CALCULUS (2016-2017 Winter)

Instructor: **Li, Chao**
Subject: **MATH**
Catalog & Section: **42A 1**

Responses Incl Declines: **4**
Declines: **0**

Click on the number of comments to either expand or collapse comment sections.

Interaction

Chao Li (4 comments)

Q: During the quarter, about how many hours on average per week did you interact with this instructor in section, class, lab, office hours, and other meetings?
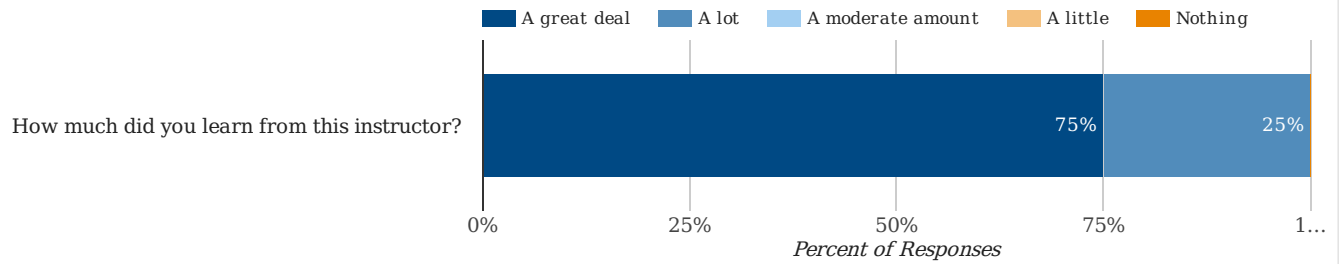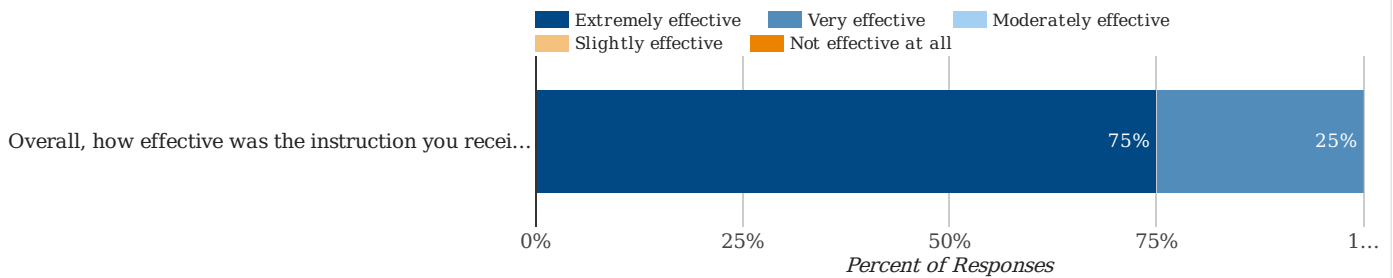
1	4
2	6
3	4
4	4

Learning and Instruction

How much did you learn from this instructor?

| | 75% | 25% |

Percent of Responses

Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How much did you learn from this instructor?	4	100%	4.8	5	0.4	75%	25%	0%	0%	0%

Note: 5:A great deal; 4:A lot; 3:A moderate amount; 2:A little; 1:Nothing;

Overall, how effective was the instruction you recei…

| | 75% | 25% |

Percent of Responses

Question	Number of Responses	Response Rate	Course Mean	Course Median
Overall, how effective was the instruction you received from this instructor?	4	100%	4.8	5

Note: 5:Extremely effective; 4:Very effective; 3:Moderately effective; 2:Slightly effective; 1:Not effective at all;

Chao Li (3 comments)

Q: What skills or knowledge did you learn or improve from this instructor?

