

TEACHING FEEDBACKS

CHENGYANG WU

This file collects students' feedbacks from the courses that I have taught in their exercise sessions.

- (2025 Spring) Linear Algebra A (II).
- (2024 Spring) Higher Algebra (II), Honors Class.
- (2023 Fall) Higher Algebra (I), Honors Class.
- (2023 Spring) Higher Algebra (II), Honors Class.
- (2022 Fall) Higher Algebra (I), Honors Class.
- (2022 Spring) Mathematical Analysis (II).
- (2021 Fall) Linear Algebra B.

1. 2021 FALL, LINEAR ALGEBRA B

• (From Soliloquies) Chengyang Wu is a nice TA during learning Linear Algebra B. He did the work of homework grading and problem-solving guidance during office hour. Most importantly, he explained not only the answers but also the underlying logic from a higher point of view. For example, consider the following problem: if n by n matrices A, B satisfies $AB - BA = A$, then there exists a positive integer k such that $A^k = 0$. He first showed the answer using the trick $\text{Tr}(A^n) = 0$ for all n , and then told us that this problem originates from Lie algebra where $AB - BA$ is viewed as an operation on A , which motivated my learning interest in further study.

2. 2022 SPRING, MATHEMATICAL ANALYSIS (II)

• (From David Yang) Chengyang Wu was an exceptional teaching assistant who greatly enhanced my understanding of Mathematical Analysis. His explanations were always clear, patient, and tailored to students' needs. In the tutorial classes, he often expanded the content, demonstrating his profound knowledge of this subject and genuine passion for teaching. His feedback on homework was also very timely, helping me identify my weaknesses and improve them. His dedication as a teaching assistant and teaching effectiveness are both outstanding.

• (From Ruoyu Wang) Dear Senior Wu,

As a student from your 2022 Spring Mathematical Analysis II class (Section 2), I'm writing to share my feedback on your teaching. Your dedication as a teaching assistant significantly enhanced our learning experience:

Meticulous Preparation: Your well-structured lessons clarified complex concepts.

Thoughtful Grading: Detailed comments on assignments helped pinpoint weaknesses.

Engaging Exercise Sessions: Beyond core knowledge, you integrated advanced topics (e.g., metric space applications) that deepened our analytical thinking.

The "holistic understanding" approach you emphasized allowed me to connect fragmented theories seamlessly.

Best regards,

Ruoyu Wang, a Student from Math Analysis II, Spring 2022

• (From Xuanlin Zhu) Chengyang Wu was an exceptional Mathematical Analysis TA in Spring 2022. He meticulously prepared exercise sessions with handwritten notes and diverse materials, delivering precise yet witty explanations that fostered an engaging learning environment. Truly one of the best TAs during my undergraduate studies.

- (From Sam) TA Chengyang Wu was very dedicated and responsible throughout the Spring 2022 Mathematical Analysis course. His explanations were rigorous yet accessible, and his recitation sessions were particularly helpful. He provided prompt and careful feedback on homework, which greatly supported my learning.

- (From Mr. Chen) Mr. Wu is one of the TAs of my mathematics analysis course.

First, he is great at teaching. He explains the concepts clearly and in depth. He explains definitions and theorems intuitively, allowing me to better understand the motivation behind them, helping me better remember and apply them.

Second, he has very strong knowledge in the field. He gives interesting insights into course material from a more advanced perspective. This both helps me better grasp the concepts and gives me a glimpse into more advanced mathematics.

He is also thoughtful and considerate. He prepares detailed notes for each TA session so that students can refer to it after the sessions. He is aware of common mistakes and difficulties students can face, giving students useful tips on avoiding or overcoming them. He answers questions from each student patiently and in detail, taking note of common questions to answer during TA sessions.

In conclusion, Mr. Wu is an excellent TA with a strong combination of teaching ability, professional knowledge and interpersonal skills.

- (From Jason Wang) Wu Chengyang has been an exceptionally dedicated and responsible teaching assistant who provided me with tremendous support. During his tenure as the TA for Mathematical Analysis, he consistently demonstrated diligence and professionalism by carefully grading our assignments and patiently addressing our questions. His explanations during problem-solving sessions were clear and well-structured, which greatly enhanced my understanding of the course content. In addition, he was considerate enough to review my exam paper and grade late submissions with patience and fairness. I am sincerely grateful for his hard work and generous assistance, which greatly benefited my learning experience in this course.

- (From Yuke An) I had the pleasure of attending Chengyang Wu's section of the Mathematical Analysis (Spring 2022) course, where he served as one of the teaching assistants. Chengyang was consistently clear, patient, and well-prepared in his teaching. His explanations were both rigorous and accessible, which greatly helped students grasp the subtleties of real analysis. He was also approachable during office hours, always willing to spend extra time to ensure students truly understood the material. His ability to communicate abstract mathematical ideas with clarity and enthusiasm made a significant impact on my learning experience.

