## Mathematics Union



## Many students actually look forward to Mr. Atwadder's math tests.

## Introduction

The Mathematics Union (MU) represents the interests of, organizes events for, and generally works to improve the experience of all undergraduates enrolled in a program or course offered by the Department of Mathematics. Please feel free to contact us by email at mu@math. toronto.edu

MU Executive

## APM 236H1F Applications of Linear Programming

Instructor(s): P. Kergin

| Enr: 86 | Resp: 36 |  |  |  |  | Retake: $68 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 5 | 0 | 2 | 11 | 26 | 35 | 17 | 5.3 |
| Explains | 0 | 0 | 2 | 11 | 25 | 37 | 22 | 5.7 |
| Communicates | 2 | 0 | 2 | 8 | 38 | 32 | 14 | 5.4 |
| Teaching | 0 | 5 | 2 | 11 | 25 | 38 | 16 | 5.4 |
| Workload | 2 | 26 | 26 | 35 | 2 | 2 | 2 | 3.3 |
| Difficulty | 5 | 14 | 29 | 41 | 2 | 2 | 2 | 3.4 |
| Learn Exp | 0 | 9 | 6 | 53 | 12 | 12 | 6 | 4.3 |

Most students considered Kergin to be a well-organized instructor. Others, however, were concerned with the pace of the course, which they felt was too show, and several students commented that a course website would have been helpful.

## APM 236H1S Applications of Linear Programming

Instructor(s): S> Homayouni-Boroojeni

| Enr: 51 | Resp: 24 |  |  |  |  | Retake: $59 \%$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |  |
| Presents | 0 | 4 | 0 | 19 | 42 | 19 | 14 | 5.1 |  |
| Explains | 0 | 0 | 13 | 27 | 18 | 31 | 9 | 5.0 |  |
| Communicates | 0 | 0 | 4 | 23 | 14 | 38 | 19 | 5.4 |  |
| Teaching | 0 | 4 | 0 | 18 | 27 | 36 | 13 | 5.3 |  |
| Workload | 0 | 4 | 0 | 47 | 43 | 4 | 0 | 4.4 |  |
| Difficulty | 0 | 9 | 4 | 40 | 36 | 9 | 0 | 4.3 |  |
| Learn Exp | 0 | 0 | 5 | 47 | 41 | 5 | 0 | 4.5 |  |

## APM 346H1F Differential Equations

Instructor(s): J. Colliander

| Enr: 71 | Resp: 36 |  |  |  |  | Retake: $75 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 5 | 2 | 11 | 16 | 41 | 22 | 5.5 |
| Explains | 0 | 2 | 2 | 2 | 30 | 38 | 22 | 5.7 |
| Communicates | 0 | 0 | 0 | 0 | 8 | 25 | 66 | 6.6 |
| Teaching | 0 | 0 | 0 | 5 | 16 | 41 | 36 | 6.1 |
| Workload | 0 | 5 | 0 | 30 | 41 | 13 | 8 | 4.8 |
| Difficulty | 0 | 5 | 0 | 36 | 19 | 33 | 5 | 4.9 |

$\begin{array}{lllllllll}\text { Learn } \operatorname{Exp} & 0 & 0 & 0 & 36 & 8 & 52 & 4 & 5.2\end{array}$
The majority of students felt that Colliander was a very good lecturer, mainly because he explained concepts with clarity, showed great enthusiasm for the material, and put the students' learning experience first (for example, by always being available for consultation and helpful in answering questions). A handful of students commented that Colliander was one of the best instructors they had encountered at Uoft.

A few felt the course was too theoretical and that evaluations were too lengthy or difficult. Suggestions included giving more applied examples in class that were on par with evaluation questions, posting homework solutions online, and having a tutorial scheduled for this course. There were also complaints about take-home midterms, for which it was felt some students had collaborated. An open-book exam was suggested instead.

## APM 351Y1Y Partial Differential Equations

Instructor(s): C. Sulem
Enr: 19
Resp: 11
Retake: 66\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 0 | 9 | 18 | 9 | 63 | 6.3 |
| Explains | 0 | 0 | 0 | 0 | 36 | 0 | 63 | 6.6 |
| Communicates | 0 | 0 | 0 | 0 | 18 | 18 | 63 | 6.5 |
| Teaching | 0 | 0 | 0 | 18 | 18 | 0 | 63 | 6.1 |
| Workload | 0 | 0 | 0 | 0 | 60 | 30 | 10 | 5.5 |
| Difficulty | 0 | 0 | 0 | 20 | 20 | 60 | 0 | 5.4 |
| Learn Exp | 0 | 16 | 0 | 33 | 0 | 0 | 50 | 5.2 |

Most students felt that Sulem was an outstanding instructor, with some students stating she was the best they had encountered so far. She was always available, happy to answer questions, and made sure that everyone understood the material. Students also appreciated her pointing out connections to other studies, along with a leniency regarding assignment due dates. The course material itself was considered interesting and enjoyable (one respondent stated this was "one of the best math/physics courses" ever taken), and many expressed a motivation to attend class despite its being scheduled at 9 a.m. three days a week.

APM 426H1S General Relativity
Instructor(s): P. Blue

| Enr: 14 | Resp: 9 |  |  |  | Retake: $100 \%$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 6.5 |
| Explains | 0 | 0 | 0 | 12 | 25 | 12 | 50 | 6.0 |
| Communicates | 0 | 0 | 0 | 12 | 12 | 25 | 50 | 6.1 |
| Teaching | 0 | 0 | 0 | 0 | 25 | 12 | 62 | 6.4 |
| Workload | 0 | 0 | 0 | 37 | 12 | 50 | 0 | 5.1 |
| Difficulty | 0 | 0 | 0 | 25 | 25 | 50 | 0 | 5.2 |
| Learn Exp | 0 | 0 | 0 | 0 | 25 | 62 | 12 | 5.9 |

Most students found Blue to have been an excellent instructor.
APM 446H1S Applied Nonlinear Equations
Instructor(s): A. Burchard

| Enr: 6 | Resp: 5 |  |  |  |  | Retake: 100\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 20 | 0 | 20 | 40 | 20 | 5.4 |
| Explains | 0 | 0 | 0 | 0 | 20 | 40 | 40 | 6.2 |
| Communicates | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 7.0 |
| Teaching | 0 | 0 | 0 | 0 | 0 | 40 | 60 | 6.6 |
| Workload | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 4.0 |
| Difficulty | 0 | 0 | 0 | 40 | 20 | 40 | 0 | 5.0 |
| Learn Exp | 0 | 0 | 0 | 0 | 25 | 50 | 25 | 6.0 |

Students greatly enjoyed the course, finding Burchard to be a highly enthusiastic and approachable instructor who "did an excellent job explaining concepts and answering questions". One student did comment that some prior exposure to functional analysis would have been a helpful prerequisite.