1   Gained a much better understanding of the material covered in lecture.

2   Chao Li helped me solidify the concepts that I learned in class and understand what I missed.

3   Differential Equations, Application of Integrals, Series and Sequences

Teaching Feedback

Chao Li (8 comments)

Q: What aspects of this instructor's teaching were most helpful to you? (Please type one idea in each box below.)
Aspect 1:

1 Very good at explaining topics if you don't get it.

2 His handouts are A for studying.

3 Preparation for classes

Q: Aspect 2:

1 Very smart and knowledgable about any topics being covered.

2 He goes above and beyond what Jorge taught in class.

3 Ability to help every student understand the material

Q: Aspect 3:

1 Aware of the types of questions we need to be able to answer and knew what was going on in class.

2 Flexibility in schedule

Chao Li (5 comments)

Q: How can this instructor's teaching be improved? (Please type one idea in each box below.)
Aspect 1:

1 Spend more time on material that is very relevant, and less time on proofs.

2 None that I can think of. He is a superb TA.

3 I think he could be a little bit more assertive sometimes

Q: Aspect 2:

1 Expect less pre-knowledge coming into the course.

Q: Aspect 3:

1 Nothing Else

Instructor Added Questions

Closed-ended

No Data.

APPLIED MATRIX THEORY (2015-2016 Spring)

Instructor: **Li, Chao**
Subject: **MATH**
Catalog & Section: **104 1**

Responses Incl Declines: **59**
Declines: **18**

Click on the number of comments to either expand or collapse comment sections.

Interaction

Q: During the quarter, about how many hours on average per week did you interact with this TA in section, class, lab, office hours, and other meetings?

1	2
2	1
3	4
4	2
5	1
6	3
7	3
8	3
9	2
10	1
11	2
12	.5
13	2
14	0
15	1
16	2
17	1
18	1
19	1
20	2
21	1
22	0
23	1
24	2
25	1
26	1
27	1
28	2
29	2
30	1
31	1
32	3
33	3
34	3
35	2
36	2

Learning and Instruction
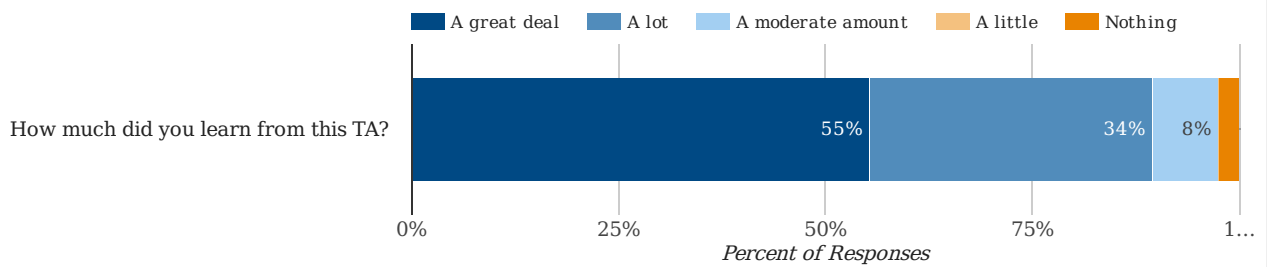
How much did you learn from this TA?
- A great deal: 55%
- A lot: 34%
- A moderate amount: 8%

Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How much did you learn from this TA?	38	64%	4.4	5	0.8	55%	34%	8%	0%	3%

Note: 5:A great deal; 4:A lot; 3:A moderate amount; 2:A little; 1:Nothing;
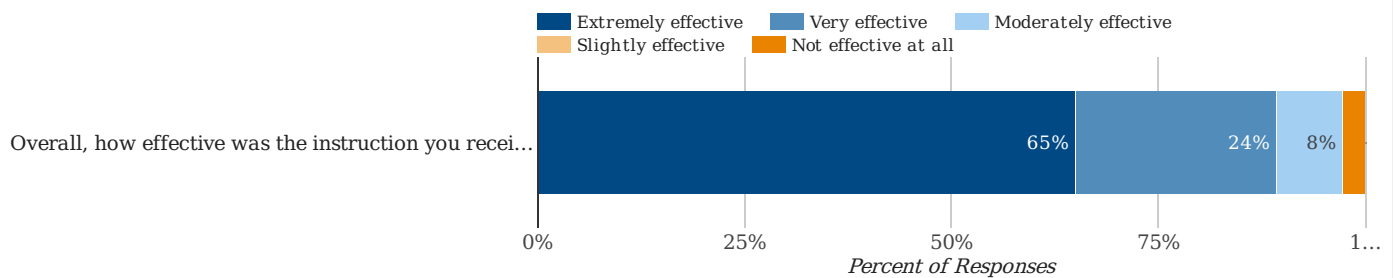
Overall, how effective was the instruction you recei...
- Extremely effective: 65%
- Very effective: 24%
- Moderately effective: 8%