3. 2022 FALL-2023 SPRING, HIGHER ALGEBRA (I)(II), HONORS CLASS

- (From Shiyu Xiu) Very Hardcore; Excellent Material.

- (From Yikai Zhu) Teaching Assistant Wu Chengyang was one of the TAs for my Honors Linear Algebra class during my freshman year. First of all, he was extremely responsible and diligent in assisting with homework and in-class Q&A sessions, always providing prompt responses. Secondly, he never failed to reply to my extracurricular questions, whether they were about advanced topics related to the course or research-based knowledge from other disciplines. He offered me highly effective guidance in my mathematical studies, truly living up to the role of a mentor. Regardless of whether I continue to pursue mathematics in the future, I will always remember the help and support he provided.

- (From Student Locus) Chengyang Wu was the teaching assistant(TA) in the course Linear Algebra. From my perspective, he is a conscientious TA and has a strong sense of responsibility. In addition to the common work of TA, including receiving, sending and correcting my homework, he must have made careful preparations for his exercise classes. Therefore, he could

analyze the difficult problems clearly and incisively explain the contents important or hard to understand in each chapter for us.

- (From Yuan Lu) Wu was the teaching assistant for Advanced Algebra I (Honors) and Advanced Algebra II (Honors). He carefully scored assignments, annotated even minor errors on students' assignments, and patiently addressed our questions, which made him a very dedicated and student-centered teaching assistant. What impressed me most was his endeavor to elevate the Honors curriculum beyond standard expectations. He wrote many pages of lecture notes for his exercise sessions, containing supplementary materials in linear algebra, abstract algebra, and even representation theory. I still remember that in his first exercise class, he introduced group objects in a category—a concept entirely new to me, and greatly deepened my understanding of abstract mathematics.

In summary, Chengyang Wu is a dedicated, well-prepared, and intellectually generous educator. His familiarity with teaching material and passion for teaching make him an exceptional candidate.

- (From Ruilin Wu) Dear Chengyang Wu,

As a student in your Linear Algebra Honors discussion section (Fall 2022), I wanted to provide feedback on your teaching.

I was particularly impressed by the depth and unique perspective you brought to the exercise class. You went beyond simple review, consistently revisiting lecture concepts from higher mathematical viewpoints.

A standout example was your session on quotient spaces. You not only reinforced the lecture material but also introduced fundamental isomorphism theorems and the Zassenhaus Lemma (with its memorable “butterfly diagram”). Most notably, you connected these ideas to universal properties in category theory.

This approach of linking core course content to deeper mathematical ideas was extremely valuable:

1. It significantly strengthened my understanding of the fundamental linear algebra concepts.
2. It sparked my interest in exploring more advanced mathematics, showing the beauty and connections beyond the syllabus.

Your clear explanations and evident enthusiasm made complex topics accessible and engaging. Overall, your recitations were a truly valuable part of the course, greatly enhancing my learning experience.

Sincerely,
Student Ruilin Wu

4. 2023 FALL-2024 SPRING, HIGHER ALGEBRA (I)(II), HONORS CLASS

- (From Jiatong Lv) It was a privilege to have Chengyang Wu as the teaching assistant in Advanced Algebra I (Honor), 2023 Fall, Peking University. During the course, I witnessed his exceptional skills in mathematics and great dedication to teaching. In every lecture, his explanations were very clear and consistently transformed complex abstract concepts into logical frameworks. All the topics covered in the course reflected exhaustive preparation. Every assignment was returned with comprehensive feedback. Besides, what impressed me most was that he developed self-contained teaching materials and uploaded them on his academic website. In summary, Chengyang Wu is not only a brilliant mathematician but also a great educator and mentor.

- (From Jack) I am providing teaching feedback regarding Teaching Assistant Wu Chengyang's performance in the Linear Algebra course. Mr. Wu stands out as one of the most dedicated and responsible TAs I have encountered at Peking University, demonstrated notably in the following areas:

1. Mr. Wu conducted detailed weekly problem-solving sessions with content that was appropriately challenging. His explanations were consistently clear and effective.

2. Proactively seeking to optimize learning outcomes, he contacted us after each session to gather feedback on difficulty levels. This ensured material accessibility and maximized the sessions' benefit for our coursework.

3. Demonstrating exceptional willingness to assist, Mr. Wu consistently provided detailed solutions whenever I approached him privately with questions from external materials – even though these fell outside his core teaching responsibilities. This immensely helped my understanding of the course.

4. Further supporting conceptual mastery, he shared supplementary materials on multiple occasions, significantly deepening my comprehension of course content.

- (From Jinxing Zhou) Wu Chengyang, a senior student, served as a teaching assistant for the Advanced Algebra experimental class. During the exercise sessions, he provided detailed supplementary knowledge of the course, and he was also patient and prompt in answering students' questions outside of class. The Advanced Algebra lecture notes on his personal homepage have been of great help to me as well.