APM 461H1S Combinatorial Methods
Instructor(s): S. Tanny

| Enr: 17 | Resp: 11 |  |  |  |  | Retake: 100\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 18 | 36 | 45 | 6.3 |
| Explains | 0 | 0 | 0 | 0 | 18 | 45 | 36 | 6.2 |
| Communicates | 0 | 0 | 0 | 9 | 9 | 18 | 63 | 6.4 |
| Teaching | 0 | 0 | 0 | 0 | 9 | 45 | 45 | 6.4 |
| Workload | 0 | 0 | 9 | 63 | 18 | 9 | 0 | 4.3 |
| Difficulty | 0 | 0 | 9 | 45 | 27 | 18 | 0 | 4.5 |
| Learn Exp | 0 | 0 | 0 | 25 | 37 | 25 | 12 | 5.2 |

Students had only praise for Tanny's enthusiasm, humour, concern for students, and organization. They appreciated the fact that the notes were available online. However, some felt that the evaluation was too focused on major tests - there was one $30 \%$ midterm and a $50 \%$ final exam.

## APM 462H1S Nonlinear Optimization

Instructor(s): N. Derzko

| Enr: 44 | Resp: 33 |  |  |  |  | Retake: 46\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 3 | 12 | 36 | 36 | 9 | 3 | 4.5 |
| Explains | 0 | 3 | 9 | 39 | 39 | 6 | 3 | 4.5 |
| Communicates | 0 | 3 | 9 | 30 | 42 | 6 | 9 | 4.7 |
| Teaching | 0 | 0 | 6 | 24 | 54 | 6 | 9 | 4.9 |
| Workload | 0 | 0 | 6 | 51 | 19 | 16 | 6 | 4.6 |
| Difficulty | 0 | 0 | 3 | 45 | 25 | 19 | 6 | 4.8 |
| Learn Exp | 5 | 5 | 5 | 50 | 30 | 5 | 0 | 4.1 |

The textbook for this course was denounced as confusing. Students mentioned the instructor was "nice" and clearly knowledgeable about the topic, but that his presentation was sometimes vague or disorganized.

MAT 123H1S Calculus and Linear Algebra for Commerce (A)
Instructor(s): P. Kergin

| Enr: 77 | Resp: 35 |  |  |  |  | Retake: 16\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 8 | 0 | 14 | 14 | 28 | 20 | 14 | 4.7 |
| Explains | 5 | 11 | 5 | 14 | 23 | 17 | 20 | 4.7 |
| Communicates | 2 | 5 | 8 | 23 | 26 | 20 | 11 | 4.7 |
| Teaching | 2 | 14 | 8 | 20 | 14 | 23 | 14 | 4.6 |
| Workload | 0 | 5 | 2 | 51 | 14 | 20 | 5 | 4.6 |
| Difficulty | 0 | 2 | 5 | 25 | 14 | 28 | 22 | 5.3 |
| Learn Exp | 17 | 8 | 11 | 3 | 18 | 18 | 11 | 3.6 |

Students tended to be satisfied with Kergin's performance as an instructor, though some concern was raised for the difficulty of the tests.

## MAT 125H1S Calculus I (A)

Instructor(s): A. Lam

| Enr: 56 | Resp: 30 |  |  |  |  | Retake: 51\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 3 | 26 | 70 | 6.7 |
| Explains | 0 | 0 | 0 | 0 | 0 | 16 | 83 | 6.8 |
| Communicates | 0 | 0 | 0 | 0 | 0 | 16 | 83 | 6.8 |
| Teaching | 0 | 0 | 0 | 0 | 0 | 23 | 76 | 6.8 |
| Workload | 0 | 0 | 3 | 40 | 23 | 26 | 6 | 4.9 |
| Difficulty | 0 | 0 | 0 | 33 | 23 | 33 | 10 | 5.2 |
| Learn Exp | 0 | 0 | 0 | 9 | 18 | 45 | 27 | 5.9 |

Students unanimously praised Lam for being an excellent instructor, describing him as organized, helpful and extremely enthusiastic. His clarity and presentation of examples were greatly appreciated and tests and evaluations were said to be reasonable.

MAT 133Y1Y Calculus and Linear Algebra for Commerce Instructor(s): P. Kergin

| Enr: 87 | Resp: 12 |  |  |  |  | Retake: 75\% |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 16 | 16 | 50 | 8 | 8 | 4.8 |
| Explains | 0 | 0 | 16 | 41 | 8 | 25 | 8 | 4.7 |
| Communicates | 0 | 0 | 8 | 25 | 41 | 16 | 8 | 4.9 |
| Teaching | 0 | 0 | 25 | 25 | 41 | 0 | 8 | 4.4 |
| Workload | 0 | 0 | 0 | 66 | 16 | 8 | 8 | 4.6 |
| Difficulty | 0 | 0 | 0 | 58 | 25 | 8 | 8 | 4.7 |
| Learn Exp | 0 | 0 | 12 | 50 | 12 | 12 | 12 | 4.6 |

Instructor(s): A. Igelfeld

| Enr: 105 | Resp: 20 |  |  |  |  | Retake: $50 \%$ |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 15 | 15 | 30 | 35 | 5 | 5.0 |
| Explains | 0 | 0 | 0 | 26 | 26 | 31 | 15 | 5.4 |
| Communicates | 0 | 0 | 0 | 10 | 20 | 55 | 15 | 5.8 |
| Teaching | 0 | 0 | 0 | 25 | 25 | 40 | 10 | 5.3 |
| Workload | 0 | 5 | 5 | 35 | 10 | 35 | 10 | 4.9 |
| Difficulty | 0 | 5 | 5 | 30 | 20 | 35 | 5 | 4.9 |
| Learn Exp | 0 | 0 | 6 | 31 | 37 | 25 | 0 | 4.8 |