Question	Number of Responses	Response Rate	Course Mean	Course Median
Overall, how effective was the instruction you received from this TA?	37	62%	4.5	5

Note: 5:Extremely effective; 4:Very effective; 3:Moderately effective; 2:Slightly effective; 1:Not effective at all;

Chao Li (21 comments)

Q: What skills or knowledge did you learn or improve from this TA?

1 Very insightful applications of the dense course material to problems

2 Chao explained everything very clearly and got the linear algebra confusion out of my brain.

3 Proofs, Factorization Computations

4 Proofs.

5 Basic linear algebra skills which I had forgotten for years.

6 chao is ~*~the coolest!~*~

7 linear algebra

8 I liked that he didn't just show you how to solve a problem, but the theory and thought process behind each step.

9 Chao Li leads you through problems in such a way that you internalize the knowledge very well without outright being given the answer. Most of my learning in this course came from his office hours.

10 I only went to Chao's office hours once towards the beginning of the year, but he helped look over my proof to make sure it was rigorous.

11 a lot of the practical examples that came from the theoretical concepts

12	How to solve homework problems
13	Reinforcing class concepts
14	TA answered all doubts
15	He helped a lot with the more difficult problems on the p-set.
16	everything!! chao li you are an angel
17	matrix theory
18	Math, proofs
19	Problem solving
20	A lot of cool explanations and tricks when doing proofs
21	Problem sets

Teaching Feedback

Chao Li (39 comments)

Q: What aspects of this TA's teaching were most helpful to you? (Please type one idea in each box below.)
Aspect 1:

1	Great problem solving skills.
2	Great at communicating math
3	Clear explanations of concepts and problems
4	He never confused us by making us guess endlessly what the answer might be.
5	Ability to answer questions
6	Writing explanations on the board, then going over them in detail
7	none
8	I had forgotten a basic linear algebra technique as it had been years since I last took a linear algebra class, but he was very nice and patient about it. I was worried I was going to be mocked for forgetting something that simple, but he was the complete opposite and I appreciated that.
9	responsiveness
10	Very good at working through problems
11	He took questions
12	Preparedness
13	Willingness to explain things
14	Office hours were incredibly helpful. Working out the problems with students was extremely effective.
15	Doubt solving
16	knowledge
17	Going over answers clearly
18	Chao Li is a god. I love how he solves problems on the spot! He's very logical about them and thorough. I learnt more from this guy than I learnt from lecture all quarter. Thanks, Chao - you're awesome.
19	Simplicity of explanation
20	Explains really clearly
21	Very very brilliant problem solving skills. Able to offer smart solutions that instructors can't.
22	Chao is very knowledgable

Q: Aspect 2:

1	Clarity
2	Offered new and often easier ways to approach problems than were covered in lecture
3	allowing everyone to to ask questions
4	He was very clear when answering our questions.
5	Ability to go through any problem of the problem sets
6	none
7	I also appreciated that he wrote everything on the board for me to follow. It's easier for me to write things down that way.
8	Clarity
9	clarity
10	Gave great hint!
11	Clarity of explanation
12	Helpful, patient

Q: Aspect 3:

1	Thoroughness
2	His office hours went over the problems with the entire group in attendance, so that we all got the most out of the 2 hours.
3	none
4	Patience
5	n/a

Chao Li (14 comments)

Q: How can this TA's teaching be improved? (Please type one idea in each box below.) - Aspect 1:

1	Don't solve the entirety of the problem during office hours
2	NA
3	I can't really come up with ways he could improve. The math building could improve -- the TAs' offices are really horrible! The chalk boards and heavy wooden desks need to go!
4	Don't make the easy assumption that students who take this class know much a lot about linear algebra. There are slow to learn students and students who know very little linear algebra who take this class. This TA is constantly jumping from one thing to another sometimes with little or no explanation.
5	Review the psets and material a bit more before office hours, seemed slightly unprepared but was smart enough to recover
6	none
7	No complaints, though the exam grading was a bit harsh :P I'm sure that's not entirely his responsibility though, so I don't blame him.
8	Not skip over big steps too quickly
9	n/a
10	nothing

Q: Aspect 2:

| 1 | none |
| 2 | n/a |

Q: Aspect 3:

1 none

2 n/a

Instructor Added Questions

Closed-ended

No Data.

LIN ALG AND MULTIVAR CALCULUS (2015-2016 Winter)

Instructor: **Li, Chao**
Subject: **MATH**
Catalog & Section: **51 9**

Responses Incl Declines: **60**
Declines: **3**

Click on the number of comments to either expand or collapse comment sections.

Interaction

Chao Li (57 comments)

Q: During the quarter, about how many hours on average per week did you interact with this TA in section, class, lab, office hours, and other meetings?

1	3
2	0
3	2
4	2
5	2
6	4
7	2
8	4
9	4
10	3
11	1
12	2
13	1
14	2
15	2
16	2
17	2
18	2
19	4
20	2
21	2
22	0
23	2
24	2
25	3
26	2
27	1
28	1.5
29	4
30	2
31	2

32	3
33	.5
34	2
35	1
36	2
37	2
38	2
39	2
40	2
41	4
42	2
43	3
44	2
45	3
46	3
47	2
48	2
49	8
50	3
51	2
52	2
53	3
54	1
55	4
56	2
57	2

Learning and Instruction
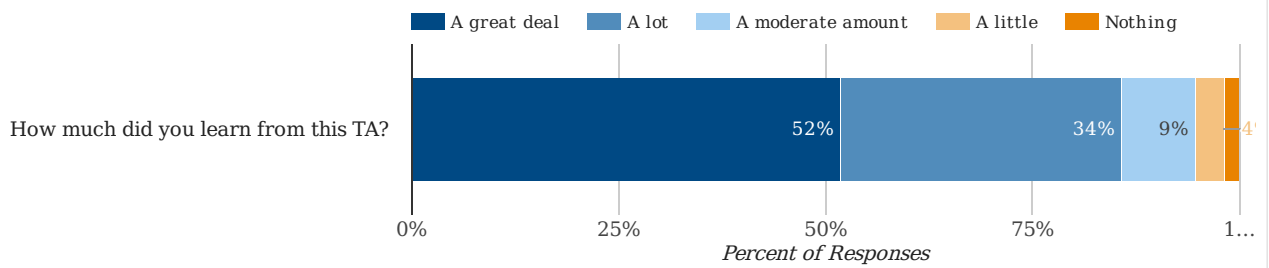
Legend: A great deal · A lot · A moderate amount · A little · Nothing

How much did you learn from this TA? — 52% | 34% | 9% | 4%

Percent of Responses

Question	Number of Responses	Response Rate	Course Mean	Course Median	STDEV	5	4	3	2	1
How much did you learn from this TA?	56	93%	4.3	5	0.9	52%	34%	9%	4%	2%

Note: 5:A great deal; 4:A lot; 3:A moderate amount; 2:A little; 1:Nothing;
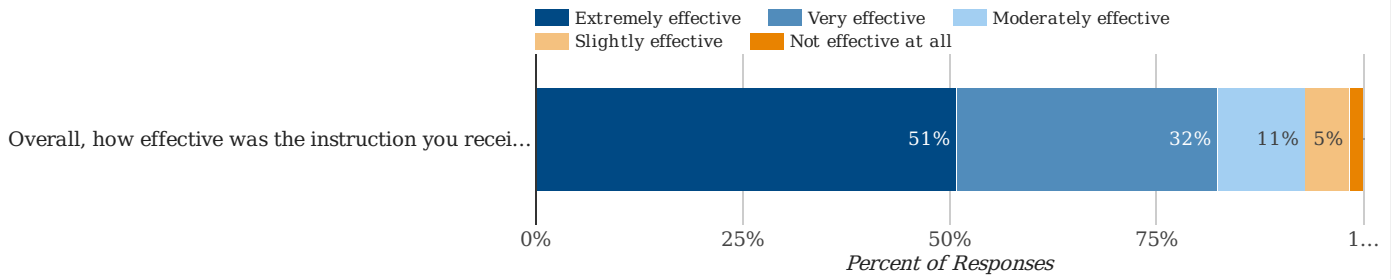
Question	Number of Responses	Response Rate	Course Mean	Course Median
Overall, how effective was the instruction you received from this TA?	57	95%	4.3	5

