload	0	0	0	28	0	42	28	5.7
Difficulty	0	0	0	14	14	71	0	5.6
Learn Exp	0	0	0	0	0	0	100	7.0

This course was said to be very useful.

### PHY 100H1S The Magic of Physics

Instructor(s): K. Strong

Enr: 183	Resp: 44							Retake: 66%
	1	2	3	4	5	6	7	Mean
Presents	6	0	2	13	20	40	15	5.3
Explains	4	4	6	4	22	38	18	5.2
Communicates	2	0	4	2	15	36	38	5.9
Teaching	2	2	4	4	16	44	25	5.7
Workload	0	2	13	56	15	6	4	4.2

Difficulty	4	2	15	45	15	13	2	4.2
Learn Exp	5	5	5	42	15	21	5	4.4

Students liked the class demonstrations and Strong's enthusiasm, but a number of students had difficulty with the math involved.

### PHY 101H1F Emergence in Nature

Instructor(s): S. Morris

Enr: 71	Resp: 39							Retake: 86%
	1	2	3	4	5	6	7	Mean
Presents	0	2	5	23	35	25	7	5.0
Explains	0	0	2	10	13	44	28	5.9
Communicates	0	0	0	2	5	28	64	6.5
Teaching	0	0	0	7	18	44	28	5.9
Workload	0	5	25	50	16	2	0	3.9
Difficulty	0	5	12	61	15	5	0	4.0
Learn Exp	0	0	0	17	32	29	20	5.5

### PHY 131H1F Introduction to Physics I

Instructor(s): J. Harlow

Enr: 764	Resp: 598							Retake: 47%
	1	2	3	4	5	6	7	Mean
Presents	0	1	5	18	31	28	14	5.2
Explains	1	2	6	19	26	27	16	5.2
Communicates	1	0	3	12	21	30	30	5.7
Teaching	1	1	5	16	26	30	18	5.3
Workload	1	1	2	35	34	16	8	4.8
Difficulty	1	0	2	25	27	26	16	5.2
Learn Exp	2	4	6	39	22	19	5	4.6

Students appreciated Harlow's enthusiasm and really enjoyed the in-class demonstrations. They felt he sometimes moved through material too quickly, but was a great lecturer.

Some felt the course was very difficult, and the practice homework questions did not reflect the difficulty of the evaluations. Also, students would have preferred if the test had more questions, because they felt having so few multiple choice questions meant that each one was weighed too heavily.

### PHY 132H1S Introduction to Physics II

Instructor(s): D. Jones

Enr: 501	Resp: 415							Retake: 39%
	1	2	3	4	5	6	7	Mean
Presents	1	2	7	24	31	24	8	4.9
Explains	2	2	7	22	33	23	8	4.9
Communicates	1	0	2	15	29	29	20	5.4
Teaching	2	1	5	17	35	25	11	5.0
Workload	0	0	3	38	31	15	9	4.8
Difficulty	0	2	1	27	26	27	14	5.2
Learn Exp	4	3	7	46	21	11	5	4.3

Students strongly felt that the test was too difficult and did not accurately reflect the material learned in lectures. They felt that the multiple choice questions, in particular, were weighted too heavily.

### PHY 151H1F Foundations of Physics II

Instructor(s): D. James

Enr: 169	Resp: 73							Retake: 92%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	5	19	26	48	6.2
Explains	0	0	1	4	13	30	50	6.2
Communicates	0	0	0	0	4	16	79	6.8
Teaching	0	0	0	1	8	26	64	6.5
Workload	2	1	4	49	28	14	0	4.4
Difficulty	2	0	1	44	32	11	7	4.7
Learn Exp	0	1	1	25	13	23	33	5.6

James was described as a very approachable and enthusiastic instructor.

tor. Students would have appreciated the use of more complex examples similar to test/assignment questions. The course was difficult but the instructor made it very enjoyable.