Instructor(s): A. Igelfeld

| Enr: 115 | Resp: 38 |  |  |  |  | Retake: $47 \%$ |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 13 | 27 | 32 | 21 | 5 | 4.8 |
| Explains | 0 | 2 | 7 | 34 | 21 | 23 | 10 | 4.9 |
| Communicates | 0 | 2 | 0 | 13 | 34 | 39 | 10 | 5.4 |
| Teaching | 0 | 0 | 5 | 15 | 39 | 28 | 10 | 5.2 |
| Workload | 0 | 0 | 0 | 40 | 27 | 24 | 8 | 5.0 |
| Difficulty | 0 | 0 | 2 | 37 | 29 | 24 | 5 | 4.9 |
| Learn Exp | 3 | 3 | 9 | 48 | 27 | 9 | 0 | 4.2 |

Instructor(s): J. Tate

| Enr: 125 | Resp: 77 |  |  |  |  | Retake: $46 \%$ |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 5 | 5 | 26 | 63 | 6.5 |
| Explains | 0 | 0 | 0 | 3 | 9 | 31 | 55 | 6.4 |
| Communicates | 0 | 0 | 1 | 3 | 17 | 32 | 42 | 6.1 |
| Teaching | 0 | 0 | 0 | 1 | 5 | 32 | 61 | 6.5 |
| Workload | 1 | 0 | 2 | 30 | 23 | 24 | 17 | 5.2 |
| Difficulty | 1 | 0 | 2 | 28 | 32 | 21 | 13 | 5.1 |
| Learn Exp | 4 | 3 | 3 | 40 | 18 | 19 | 9 | 4.6 |

Students were nearly unanimous in their praise of Tate, whom they considered an "outstanding" instructor. They lauded her, in particular, as easy to understand, well-organized, and approachable. A few students did, however, express concern about the difficulty of the course.

Instructor(s): J. Tate

| Enr: 118 | Resp: 85 |  |  |  |  | Retake: $61 \%$ |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 1 | 0 | 8 | 27 | 63 | 6.5 |
| Explains | 0 | 0 | 1 | 2 | 11 | 26 | 58 | 6.4 |
| Communicates | 0 | 1 | 1 | 5 | 22 | 34 | 34 | 5.9 |
| Teaching | 0 | 0 | 0 | 2 | 9 | 32 | 55 | 6.4 |
| Workload | 0 | 2 | 2 | 30 | 33 | 21 | 9 | 5.0 |
| Difficulty | 1 | 0 | 3 | 33 | 22 | 27 | 11 | 5.1 |
| Learn Exp | 0 | 1 | 4 | 33 | 23 | 27 | 8 | 5.0 |

Most students commended Tate as an "excellent" instructor. Some, however, felt that the scheduling of the section in a single 3-hour block was not terribly conducive to learning.

## MAT 135Y1Y Calculus I

Instructor(s): A. Lam
Enr: 182
Resp: 157

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 0 | 2 | 5 | 24 | 67 | 6.6 |
| Explains | 0 | 0 | 0 | 1 | 5 | 19 | 73 | 6.6 |
| Communicates | 0 | 0 | 0 | 0 | 5 | 11 | 83 | 6.8 |
| Teaching | 0 | 0 | 0 | 0 | 3 | 21 | 74 | 6.7 |
| Workload | 0 | 0 | 3 | 33 | 27 | 25 | 10 | 5.0 |
| Difficulty | 0 | 0 | 3 | 17 | 24 | 34 | 20 | 5.5 |
| Learn Exp | 1 | 0 | 4 | 29 | 19 | 29 | 14 | 5.1 |

Students gave outstanding praise for Lam and his lectures. Many even said the class should be taught in Con Hall, claiming that the students in the other sections were at a disadvantage. Some students complained that the tests were too difficult.

Instructor(s): E. LeBlanc

| Enr: 63 | Resp: 23 |  |  |  | Retake: 54\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 13 | 50 | 36 | 6.2 |
| Explains | 0 | 0 | 0 | 0 | 22 | 36 | 40 | 6.2 |
| Communicates | 0 | 0 | 0 | 22 | 45 | 13 | 18 | 5.3 |
| Teaching | 0 | 0 | 0 | 0 | 13 | 50 | 36 | 6.2 |
| Workload | 0 | 0 | 0 | 26 | 34 | 26 | 13 | 5.3 |
| Difficulty | 0 | 0 | 0 | 18 | 36 | 31 | 13 | 5.4 |
| Learn Exp | 0 | 0 | 0 | 52 | 10 | 26 | 10 | 4.9 |

Students praised LeBlanc as a very good lecturer and commended him in particular for the organization and clarity of his lectures and the helpfulness of his examples. A couple of students felt, however, he could have been more enthusiastic, while others felt that the scheduling of the section in a single 3-hour block was ill-suited for learning.

Instructor(s): M. Wesslen

| Enr: 97 | Resp: 57 |  |  |  | Retake: $48 \%$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 5 | 25 | 37 | 32 | 6.0 |
| Explains | 0 | 0 | 1 | 8 | 21 | 42 | 25 | 5.8 |
| Communicates | 0 | 0 | 3 | 14 | 41 | 21 | 19 | 5.4 |
| Teaching | 0 | 0 | 1 | 8 | 21 | 38 | 29 | 5.9 |
| Workload | 0 | 1 | 7 | 32 | 32 | 20 | 5 | 4.8 |
| Difficulty | 0 | 1 | 3 | 21 | 38 | 16 | 18 | 5.2 |
| Learn Exp | 2 | 4 | 14 | 42 | 17 | 14 | 4 | 4.3 |

Instructor(s): E. LeBlanc

| Enr: 166 | Resp: 54 |  |  |  |  | Retake: $36 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 7 | 16 | 31 | 44 | 6.1 |
| Explains | 0 | 0 | 1 | 7 | 25 | 38 | 25 | 5.8 |
| Communicates | 0 | 1 | 0 | 12 | 33 | 31 | 20 | 5.5 |
| Teaching | 0 | 0 | 0 | 3 | 16 | 50 | 29 | 6.1 |
| Workload | 0 | 0 | 1 | 16 | 35 | 35 | 9 | 5.3 |
| Difficulty | 0 | 0 | 0 | 11 | 26 | 49 | 13 | 5.6 |
| Learn Exp | 0 | 0 | 7 | 30 | 40 | 16 | 4 | 4.8 |

Students praised LeBlanc as a "very good" instructor, and commended him, in particular, as well-organized, helpful and enthusiastic. Some concern was expressed, however, about the difficulty of the tests.