Note: 5:Extremely effective; 4:Very effective; 3:Moderately effective; 2:Slightly effective; 1:Not effective at all;

Chao Li (46 comments)

Q: What skills or knowledge did you learn or improve from this TA?

1   I learned better ways to solve the problems using the concepts we learned in lecture.

2   A lot of math

3   I learned almost everything that I learned from the course. The lecture was very poorly run but Chao did a great job as a TA.

4   approaching problems

5   Appreciation of how to solve linear algebra questions

6   Math

7   His methodology to solving problems was always very clear and systematic. The work was easily to understand and the writing was the most legible of all TAs/professors (I've tried a majority of them).

8   Pretty much all of the class, sections are necessary in my opinion as they really solidify material learned in class

9   It was like an extension of lecture, I continued to learn the material just through a different teacher.

10   Go slower

11   Many different topics throughout the quarter (my understanding of null space, eigenvalues, etc.)

12   I learned how to do some of the problems on the problem sets in section.

13   My problem solving ability improved!

14   Linear algebra and Multivariable calculus

15   Improved Linear Algebra/Multivariable Calculus knowledge; better preparation for midterms/exams.

16   how to do the basic version of each problem type

17   Linear Algebra and differential multivariable calculus

18   Better conceptual and practical understanding of the material

19   CHAO EXPLAINED EVERYTHING!!!!

20   Chao clarified almost every topic beyond what I was able to understand in lecture alone

21   I learned the intuition behind the math we learned in lecture.

22   practice with concepts and examples

23   Reinforced the material we learned in class.

24   Most math concepts from the first two midterms

25   Honestly I attribute everything I learned in Math 51 to Chao's sections and office hours. I found him far and away more clear, effective, and accessible than lecture, Khan Academy, and the textbook combined.

26   Chao was SO GOOD about actually providing the necessary information to do well in the class and understand the material.

27   He was great at explaining difficult concepts and applying them in practice problems

28	General problem solving, how to attack certain problems and key methodologies needed for math 51
29	How to understand what was taught in lecture, how to be an effective teacher and strong communicator, how to be efficient with mathematical concepts.
30	I learned how to complete various mathematical problems when I presented them
31	Reinforced learning in lecture.
32	approaching math problems with a clear procedure of how to solve them
33	practical problem solving
34	Nothing in particular. I did not attend section meetings.
35	Was very clear - in his handwriting, in his pace, and in his clear description of concepts. I felt that in lecture I was introduced to the concepts and then in section my understanding was solidified. I learned how to do the homework problems from Chao because his examples echoed what would come on the homework.
36	more elaborate version of materials than class
37	Everything on the syllabus for Math 51 was explained with great precision and accessibility by Chao. He went to great lengths to help us understand anything that was unclear.
38	Problem solving in new variables and in abstract settings
39	Taught everythign really well
40	Most of the syllabus!
41	All skills pertaining to the class
42	All of his examples were clear
43	reinforced concepts learned via khan academy or lecture
44	Everything in Math 51
45	This TA went over information from lecture very quickly and efficiently, which was perfect if I had missed the last lecture. Other than that, we went over some of the more difficult problems which was extremely useful.
46	In depth knowledge of math beyond just memorizing formulas and equations

Teaching Feedback

Chao Li (129 comments)

Q: What aspects of this TA's teaching were most helpful to you? (Please type one idea in each box below.) Aspect 1:

1	Ample examples of each type of problem we were doing in class-including ones which were similar to the homework
2	He went through problems carefully on the board
3	Doing sample problems and clearly showing every step.
4	His encouragement to have us ask questions kept me interested in learning the material he was teaching.
5	He knew the material well
6	He was able to present material clearly and help me understand new topics.
7	Going over how to do specific problems in section.
8	Clarity
9	Chao is super clear at explaining concepts.
10	Chao is an exemplary TA who provides clear explanations and concepts.
11	example problems
12	clear in lecture
13	Ability to present material clearly

14 clear explanations of how to do problems

15 He was very organized, in the way he spoke and presented information

16 His attention to detail when explaining practice problems

17 Spoke relatively slowly

18 really clear explanations of material covered in lecture (good refresher)

19 Willing to substitute when the professor is sick.

20 He organized the material he taught into example problems which was very helpful

21 Information was very clearly laid out on the board, at a pace ideal for making notes and understanding

22 Going through problems

23 Great understanding of linear algebra with the ability to articulate knowledge in a way that is easy for any student to understand.

24 Examples

25 Clarity

26 very clear

27 Clarity of concepts

28 Timing was really good, he would spend our time efficiently, skipping over unnecessary calculations to cover more

29 The examples that he chooses to go over in section are relatively similar to the problems on the exam.

30 Slow and steady pace

31 Clear, worked examples

32 So organized

33 Clarity

34 Examples

35 Connecting Concepts; Although the course itself does not follow a linear narrative arc, Chao really helped connect a lot of those dots across different concepts (or even different classes!). This really helped make the material we were learning a lot more interesting and meaningful for me, besides also helping elucidate key concepts.

36 He really emphasized the most important points of lecture and made difficult topics clear.

37 Very thorough and neat in lessons

38 Worked out example problems.

39 explaining questions, giving proof based examples

40 clarity - Chao's sections are super clear! yayyy

41 Clear.

42 approachable

43 Attitude! Chao was always positive, helpful, and approachable.

44 Very knowledgable

45 went through each problem slowly and carefully

46 All of the problems Chao outlined were clear, well-paced, and relevant. His quality was top-notch throughout the entire course. He was always well-prepared and approachable.

47 slow but easy to follow

48 He was able to answer every question we asked. His explanations were always very concise and helpful. I went to almost every other TA's office hour and section, and I figured out that he is one of the best.

49 quickly and efficiently going over concepts from the most recent lectures

Q: Aspect 2:

1 clear and detailed explanations of each concept-often even made more sense than how we were taught in lecture.

2 Ability to present material clearly

3 Organization

4	neat handwriting
5	Approachability
6	His handwriting and explanations were clear
7	Pacing was at the perfect speed.
8	Willingness to go back. There were times however when he would skip over some non trivial calculations, but would quickly go back and work out the problems if he sensed most people were stuck
9	He provided a few examples in class.
10	Was friendly
11	He was always prepared for lecture and fully understood the covered topic.
12	Going over how to do specific problems in office hours.
13	determination to help us fully understand the concepts
14	The speed at which he goes over the material
15	Professional in teaching - always well organized and knows what he's doing.
16	proofs of theorems
17	asking for answers from class
18	Clear answers to questions
19	Methodical
20	provided good examples
21	Ability to answer questions
22	Examples
23	Definitions
24	Preparedness; Chao always had a lesson plan for every section that he held, which helped to both solidify concepts covered in lecture as well as to provide practice examples relevant to homework or exam problems. He always filled the entire section with teaching points, and I also really appreciated his hand-outs that served as useful resources to study from.
25	He provided lots of good example problems.
26	His instruction flowed very well. First he would explain the concepts, then do some practice problems that complemented his instruction. I learned so much from him!
27	His handwriting was extremely good and that made a big difference
28	Very patient, kind, open to questions/evaluations/feedback
29	Offered enough time for me to write down what was written
30	Gave nifty tricks for solving problems.
31	coverage of important concepts - I used section notes to study for all the exams because they were really comprehensive
32	examples are well chosen
33	Ready to answer and explain questions from students thoroughly.
34	ability to explain things clearly
35	Accessibility! Chao was willing to have office hours at weird times to accommodate me and my friend; we both have SLE during his office hours.
36	Came prepared with good examples
37	Well planned out sections
38	Great examples were done in section which helped me with the psets. I've used my section notes for every single pset - that's how useful it was
39	Alternative perspective on topics
40	went through problems multiple times if people were confused
41	Chao even made himself available outside office hours for his students who had conflicts with his set office hours. Very kind.
42	calm attitude
43	He was super well prepared. He knew what was covered in the lecture and the section(much better than me).