### PHY 201H1F Concepts of Physics

Instructor(s): A. Steinberg

	Resp: 31							Mean
	1	2	3	4	5	6	7	
Presents	0	0	9	12	38	25	12	5.2
Explains	0	3	6	16	29	29	16	5.2
Communicates	0	0	0	9	25	25	38	5.9
Teaching	0	0	3	16	25	29	25	5.6
Workload	0	3	0	50	40	6	0	4.5
Difficulty	0	0	3	26	20	30	20	5.4
Learn Exp	0	0	12	20	29	25	12	5.0

### PHY 205H1S The Physics of Everyday Life

Instructor(s): K. Walker

	Resp: 78							Mean
	1	2	3	4	5	6	7	
Presents	0	1	1	10	11	38	36	5.9
Explains	1	1	3	11	6	29	45	5.9
Communicates	0	1	1	3	14	31	48	6.2
Teaching	1	0	3	6	12	32	42	6.0
Workload	1	1	8	50	10	20	0	4.6
Difficulty	1	1	18	40	16	15	6	4.4
Learn Exp	3	0	3	30	21	26	15	5.1

The very small number of students who commented said that Walker was a great instructor. She did an excellent job in teaching the course material in an organized and clear manner, using fun demonstrations.

Instructor(s): K. Walker

	Resp: 79							Mean
	1	2	3	4	5	6	7	
Presents	0	0	0	3	18	40	36	6.1
Explains	0	0	1	3	15	47	32	6.1
Communicates	0	1	0	5	12	31	49	6.2
Teaching	0	0	1	2	23	44	28	6.0
Workload	0	3	16	43	25	7	2	4.2
Difficulty	1	3	25	38	21	7	1	4.0
Learn Exp	1	0	6	28	38	21	3	4.8

Walker was a great instructor who was enthusiastic about the course. A small number who commented said they enjoyed the demonstrations she did in class.

### PHY 231H1F Physics of Living Systems

Instructor(s): R. Serbanescu

	Resp: 12							Mean
	1	2	3	4	5	6	7	
Presents	0	0	0	8	16	33	4	6.1
Explains	0	0	8	0	33	25	33	5.8
Communicates	0	8	0	0	33	25	33	5.7
Teaching	0	0	0	8	25	25	41	6.0
Workload	0	0	0	91	8	0	0	4.1
Difficulty	0	0	8	58	25	8	0	4.3
Learn Exp	0	0	0	55	11	33	0	4.8

### PHY 252H1F Thermal Physics

Instructor(s): J. Thywissen

	Resp: 67							Mean
	1	2	3	4	5	6	7	
Presents	1	0	1	1	10	39	45	6.2
Explains	1	0	1	1	13	42	39	6.1
Communicates	1	0	1	0	6	22	68	6.5
Teaching	1	0	1	0	6	40	50	6.3

Workload	0	0	7	53	34	3	1	4.4
Difficulty	0	3	10	48	24	10	3	4.4
Learn Exp	1	0	1	22	22	35	16	5.4

Thywissen was very enthusiastic and knowledgeable. Students really enjoyed the course.

### PHY 254H1F Mechanics: From Oscillations to Chaos

Instructor(s): P. Kushner

	Resp: 36							Mean
	1	2	3	4	5	6	7	
Presents	2	2	0	5	30	36	22	5.6
Explains	5	0	0	22	25	25	22	5.2
Communicates	2	0	5	0	19	27	44	5.9
Teaching	5	0	2	2	25	38	25	5.6
Workload	0	5	2	22	41	22	5	4.9
Difficulty	0	11	2	22	33	19	11	4.8
Learn Exp	3	3	0	31	15	40	6	5.0

Kushner was described as a good lecturer who was organized. A few students felt there was too heavy of a Python programming component.

### PHY 256H1S Introduction to Quantum Physics

Instructor(s): K. Burch

	Resp: 59							Mean
	1	2	3	4	5	6	7	
Presents	0	1	5	12	22	36	22	5.5
Explains	0	1	6	13	36	25	15	5.2
Communicates	0	0	0	6	12	34	46	6.2
Teaching	0	5	0	3	27	39	24	5.7
Workload	0	1	12	50	28	7	0	4.3
Difficulty	0	0	3	17	35	29	14	5.3
Learn Exp	0	1	5	26	26	34	3	5.0

Student wanted more examples or practice homework to help them better prepare for tests and learn the material. There was a lot of focus on math. Burch was an effective instructor who was funny, enthusiastic and presented the material clearly.