Instructor(s): A. Lam

| Enr: 182 | Resp: 137 |  |  |  | Retake: 55\% |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 6 | 29 | 64 | 6.6 |
| Explains | 0 | 0 | 0 | 0 | 6 | 27 | 66 | 6.6 |
| Communicates | 0 | 0 | 0 | 0 | 3 | 21 | 74 | 6.7 |
| Teaching | 0 | 0 | 0 | 0 | 4 | 28 | 66 | 6.6 |


| Workload | 0 | 0 | 2 | 35 | 32 | 21 | 6 | 4.9 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | ---: | :--- |
| Difficulty | 0 | 0 | 1 | 21 | 28 | 28 | 18 | 5.4 |
| Learn Exp | 0 | 0 | 2 | 35 | 23 | 28 | 8 | 5.0 |

The students overwhelmingly praised Lam's clarity and organization. They also found the notes he provided to be very helpful. Some students complained that the tests were too hard.

Instructor(s): J. Korman

| Enr: 103 | Resp: 18 |  |  |  |  | Retake: 38\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 5 | 27 | 55 | 11 | 5.7 |
| Explains | 0 | 0 | 5 | 11 | 22 | 55 | 5 | 5.4 |
| Communicates | 0 | 0 | 0 | 22 | 38 | 16 | 22 | 5.4 |
| Teaching | 0 | 0 | 0 | 11 | 22 | 61 | 5 | 5.6 |
| Workload | 0 | 0 | 0 | 27 | 50 | 5 | 16 | 5.1 |
| Difficulty | 0 | 0 | 0 | 16 | 11 | 61 | 11 | 5.7 |
| Learn Exp | 5 | 0 | 5 | 47 | 23 | 17 | 0 | 4.4 |

Korman was good at helping with questions. A couple students suggested using more examples.

## MAT 137Y1Y Calculus!

Instructor(s): T. Baird

| Enr: 45 | Resp: 11 |  |  |  |  | Retake: $55 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 27 | 18 | 45 | 9 | 5.4 |
| Explains | 0 | 0 | 0 | 20 | 20 | 50 | 10 | 5.5 |
| Communicates | 0 | 10 | 10 | 10 | 20 | 30 | 20 | 5.1 |
| Teaching | 0 | 9 | 0 | 0 | 36 | 54 | 0 | 5.3 |
| Workload | 0 | 0 | 0 | 10 | 10 | 60 | 20 | 5.9 |
| Difficulty | 0 | 0 | 0 | 9 | 18 | 54 | 18 | 5.8 |
| Learn Exp | 0 | 0 | 12 | 12 | 37 | 37 | 0 | 5.0 |

The students found the problem sets very difficult and thought that the lectures and textbook did not sufficiently prepare them.

Instructor(s): P. Rosenthal

| Enr: 54 | Resp: 18 |  |  |  |  | Retake: $52 \%$ |  |  |
| :--- | :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 23 | 17 | 47 | 11 | 5.5 |
| Explains | 0 | 0 | 5 | 5 | 11 | 41 | 35 | 5.9 |
| Communicates | 0 | 0 | 5 | 11 | 29 | 23 | 29 | 5.6 |
| Teaching | 0 | 5 | 0 | 11 | 17 | 35 | 29 | 5.6 |
| Workload | 0 | 5 | 0 | 11 | 29 | 17 | 35 | 5.6 |
| Difficulty | 0 | 0 | 5 | 11 | 29 | 23 | 29 | 5.6 |
| Learn Exp | 6 | 0 | 6 | 13 | 13 | 33 | 26 | 5.3 |

The students liked the instructor and were happy that he gave many examples. But some students complained that the lectures didn't sufficiently prepare them for the difficult problem sets.

Instructor(s): N. Tzirakis

| Enr: 76 | Resp: 18 |  |  |  |  | Retake: 60\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 11 | 11 | 58 | 17 | 5.8 |
| Explains | 0 | 0 | 0 | 0 | 29 | 47 | 23 | 5.9 |
| Communicates | 0 | 0 | 5 | 11 | 23 | 35 | 23 | 5.6 |
| Teaching | 0 | 0 | 0 | 6 | 18 | 56 | 18 | 5.9 |
| Workload | 0 | 0 | 5 | 17 | 35 | 29 | 11 | 5.2 |
| Difficulty | 0 | 0 | 11 | 23 | 17 | 47 | 0 | 5.0 |
| Learn Exp | 0 | 0 | 14 | 21 | 42 | 14 | 7 | 4.8 |

The students thought the instructor was kind and explained ideas well.

Instructor(s): E. Ruiz

| Enr: 33 | Resp: 18 |  |  |  |  | Retake: $50 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 5 | 5 | 16 | 33 | 38 | 5.9 |
| Explains | 0 | 0 | 0 | 11 | 11 | 33 | 44 | 6.1 |
| Communicates | 0 | 0 | 0 | 16 | 22 | 38 | 22 | 5.7 |
| Teaching | 0 | 0 | 0 | 11 | 27 | 38 | 22 | 5.7 |
| Workload | 0 | 0 | 0 | 22 | 27 | 22 | 27 | 5.6 |
| Difficulty | 0 | 0 | 0 | 22 | 27 | 27 | 22 | 5.5 |
| Learn Exp | 0 | 0 | 15 | 23 | 15 | 38 | 7 | 5.0 |

Instructor(s): S. Uppal

| Enr: 78 | Resp: 39 |  |  |  |  | Retake: 60\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |  |
| Presents | 0 | 0 | 2 | 5 | 10 | 31 | 50 | 6.2 |  |
| Explains | 0 | 0 | 5 | 2 | 21 | 15 | 55 | 6.1 |  |
| Communicates | 0 | 0 | 0 | 5 | 23 | 31 | 39 | 6.1 |  |
| Teaching | 0 | 0 | 0 | 2 | 15 | 18 | 63 | 6.4 |  |
| Workload | 0 | 0 | 0 | 21 | 13 | 28 | 36 | 5.8 |  |
| Difficulty | 2 | 0 | 0 | 21 | 13 | 35 | 27 | 5.6 |  |
| Learn Exp | 0 | 0 | 5 | 26 | 17 | 38 | 11 | 5.2 |  |

Most students praised Uppal as an "excellent" instructor, and particularly appreciated the clarity of his lectures, his use of examples and his organization. Several students, however, felt that the pace of the course was too quick, and others expressed concern with the length and difficult of the problem sets. Some also expresses discontent with the TAs.