44	going over (fully) some more difficult problems
45	Goes over key lecture concepts at the beginning of section.

Q: Aspect 3:

1	Preparation
2	Practice problems
3	pertinent questions
4	Willing to spend time on students
5	He was prompt to respond via email
6	He was always patient and prepared.
7	Openness, he was really inviting to questions and would be really helpful and eager to answer questions after class. I felt that made him more approachable
8	Wanted to help
9	His office hours were at a good time that fit within most students' schedules.
10	He was always very prepared for section.
11	He incorporates both review of the concepts and examples in his sections.
12	Answers questions with clarity.
13	office hours
14	Clear explanations of concepts.
15	Really cares
16	thorough in answering questions and going over topics
17	Availability outside class
18	Preparedness
19	Telling us about mistakes
20	Clarity; Chao was always incredibly clear and accurate in his explanations. He always took the time to draw out diagrams that really helped eschew obfuscation.
21	He made himself very available and was thorough in answering questions.
22	His responsiveness to practice problem requests in class
23	Strong sense of how to best describe difficult concepts in easy ways
24	Allowed time for me to address issues with the material
25	thanks for a great quarter Chao:) wouldn't have made it through 51 w/o you haha
26	does a really good job at office hours
27	Always well prepared.
28	friendly
29	Clarity and thoroughness. Not all people who are great at math are great at explaining it to students. Chao is. He was able to use proofs, intuition, and clear explanation to show us what we need to know AND why things are the way they are.
30	Answered questions with directly
31	Made an effort to get to know students by name
32	Clear verbal explanations; Chao always gave clarification and was very friendly and open to questions.
33	I cannot say enough good things about Chao, both in terms of teaching and personality. He was the highlight of this course-- always professional, approachable, and clear. I could not have made it through the course without his time, his reassurance, and his willingness to help.
34	He was responsible for everything and tried to communicate a lot with the class.
35	Understands the needs of students and have very applicable examples

Chao Li (71 comments)

Q: How can this TA's teaching be improved? (Please type one idea in each box below.) - Aspect 1:

1 Cover more examples rather than have us work on them in class (but I know that the time was also partially based on feedback from the students)

2 Cannot improve

3 creating handouts with the problems

4 Clearer articualtion

5 It often seemed as though he didn't quite understand the questions students were asking

6 It would be even more helpful if he can spend more time reviewing the concepts in addition to doing sample problems.

7 Pacing, which is different from timing. The timing is really good but pacing of the words was slightly off, short fast bursts were common

8 Explain concepts in a more basic and understandable way.

9 Go slower

10 Perform the example problems on the board so we can see them

11 Sometimes during section, I felt like too much time was spent reviewing the topics covered in lecture rather than doing more practice problems that would help us through our homework.

12 Maybe be more understanding about students lack of comprehension on the material.

13 outside videos (like Peter)

14 Nothing really. Chao is the man!

15 Sometimes what is being taught in section is slightly different than what is being taught in lecture.

16 Sometimes materials taught in lectures and sections are on different weeks.

17 more challenging examples

18 Speak louder

19 Do more difficult questions in section

20 n/a

21 maybe writing down some of the things we went over in handouts (some other sections had key point handouts that were very useful)