### PHY 350H1F Electromagnetic Theory

Instructor(s): P. Krieger

	Resp: 28							Mean
	1	2	3	4	5	6	7	
Presents	0	0	3	0	29	40	25	5.9
Explains	0	0	3	7	28	35	25	5.7
Communicates	0	0	7	10	35	39	7	5.3
Teaching	0	0	0	14	14	57	14	5.7
Workload	0	0	3	39	32	25	0	4.8
Difficulty	0	0	14	46	17	17	3	4.5
Learn Exp	0	0	4	38	23	33	0	4.9

Most students felt Krieger was a very good lecturer. His explanations and examples were helpful and he was very well-organized.

### PHY 354H1S Classical Mechanics

Instructor(s): E. Poppitz

	Resp: 54							Mean
	1	2	3	4	5	6	7	
Presents	0	3	3	9	24	32	26	5.6
Explains	0	0	7	19	25	26	21	5.3
Communicates	0	1	0	36	9	26	58	6.3
Teaching	0	0	0	3	32	32	30	5.9
Workload	0	1	0	26	37	24	9	5.1
Difficulty	0	0	1	9	28	24	35	5.8
Learn Exp	0	0	0	26	15	36	21	5.5

Poppitz was a good instructor who was described as enthusiastic and clear. One suggestion was for him to slow down a bit when lecturing so

## 162 PHYSICS & ASTRONOMY

students could keep up.

### PHY 356H1F Quantum Mechanics I

Instructor(s): A. Steinberg

Enr: 80	Resp: 57							Retake: 69%
	1	2	3	4	5	6	7	Mean
Presents	3	1	23	19	25	17	8	4.5
Explains	1	1	19	26	21	17	10	4.6
Communicates	0	0	1	3	26	32	35	6.0
Teaching	0	3	12	14	32	28	8	5.0
Workload	1	0	0	43	16	20	18	5.1
Difficulty	1	0	0	14	16	25	42	5.9
Learn Exp	3	0	9	23	28	21	13	4.9

Steinberg was knowledgeable and a good lecturer overall. However, a few students felt he talked too fast while lecturing and wrote too small on the blackboard.

Students wanted a better textbook that complemented lectures. Also, they did not appreciate all the time spent working on homework only to have 1 question marked. They wanted more practice problems that would better prepare them for tests or assignments.

### PHY 357H1S Nuclear and Particle Physics

Instructor(s): R. Orr

Enr: 24	Resp: 11							Retake: 72%
	1	2	3	4	5	6	7	Mean
Presents	9	0	0	18	45	9	18	4.9
Explains	9	0	0	9	45	27	9	5.0
Communicates	9	0	0	0	0	54	36	5.9
Teaching	9	0	0	0	27	45	18	5.5
Workload	0	0	0	72	18	9	0	4.4
Difficulty	0	9	0	45	36	9	0	4.4
Learn Exp	11	0	11	22	33	22	0	4.3

Students largely preferred to have lectures on chalkboards instead of powerpoint. A few students felt that the content was rushed slightly, and more depth would have helped.

### PHY 385H1F Introductory Optics

Instructor(s): J. Harlow

Enr: 21	Resp: 17							Retake: 75%
	1	2	3	4	5	6	7	Mean
Presents	0	0	5	5	35	29	23	5.6
Explains	0	0	0	11	47	23	17	5.5
Communicates	0	0	0	0	0	41	58	6.6
Teaching	0	0	0	11	17	35	35	5.9
Workload	0	17	35	41	5	0	0	3.4
Difficulty	11	5	35	29	17	0	0	3.4
Learn Exp	0	7	0	21	28	42	0	5.0

Harlow was described as a passionate and enthusiastic instructor who made the students want to connect with the material.

However, the course as a whole was not very intellectually challenging.

### PHY 392H1S Physics of Climate

Instructor(s): D. Jones

Enr: 20	Resp: 8							Retake: 87%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	25	25	50	6.2
Explains	0	0	0	0	25	25	50	6.2
Communicates	0	0	0	0	0	25	75	6.8
Teaching	0	0	0	0	12	37	50	6.4
Workload	0	0	25	62	12	0	0	3.9
Difficulty	0	0	25	37	25	12	0	4.2
Learn Exp	0	0	0	12	37	25	25	5.6

Jones was well-liked and the course content was said to be interesting.