## MAT 157Y1Y Analysis I

Instructor(s): E. Meinrenken

| Enr: 52 | Resp: 23 |  |  |  | Retake: 65\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 0 | 13 | 52 | 34 | 6.2 |
| Explains | 0 | 0 | 4 | 8 | 26 | 47 | 13 | 5.6 |
| Communicates | 0 | 0 | 4 | 8 | 17 | 30 | 39 | 5.9 |
| Teaching | 0 | 0 | 0 | 8 | 13 | 43 | 34 | 6.0 |
| Workload | 0 | 0 | 0 | 4 | 21 | 43 | 30 | 6.0 |
| Difficulty | 0 | 0 | 0 | 0 | 8 | 34 | 56 | 6.5 |
| Learn Exp | 0 | 0 | 14 | 4 | 28 | 28 | 23 | 5.4 |

Students found the course very difficult, but rewarding. The instructor was praised for explaining the material well and going beyond the textbook to make lectures interesting. However, one student said that "it should be stated and emphasized clearly in the calendar that this course is appropriate only for students with excellent preparation!" It was also mentioned that there were about 100 students at the start of the course.

## MAT 223H1F Linear Algebra I

Instructor(s): M. Shub

| Enr: 109 | Resp: 26 |  |  |  |  | Retake: 62\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 3 | 3 | 15 | 15 | 42 | 19 | 0 | 4.5 |
| Explains | 0 | 4 | 16 | 32 | 20 | 20 | 8 | 4.6 |
| Communicates | 0 | 11 | 7 | 15 | 38 | 26 | 0 | 4.6 |
| Teaching | 0 | 7 | 7 | 11 | 38 | 26 | 7 | 4.9 |
| Workload | 4 | 4 | 4 | 56 | 16 | 12 | 4 | 4.3 |
| Difficulty | 0 | 8 | 8 | 24 | 40 | 12 | 8 | 4.6 |
| Learn Exp | 0 | 15 | 5 | 35 | 25 | 15 | 5 | 4.3 |

Most students considered Shub to be a good instructor. There were, however, some concerns about the legibility of his notes on the blackboard.

Instructor(s): M. Shub

| Enr: 130 | Resp: 17 |  |  |  |  | Retake: $56 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 5 | 11 | 0 | 23 | 47 | 11 | 0 | 4.3 |
| Explains | 0 | 5 | 17 | 29 | 29 | 17 | 0 | 4.4 |


| Communicates | 0 | 11 | 0 | 23 | 41 | 17 | 5 | 4.7 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Teaching | 0 | 0 | 5 | 29 | 35 | 29 | 0 | 4.9 |
| Workload | 0 | 0 | 6 | 50 | 18 | 25 | 0 | 4.6 |
| Difficulty | 0 | 0 | 6 | 31 | 25 | 37 | 0 | 4.9 |
| Learn Exp | 6 | 0 | 0 | 53 | 26 | 13 | 0 | 4.3 |

Instructor(s): S. Uppal

| Enr: 147 | Resp: 129 |  |  |  | Retake: $57 \%$ |  |  |  |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 4 | 3 | 20 | 30 | 39 | 5.9 |
| Explains | 1 | 1 | 3 | 6 | 29 | 27 | 30 | 5.6 |
| Communicates | 1 | 0 | 3 | 8 | 23 | 37 | 25 | 5.6 |
| Teaching | 0 | 0 | 1 | 4 | 20 | 38 | 32 | 5.9 |
| Workload | 0 | 1 | 2 | 49 | 29 | 15 | 1 | 4.6 |
| Difficulty | 0 | 0 | 4 | 34 | 33 | 18 | 7 | 4.8 |
| Learn Exp | 0 | 1 | 8 | 37 | 26 | 16 | 8 | 4.7 |

Students gave mixed reviews regarding the course material. Many felt Uppal was a very good lecturer and praised him for being clear in his explanations and well-organized. Common complaints included the need for more examples and a slightly rushed pace. Despite this, several evaluations came from students who admitted they were not enrolled in Uppal's section. Online assignments were controversial in terms of their usefulness. Many commented that these did not correspond well with lecture and test material, or that they were tedious and conceptually superficial in nature. Tutorials were considered useless by most, and it was often suggested they be more structured.

## MAT 223H1S Linear Algebra I

Instructor(s): S. Uppal

| Enr: 156 | Resp: 57 |  |  |  | Retake: 67\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 3 | 1 | 10 | 36 | 47 | 6.2 |
| Explains | 0 | 1 | 3 | 7 | 12 | 45 | 29 | 5.9 |
| Communicates | 0 | 1 | 0 | 8 | 24 | 40 | 24 | 5.8 |
| Teaching | 0 | 0 | 1 | 0 | 15 | 3 | 49 | 6.3 |
| Workload | 0 | 0 | 5 | 43 | 19 | 22 | 8 | 4.9 |
| Difficulty | 0 | 1 | 1 | 32 | 35 | 16 | 12 | 5.0 |
| Learn Exp | 0 | 2 | 9 | 16 | 41 | 23 | 6 | 5.0 |

While those who responded had varied opinions regarding the overall value of the course, most identified Uppal as an outstanding lecturer. They felt he explained concepts clearly and his class notes were said to be clear, complete, concise, well-organized and very helpful.

However, few students were content with respect to the structure of the course. In particular, online labs were considered to be time-consuming and of little value, and having written assignments was suggested so that students would have more practice at problems. Additionally, some noted variation in difficult between tests and also suggested using an alternate textbook.

## MAT 224H1F Linear Algebra II

Instructor(s): S. Uppal

| Enr: 80 | Resp: 42 |  |  |  |  | Retake: 62\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 2 | 7 | 43 | 46 | 6.3 |
| Explains | 0 | 0 | 0 | 0 | 29 | 34 | 36 | 6.1 |
| Communicates | 0 | 0 | 0 | 9 | 14 | 36 | 39 | 6.0 |
| Teaching | 0 | 0 | 0 | 0 | 14 | 46 | 39 | 6.2 |
| Workload | 0 | 0 | 7 | 31 | 31 | 21 | 7 | 4.9 |
| Difficulty | 0 | 0 | 2 | 29 | 34 | 34 | 9 | 5.2 |
| Learn Exp | 0 | 0 | 3 | 18 | 36 | 30 | 12 | 5.3 |

Students praised Uppal as a very good instructor and lauded him, in particular, as approachable, well-organized, and skilled at giving clear explanations. In addition, several students expressed particular satisfaction with the fairness of the evaluation. Some students, however, wrote that they would have liked to see more examples covered in class, and some felt that the pace of the course was too fast. As well, several students expressed dissatisfaction with the course textbook.