22 Might provide more practice problems in section

23 N/A

24 Slow down

25 Nothing. Chao is the best TA I've had at Stanford and the reason I enjoyed Math 51.

26 Not much. Maybe just more enthusiasm.

27 Try not to cover the board when you write things down

28 n/a

29 Use more worksheets to get concepts across

30 in section, maybe spend less time on basic calculations so we can cover more concepts (i.e. don't work examples all the way through, and/or don't do multiple examples of the same type)

31 more problem-solving time in discussion (we watch examples being solved often)

32 Voice is soft. I have an easier time listening to loud, booming voices.

33 Add more fun to the classroom!

34 I really can't think of anything that could be significantly better, Chao is truly amazing. Sometimes maybe being more focused in section, we didn't always cover everything and got derailed by pointless questions. Chao could be more direct in telling people their questions are not relevant to the entire section and that the student should approach him another time if they want to talk about that particular subject.

35 More overall discussion of the topics and how they relate

36 He sometimes wrote out steps to a proof or steps to a solution to a problem but would skip steps sometimes, assuming we knew what was missing. This could make his teaching confusing sometimes

37 outlines before class (he did sometimes but not always)

38 Sometimes people ask irrelevant questions in section that they could easily ask another time, and Chao tries to answer them to be nice. Their questions end up wasting time that could be used on problems.

39 go over concepts a little more clearly

40 Chao was perfect, but the gradescope was too annoying. In order to change one minor thing in my answer, I had to sort and resubmit thirty pictures again. Rather than spending this time to upload pictures on the gradescope, I prefer turning the psets to the TAs. I wasted too much time on it. I still have to take maybe four more Math classes at Stanford, and if the courses ask me to upload the psets on the gradescope, I will seriously consider changing my major.

41 None - great TA.

Q: Aspect 2:

1   Have longer section

2   Speak more out to the class rather than with your head facing the board

3   More interesting activities

4   n/a

5   Write more clearly on the board in class and don't skip computational steps on problems

6   Other section leaders gave out handouts with review, and that would have been nice

7   maybe less of a recap of lecture material and more problem-based focus

8   Clearly state what concept we are going to go over before we go over that concept rather than make it a mystery.

9   This guy should be teaching Math 51, not the actual teachers.

10 Provide more difficult questions to the class to answer to push our knowledge of the material

11 He sometimes went over time (maximum 6 minutes)

12 Broad concept handouts (like Jesse)

13 There are some things that he could have explained more clearly.

14 Hold review sessions? (before midterms etc.)

15 better synchronizing with lecture

16 I really think Chao is perfect!! However, it would be better if the section time was a bit later. 9:30am or 10:30am is kind of too early for people who study until late.

17 Explain more difficult concepts in section.

18 n/a

19 More responsive to email

Q: Aspect 3:

1   Have more office hours

2   I want to take Chao out to a fancy dinner and share surf and turf with him; he can eat the shrimp and I'll eat the steak. We'll share a Caesar salad and both get lemonade. For dessert, Oreo cheesecake.

3   N/A

4   Nothing else!

5   --

6   n/a

7   Address questions that may be lingering from lecture

8   In the sections before exams, it would have been good to have more substantial review

9   do problems quicker

10 He is a very good TA. I have nothing else to say. For math classes at stanford in general, please do not use gradescope and please

please change the section time.

11 n/a

Instructor Added Questions

Closed-ended

No Data.

LIN ALG AND MULTIVAR CALCULUS (2014-2015 Autumn)

Instructor: **Li, Chao**
Subject: **MATH**
Catalog & Section: **51 13**

Responses Incl Declines: **14**
Declines: **2**

Click on the number of comments to either expand or collapse comment sections.

Interaction

Learning and Instruction

undefined

No Data.

undefined

No Data.

Teaching Feedback

Instructor Added Questions

Closed-ended

No Data.

LIN ALG AND MULTIVAR CALCULUS (2014-2015 Autumn)

Instructor: **Li, Chao**
Subject: **MATH**
Catalog & Section: **51 17**

Responses Incl Declines: **18**
Declines: **0**

Click on the number of comments to either expand or collapse comment sections.

Interaction

Learning and Instruction

undefined
No Data.

undefined
No Data.

Teaching Feedback

Instructor Added Questions

Closed-ended
No Data.