### PHY 395H1S Physics of the Earth

Instructor(s): S. Stanley

Enr: 121	Resp: 38							Retake: 77%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	2	13	26	57	6.4
Explains	0	0	0	2	15	28	52	6.3
Communicates	0	0	0	0	13	26	60	6.5
Teaching	0	0	0	0	10	36	52	6.4
Workload	0	0	13	59	21	5	0	4.2
Difficulty	0	2	18	52	18	7	0	4.1
Learn Exp	0	0	3	43	16	20	16	5.0

This was a very good course, that was taught effectively and clearly. Stanley did an excellent job.

### PHY 407H1F Computational Physics

Instructor(s): B. Holdom

Enr: 32	Resp: 31							Retake: 81%
	1	2	3	4	5	6	7	Mean
Presents	0	0	3	20	37	24	13	5.2
Explains	0	0	3	13	37	31	13	5.4
Communicates	0	3	10	20	23	30	13	5.1
Teaching	0	0	3	0	48	34	13	5.6
Workload	0	10	56	26	3	3	0	3.3
Difficulty	0	3	33	56	3	3	0	3.7
Learn Exp	0	4	0	8	40	40	8	5.4

### PHY 408H1S Time Series Analysis

Instructor(s): Q. Liu

Enr: 33	Resp: 14							Retake: 85%
	1	2	3	4	5	6	7	Mean
Presents	0	0	14	14	50	14	7	4.9
Explains	0	0	28	21	28	14	7	4.5
Communicates	0	0	7	28	42	7	14	4.9
Teaching	0	0	0	21	42	28	7	5.2
Workload	0	0	7	35	14	28	14	5.1
Difficulty	0	0	14	28	28	28	0	4.7
Learn Exp	0	7	7	23	15	23	23	5.1

### PHY 431H1S Topics in Biological Physics

Instructor(s): W. Ryu

Enr: 13	Resp: 8							Retake: 87%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	12	37	56	0	5.4
Explains	0	0	0	12	12	62	12	5.8
Communicates	0	0	0	0	12	37	50	6.4
Teaching	0	0	0	0	12	62	25	6.1
Workload	0	0	0	62	25	12	0	4.5
Difficulty	0	0	0	75	25	0	0	4.2
Learn Exp	0	0	0	14	42	14	28	5.6

### PHY 450H1S Relativistic Electrodynamics

Instructor(s): E. Poppitz

Enr: 38	Resp: 17							Retake: 87%
	1	2	3	4	5	6	7	Mean
Presents	0	5	0	0	23	29	41	5.9
Explains	0	0	0	5	11	35	47	6.2
Communicates	0	0	5	0	0	35	58	6.4
Teaching	0	0	0	0	12	38	50	6.4
Workload	0	0	0	0	12	37	50	6.4
Difficulty	0	0	0	37	6	56	0	5.2
Learn Exp	0	0	0	13	20	40	26	5.7

Students felt that Poppitz was a great and enthusiastic lecturer, however the course was difficult.



**PHY 454H1S Continuum Mechanics**

Instructor(s): K. Das

Enr: 20	Resp: 15							Retake: 78%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	13	13	33	40	6.0
Explains	0	0	6	0	40	33	20	5.6
Communicates	0	0	6	0	20	46	26	5.9
Teaching	0	6	0	0	33	26	15	5.7
Workload	20	20	26	20	13	0	0	2.9
Difficulty	13	26	20	26	6	0	6	3.1
Learn Exp	0	0	30	10	40	20	0	4.5

Overall, Das was cited as being friendly, organized and approachable. The course could have been more challenging being a 400 level course.

**PHY 456H1F Quantum Mechanics II**

Instructor(s): J. Sipe

Enr: 31	Resp: 21							Retake: 95%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	19	38	42	6.2
Explains	0	0	4	4	19	38	33	5.9
Communicates	0	0	0	0	9	33	57	6.5
Teaching	0	0	0	4	14	42	38	6.1
Workload	4	4	0	9	42	14	23	5.2
Difficulty	0	0	4	14	19	14	47	5.9
Learn Exp	0	0	0	5	29	35	29	5.9

Overall, students agreed that Sipe was a fantastic instructor.