## MAT 224H1S Linear Algebra II

Instructor(s): S. Uppal

| Enr: 76 | Resp: 30 |  |  |  |  | Retake: 34\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 3 | 27 | 27 | 41 | 6.1 |
| Explains | 0 | 6 | 0 | 16 | 30 | 20 | 30 | 5.5 |
| Communicates | 0 | 0 | 0 | 10 | 33 | 16 | 40 | 5.9 |
| Teaching | 0 | 0 | 3 | 16 | 16 | 26 | 36 | 5.8 |
| Workload | 0 | 0 | 3 | 30 | 20 | 33 | 13 | 5.2 |
| Difficulty | 0 | 0 | 3 | 20 | 17 | 41 | 17 | 5.5 |
| Learn Exp | 0 | 4 | 4 | 40 | 13 | 22 | 13 | 4.9 |

Students generally said that the instructor was good but the test and quizzes were difficult.

## MAT 235Y1Y Calculus II

Instructor(s): R. Stanczak

| Enr: 67 | Resp: 17 |  |  |  |  | Retake: 60\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 6 | 0 | 0 | 25 | 43 | 12 | 12 | 4.9 |
| Explains | 0 | 6 | 0 | 13 | 20 | 46 | 13 | 5.4 |
| Communicates | 6 | 0 | 0 | 6 | 31 | 37 | 18 | 5.4 |
| Teaching | 6 | 0 | 0 | 12 | 31 | 37 | 12 | 5.2 |
| Workload | 0 | 0 | 6 | 53 | 33 | 6 | 0 | 4.4 |
| Difficulty | 0 | 0 | 0 | 46 | 33 | 13 | 6 | 4.8 |
| Learn Exp | 0 | 8 | 8 | 50 | 16 | 8 | 8 | 4.3 |

Instructor(s): J. Korman

| Enr: 82 | Resp: 23 |  |  |  |  | Retake: 71\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |  |
| Presents | 0 | 4 | 0 | 26 | 30 | 26 | 13 | 5.1 |  |
| Explains | 0 | 4 | 13 | 21 | 21 | 34 | 4 | 4.8 |  |
| Communicates | 4 | 4 | 21 | 21 | 26 | 21 | 0 | 4.3 |  |
| Teaching | 0 | 4 | 4 | 30 | 21 | 34 | 4 | 4.9 |  |
| Workload | 0 | 4 | 0 | 68 | 22 | 0 | 4 | 4.3 |  |
| Difficulty | 0 | 0 | 0 | 63 | 31 | 0 | 4 | 4.5 |  |
| Learn Exp | 11 | 0 | 0 | 61 | 22 | 5 | 0 | 4.0 |  |

Students were generally satisfied with Korman's performance as an instructor, and several praised him in particular for his use of examples. Students were also appreciative of the fact that Korman picked up this course well into the academic year and with rather short notice.

MAT 237Y1Y Multivariable Calculus
Instructor(s): S. Homayouni-Boroojeni

| Enr: 50 | Resp: 20 |  |  |  |  | Retake: $41 \%$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |  |
| Presents | 0 | 5 | 10 | 31 | 21 | 21 | 10 | 4.7 |  |
| Explains | 0 | 5 | 5 | 15 | 31 | 26 | 15 | 5.2 |  |
| Communicates | 0 | 0 | 5 | 5 | 22 | 38 | 27 | 5.8 |  |
| Teaching | 0 | 5 | 0 | 21 | 36 | 26 | 10 | 5.1 |  |
| Workload | 0 | 0 | 10 | 10 | 36 | 26 | 15 | 5.3 |  |
| Difficulty | 0 | 0 | 5 | 5 | 26 | 21 | 42 | 5.9 |  |
| Learn Exp | 0 | 7 | 23 | 30 | 23 | 15 | 0 | 4.2 |  |

Most students liked the instructor but had complaints about the course: it was very difficult and the material on the tests did not always correspond to what was taught in the lectures. Also, the problem sets were extremely time-consuming but not useful for test preparation.

## MAT 240H1F Algebra I

Instructor(s): D. Bar-Natan

| Enr: 76 | Resp: 45 |  |  |  | Retake: $87 \%$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 8 | 2 | 28 | 60 | 6.4 |
| Explains | 0 | 0 | 0 | 6 | 11 | 27 | 54 | 6.3 |
| Communicates | 0 | 0 | 0 | 4 | 2 | 20 | 73 | 6.6 |


| Teaching | 0 | 0 | 0 | 4 | 2 | 27 | 65 | 6.5 |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Workload | 0 | 0 | 0 | 46 | 37 | 11 | 4 | 4.7 |
| Difficulty | 0 | 0 | 2 | 33 | 33 | 24 | 6 | 5.0 |
| Learn Exp | 0 | 0 | 2 | 16 | 16 | 32 | 32 | 5.8 |

Students unanimously praised Bar-Natan for being an exceptional lecturer. He was described as well-organized, clear and insightful in his explanations and responses to questions. Additionally, Bar-Natan was said to possess a very contagious enthusiasm for the material.

Students appreciated the use of a Wiki for the course website as well as the instructor's good choices of examples and assignments that provided a good review of course material. The textbook was well-liked, but tutorials were said to be disorganized and not in sync with the lectures. A few felt that the pacing of lectures and chalkboard organization could have used improvement, but that this did not detract from their understanding of concepts.

## MAT 244H1F Introduction to Ordinary Differential Equations

Instructor(s): B. Khesin

| Enr: 108 | Resp: 42 |  |  |  |  | Retake: $65 \%$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 2 | 7 | 21 | 41 | 26 | 5.8 |
| Explains | 0 | 0 | 4 | 7 | 21 | 42 | 23 | 5.7 |
| Communicates | 0 | 2 | 2 | 4 | 21 | 43 | 24 | 5.8 |
| Teaching | 0 | 0 | 2 | 11 | 11 | 50 | 23 | 5.8 |
| Workload | 0 | 2 | 14 | 43 | 19 | 14 | 4 | 4.4 |
| Difficulty | 0 | 2 | 4 | 48 | 31 | 12 | 0 | 4.5 |
| Learn Exp | 0 | 3 | 6 | 29 | 32 | 25 | 3 | 4.8 |

Several students praised Khesin as a good instructor, noting his enthusiasm and sense of humour. However, there was concern that too little time was allotted for writing the tests and quizzes and some felt that a tutorial would have been helpful.