**PHY 483H1F Relativity Theory I**

Instructor(s): C. Dyer

Enr: 28	Resp: 20							Retake: 88%
	1	2	3	4	5	6	7	Mean
Presents	0	0	5	10	10	45	30	5.8
Explains	0	0	15	10	5	30	40	5.7
Communicates	0	0	0	0	0	15	85	6.8
Teaching	0	0	0	0	5	40	55	6.5
Workload	0	0	5	42	31	15	5	4.7
Difficulty	0	0	0	10	40	25	25	5.7
Learn Exp	0	0	7	7	0	30	53	6.2

**PHY 484H1S Relativity Theory II**

Instructor(s): C. Dyer

Enr: 5	Resp: 5							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	20	60	20	6.0
Explains	0	0	0	20	20	20	40	5.8
Communicates	0	0	0	20	0	0	80	6.4
Teaching	0	0	0	20	0	20	60	6.2
Workload	0	0	20	20	40	20	0	4.6
Difficulty	0	0	0	0	40	20	40	6.0
Learn Exp	0	0	0	0	20	60	20	6.0

**PHY 485H1F Lasers and Modern Optics**

Instructor(s): H. Van Driel

Enr: 10	Resp: 6							Retake: 50%
	1	2	3	4	5	6	7	Mean
Presents	0	0	16	16	16	33	16	5.2
Explains	0	0	0	16	33	33	16	5.5
Communicates	0	0	0	0	16	50	33	6.2
Teaching	0	0	0	0	40	40	20	5.8
Workload	0	0	16	33	16	16	16	4.8
Difficulty	0	0	0	16	16	23	33	5.8
Learn Exp	0	0	25	25	25	0	25	4.8

**PHY 487H1F Condensed Matter Physics**

Instructor(s): S. Julian

Enr: 18	Resp: 15							Retake: 92%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	13	26	46	13	5.6
Explains	0	0	0	28	28	42	0	5.1
Communicates	0	0	0	6	40	33	20	5.7
Teaching	0	0	0	0	46	53	15	5.5
Workload	0	0	0	20	60	13	6	5.1
Difficulty	0	0	0	35	21	21	21	5.3
Learn Exp	0	0	0	25	41	33	12	5.1

Julian was described as an enthusiastic instructor.

**PHY 489H1F Introduction to High Energy Physics**

Instructor(s): P. Krieger

Enr: 19	Resp: 9							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	77	11	11	5.3
Explains	0	0	11	33	22	22	11	4.9
Communicates	0	0	11	22	22	44	0	5.0
Teaching	0	0	0	0	55	44	0	5.4
Workload	0	0	0	44	11	44	0	5.0
Difficulty	0	0	0	22	44	11	22	5.3
Learn Exp	0	0	0	14	14	57	14	5.7

**PHY 491H1S Current Interpretations of Quantum Mechanics**

Instructor(s): J. Sipe

Enr: 7	Resp: 7							Retake: 100%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	57	14	28	5.7
Explains	0	0	0	0	57	42	0	5.7
Communicates	0	0	0	0	14	57	28	6.1
Teaching	0	0	0	0	28	57	14	5.9
Workload	0	0	0	42	28	14	14	5.0
Difficulty	0	0	0	28	42	14	14	5.1
Learn Exp	0	0	0	0	57	42	0	5.4

**PHY 492H1F Advanced Atmospheric Physics**

Instructor(s): K. Strong

Enr: 6	Resp: 5							Retake: 40%
	1	2	3	4	5	6	7	Mean
Presents	0	0	0	0	60	20	20	5.6
Explains	0	0	0	20	40	40	0	5.2
Communicates	0	0	0	0	40	40	20	5.8
Teaching	0	0	0	0	20	40	40	6.2
Workload	0	20	0	60	0	20	0	4.0
Difficulty	0	20	0	60	20	0	0	3.8
Learn Exp	0	0	20	40	40	0	0	4.2