MAT 244H1S Introduction to Ordinary Differential Equations
Instructor(s): S. Homayouni-Boroojeni

| Enr: 91 | Resp: 45 |  |  |  | Retake: 45\% |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 2 | 4 | 15 | 29 | 31 | 15 | 0 | 4.3 |
| Explains | 2 | 6 | 13 | 17 | 42 | 15 | 2 | 4.5 |
| Communicates | 6 | 2 | 4 | 11 | 31 | 31 | 13 | 5.0 |
| Teaching | 11 | 0 | 13 | 25 | 37 | 11 | 0 | 4.1 |
| Workload | 0 | 2 | 9 | 36 | 34 | 11 | 6 | 4.6 |
| Difficulty | 0 | 0 | 9 | 34 | 18 | 27 | 11 | 5.0 |
| Learn Exp | 3 | 9 | 18 | 43 | 15 | 6 | 3 | 3.9 |

Though some students commended the instructor for her teaching skills and sense of humour, most expressed dissatisfaction with the course. Students were especially concerned with what they felt was the excessive length and difficulty of the tests and several felt that the level of the lecture material was unduly light, especially with regards to the level of the assessments.

## MAT 246H1F Concepts in Abstract Mathematics

Instructor(s): P. Rosenthal

| Enr: 53 | Resp: 36 |  |  |  |  | Retake: $85 \%$ |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 5 | 13 | 33 | 33 | 13 | 5.4 |
| Explains | 0 | 2 | 8 | 2 | 22 | 47 | 16 | 5.5 |
| Communicates | 0 | 0 | 2 | 2 | 27 | 41 | 25 | 5.8 |
| Teaching | 0 | 0 | 0 | 5 | 19 | 52 | 22 | 5.9 |
| Workload | 5 | 5 | 8 | 71 | 8 | 0 | 0 | 3.7 |
| Difficulty | 5 | 2 | 8 | 67 | 14 | 0 | 0 | 3.8 |
| Learn Exp | 0 | 3 | 3 | 34 | 26 | 26 | 3 | 4.8 |

Students generally expressed satisfaction with Rosenthal's performance as an instructor. Others, however, wrote that they would have appreciated online lecture notes and more practice problems. There was also some concern about the strictness of the marking.

MAT 246H1S Concepts in Abstract Mathematics
Instructor(s): P. Rosenthal

| Enr: 34 | Resp: 25 |  |  |  |  | Retake: 80\% |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 4 | 4 | 21 | 39 | 17 | 13 | 5.0 |
| Explains | 0 | 0 | 4 | 8 | 43 | 30 | 13 | 5.4 |
| Communicates | 0 | 0 | 0 | 17 | 34 | 17 | 30 | 5.6 |
| Teaching | 0 | 0 | 0 | 9 | 22 | 45 | 22 | 5.8 |
| Workload | 0 | 4 | 17 | 65 | 13 | 0 | 0 | 3.9 |
| Difficulty | 0 | 4 | 8 | 60 | 26 | 0 | 0 | 4.1 |
| Learn Exp | 0 | 0 | 6 | 20 | 53 | 13 | 6 | 4.9 |

The students found Rosenthal very friendly and approachable, but thought more examples would have been helpful. Opinions were divided about the course not having a textbook.

## MAT 247H1S Algebra II

Instructor(s): F. Murnaghan
Enr: 50
Resp: 21
Retake: 88\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 0 | 20 | 10 | 35 | 35 | 5.8 |
| Explains | 0 | 0 | 4 | 9 | 17 | 47 | 19 | 5.7 |
| Communicates | 0 | 0 | 0 | 30 | 20 | 30 | 20 | 5.4 |
| Teaching | 0 | 0 | 0 | 14 | 19 | 52 | 14 | 5.7 |
| Workload | 0 | 0 | 0 | 38 | 42 | 9 | 9 | 4.9 |
| Difficulty | 0 | 0 | 0 | 33 | 28 | 23 | 14 | 5.2 |
| Learn Exp | 0 | 0 | 0 | 7 | 38 | 46 | 7 | 5.5 |

Almost everyone praised the instructor, and the word "amazing" was used more than once. There were a few minor complaints about speaking too softly or not labelling theorems clearly on the blackboard, but the positive comments far outweighed the negative.

## MAT 257Y1Y Analysis II

Instructor(s): A. Burchard

| Enr: 30 | Resp: 20 |  |  |  |  | Retake: 94\% |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 0 | 5 | 47 | 21 | 56 | 5.7 |
| Explains | 0 | 0 | 0 | 10 | 26 | 21 | 42 | 5.9 |
| Communicates | 0 | 0 | 0 | 0 | 15 | 21 | 63 | 6.5 |
| Teaching | 0 | 0 | 0 | 5 | 21 | 21 | 52 | 6.2 |
| Workload | 0 | 0 | 0 | 16 | 38 | 27 | 16 | 5.4 |
| Difficulty | 0 | 0 | 0 | 10 | 20 | 35 | 35 | 5.9 |
| Learn Exp | 0 | 0 | 0 | 11 | 35 | 29 | 23 | 5.6 |

Students thought highly of Burchard as an instructor, praising her in particular for her enthusiasm and approachability.

## MAT 327H1F Introduction to Topology

Instructor(s): M. Shub
Enr: 46
Resp: 23

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 13 | 8 | 21 | 21 | 21 | 13 | 4.7 |
| Explains | 0 | 0 | 26 | 13 | 34 | 8 | 17 | 4.8 |
| Communicates | 0 | 0 | 13 | 21 | 21 | 17 | 26 | 5.2 |
| Teaching | 0 | 4 | 13 | 8 | 34 | 17 | 21 | 5.1 |
| Workload | 0 | 0 | 0 | 13 | 36 | 40 | 9 | 5.5 |
| Difficulty | 0 | 0 | 0 | 0 | 13 | 63 | 22 | 6.1 |
| Learn Exp | 0 | 0 | 0 | 13 | 20 | 26 | 40 | 5.9 |

Most agreed that while Shub was approachable and showed concern for his students, he needed to improve his clarity, volume and penmanship. A few suggested using a different method of evaluation that focused less on memorization and more on theorems.

MAT 334H1F Complex Variables
Instructor(s): P. Milman
Enr: 47
Resp: 21
Retake: 55\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 14 | 23 | 19 | 28 | 4 | 9 | 4.1 |
| Explains | 0 | 5 | 25 | 30 | 15 | 10 | 15 | 4.4 |
| Communicates | 0 | 0 | 0 | 9 | 14 | 19 | 57 | 6.2 |
| Teaching | 0 | 0 | 9 | 14 | 42 | 19 | 14 | 5.1 |
| Workload | 0 | 4 | 9 | 33 | 23 | 14 | 14 | 4.8 |
| Difficulty | 0 | 0 | 4 | 38 | 19 | 19 | 19 | 5.1 |
| Learn Exp | 0 | 0 | 7 | 57 | 21 | 14 | 0 | 4.4 |

Milman was said to be highly enthusiastic and sympathetic to the needs of students, but difficult to follow and somewhat disorganized in his presentation and chalkboard use. However, he made himself available to students and many felt his office hours were helpful.

## MAT 335H1S Chaos, Fractals and Dynamics

Instructor(s): E. Pujals

| Enr: 94 | Resp: 34 |  |  |  |  |  | Retake: 61\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |  |
| Presents | 8 | 11 | 17 | 20 | 17 | 8 | 14 | 4.1 |  |
| Explains | 0 | 12 | 12 | 25 | 21 | 15 | 12 | 4.5 |  |
| Communicates | 0 | 9 | 3 | 24 | 18 | 27 | 18 | 5.1 |  |
| Teaching | 0 | 18 | 9 | 18 | 9 | 30 | 15 | 4.7 |  |
| Workload | 0 | 12 | 9 | 54 | 9 | 3 | 9 | 4.1 |  |
| Difficulty | 0 | 9 | 12 | 48 | 12 | 3 | 12 | 4.3 |  |
| Learn Exp | 0 | 9 | 4 | 26 | 22 | 9 | 18 | 4.7 |  |

Students had mixed opinions regarding Pujal's lecturing style, with most mentioning a lack of organization and structure (particularly on the blackboard). However, many stated that he took time attending to students' questions and did his best to help students understand the concepts. He was also said to be very helpful during office hours.

Many respondents also felt the course material itself was very interesting and intriguing.

MAT 337H1S Introduction to Real Analysis
Instructor(s): I. Graham

| Enr: 65 | Resp: 40 |  |  |  |  | Retake: 66\% |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 0 | 2 | 10 | 31 | 31 | 23 | 5.6 |
| Explains | 0 | 0 | 2 | 26 | 18 | 39 | 13 | 5.3 |
| Communicates | 0 | 2 | 10 | 23 | 39 | 13 | 10 | 4.8 |
| Teaching | 0 | 0 | 2 | 15 | 34 | 26 | 21 | 5.5 |
| Workload | 2 | 0 | 0 | 26 | 26 | 18 | 26 | 5.3 |
| Difficulty | 2 | 0 | 0 | 18 | 26 | 21 | 3 | 5.6 |
| Learn Exp | 0 | 3 | 0 | 27 | 31 | 17 | 20 | 5.2 |

Most students liked Graham and one even called him the "best prof in this university". He was described as helpful and coherent. However, some students felt that the tests were too difficult and that, given the challenging nature of the material, there was not enough tutorial hours.

MAT 344H1F Introduction to Combinatorics
Instructor(s): S. Tanny

| Enr: 75 | Resp: 50 |  |  |  |  | Retake: 77\% |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| Presents | 0 | 4 | 0 | 12 | 28 | 18 | 36 | 5.7 |
| Explains | 4 | 0 | 0 | 18 | 16 | 28 | 32 | 5.6 |
| Communicates | 0 | 2 | 4 | 10 | 12 | 34 | 36 | 5.8 |
| Teaching | 0 | 2 | 4 | 4 | 18 | 30 | 40 | 5.9 |
| Workload | 2 | 4 | 2 | 56 | 24 | 8 | 4 | 4.4 |
| Difficulty | 2 | 2 | 8 | 40 | 32 | 8 | 8 | 4.5 |
| Learn Exp | 0 | 2 | 0 | 22 | 27 | 30 | 17 | 5.3 |

Most lauded Tanny as a good instructor, praising him for his enthusiasm, approachability and especially his care for students' concerns. Some, however, felt that there was a disconnect between the difficult of the lecture material and the difficulty of the evaluations.

MAT 347Y1Y Groups, Rings and Fields
Instructor(s): S. Kudla
Enr: 16 Resp: 7 Retake: 83\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 0 | 28 | 14 | 57 | 0 | 5.3 |
| Explains | 0 | 0 | 0 | 28 | 14 | 0 | 57 | 5.9 |
| Communicates | 0 | 0 | 0 | 0 | 14 | 28 | 7 | 6.4 |
| Teaching | 0 | 0 | 0 | 14 | 14 | 14 | 57 | 6.1 |
| Workload | 0 | 0 | 0 | 14 | 14 | 57 | 14 | 5.7 |
| Difficulty | 0 | 0 | 0 | 0 | 14 | 57 | 28 | 6.1 |
| Learn Exp | 0 | 0 | 0 | 16 | 0 | 33 | 50 | 6.2 |

MAT 390H1S History of Mathematics up to 1700 - see HPS 390H1S

MAT 401H1S Polynomial Equations and Fields
Instructor(s): D. Bar-Natan
Enr: 38
Resp: 17
Retake: 47\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 11 | 11 | 41 | 29 | 5 | 5.1 |
| Explains | 0 | 0 | 11 | 29 | 23 | 29 | 5 | 4.9 |
| Communicates | 0 | 0 | 0 | 11 | 29 | 41 | 17 | 5.6 |
| Teaching | 0 | 0 | 0 | 23 | 17 | 52 | 5 | 5.4 |
| Workload | 0 | 0 | 0 | 41 | 29 | 17 | 11 | 5.0 |
| Difficulty | 0 | 0 | 5 | 17 | 41 | 17 | 17 | 5.2 |
| Learn Exp | 0 | 0 | 7 | 21 | 42 | 21 | 7 | 5.0 |

MAT 454H1S Complex Analysis II
Instructor(s): E. Bierstone
Enr: 14 Resp: 15 Retake: 86\%

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Presents | 0 | 0 | 0 | 6 | 0 | 26 | 66 | 6.5 |
| Explains | 0 | 0 | 0 | 6 | 0 | 40 | 53 | 6.4 |
| Communicates | 0 | 0 | 0 | 6 | 0 | 33 | 60 | 6.5 |
| Teaching | 0 | 0 | 0 | 6 | 0 | 33 | 60 | 6.5 |
| Workload | 0 | 0 | 0 | 50 | 35 | 0 | 14 | 4.8 |
| Difficulty | 0 | 0 | 0 | 33 | 33 | 33 | 0 | 5.0 |
| Learn Exp | 0 | 0 | 0 | 15 | 7 | 46 | 60 | 5.9 |

Students unanimously felt Bierstone was an exceptional lecturer, commending him for being clear, concise, well-organized, and even elegant in his presentation. He was said to have covered substantial material effortlessly and was also always available for extra help. The course itself was considered interesting and enjoyable, with one student stating "these are the most worthwhile classes...ever attended".


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