- (From Peter) The teaching assistant delivered lessons based on his self-designed handouts. These materials were developed as an extension of the professor's lectures, offering substantial supplementary insights. The TA frequently employed abstract and higher-level perspectives, enriching the content and providing me with a more comprehensive understanding of the core ideas behind theorem proofs. His approach deepened my appreciation for the subject and enhanced my learning experience.

- (From Yao Ma) I had the privilege of being taught by Mr. Chengyang Wu when he served as a teaching assistant for our Advanced Algebra course. His teaching ability and rigorous attitude left a lasting impression on me. As his student, I was deeply influenced by both his academic clarity and dedication. Mr. Wu graded assignments with exceptional attention to detail, often pointing out not only technical errors but also subtle logical gaps in our reasoning—sometimes even within a single sentence.

During problem sessions, he regularly supplemented the material with important examples and propositions. He had a particular talent for presenting abstract concepts in a lucid and accessible manner, which significantly deepened our understanding of algebra.

In grading exams, Mr. Wu did not adhere rigidly to standard rubrics. Instead, he carefully evaluated whether students demonstrated a solid grasp of the key ideas and whether their approaches were mathematically valid. I found this thoughtful and respectful attitude toward student reasoning both rare and admirable. In addition, he authored a supplementary set of lecture notes for the course—published on his personal website—which provided valuable insights from a more advanced algebraic perspective. For instance, in the context of linear operator decompositions, he introduced the framework of modules over polynomial rings, which greatly enriched our learning experience.

Mr. Wu's commitment to teaching, his deep understanding of mathematical content, and his patient, student-centered approach all reflect his strong sense of responsibility and remarkable pedagogical skill.

- (From Peter Han) As a freshman, I took Advanced Algebra I and II labs, taught by Mr. Wu, who was one of the teaching assistants for these courses. He taught me the exercises for two semesters. Mr. Wu is a responsible teacher who carefully prepares and teaches the weekly exercises and writes LaTeX handouts for reference. His exercises contain interesting and slightly difficult content that supplements the main course material and improves my understanding of it. Mr. Wu helped me a lot both in and out of class. I could feel his love for math and his grasp of the subject from the way he talked about it. Overall, Mr. Wu is an excellent teacher!

5. 2025 SPRING, LINEAR ALGEBRA A (II)

- (From Xingyang Zhu) Difficult class but great lecturer. 1000+ page class material and super difficult exam without any practice exams. Even though the lecture is quite conceptual, professor Wu is super nice in class and office hours. He is definitely passionate in teaching and his research.

- (From Shane X) Mr. Wu Chengyang was my teaching assistant in Linear Algebra A (II) course in the 2024-2025 spring semester.

During the journey through this difficult course, Mr. Wu helped me to grasp the most important concepts and navigate through the course with a clear roadmap in mind. By clearly demonstrating the connection between matrices and linear spaces, Mr. Wu guided me to extend what I had learned in the previous semester to assist me in understanding new coursework. Mr. Wu was also patient in resolving questions, such as patiently answering questions concerning the calculation rules of tensors. His enthusiasm is also clearly displayed via various extra Q&A sessions on weekdays which he was not required to do so, as well as listening to the teacher's classes together with us in order to know how far we were going first-hand. Of course, occasionally there were issues Mr. Wu could not resolve on the spot, but he would surely research afterwards and provide a response in a timely manner.

Overall, Mr. Wu's help was essential for me to pass the course as well as gain a deeper understanding of linear algebra.

- (From Li Ming) Mr. Wu Chengyang served as the teaching assistant for the course Linear Algebra A during the Spring 2025 semester and performed exceptionally well.

Mr. Wu possesses a deep understanding of complex topics such as eigenvalues and vector spaces, coupled with extensive problem-solving experience. He excels at explaining these concepts in a clear and patient manner. During lectures, he consistently enhanced our learning by summarizing and expanding on lecture content, while skillfully utilizing assigned exercises to reinforce understanding. Outside of class, he was always willing to clarify doubts and deepen our knowledge. Mr. Wu provided prompt feedback on assignments, often offering multiple solution approaches, which significantly enriched my comprehension. His approachable nature encouraged questions, and he consistently guided students towards discovering solutions.

In summary, Mr. Wu Chengyang is an outstanding teaching assistant. His expertise, teaching ability, and dedication greatly enhanced my learning experience.

- (From Owen) I am an undergraduate student in the School of Physics, Peking University. This semester, I took the Linear Algebra A2 course, where Mr. Wu Chengyang served as my teaching assistant. Mr. Wu is deeply committed to his teaching responsibilities. He patiently and meticulously graded every assignment I submitted, carefully marked errors and provided clear solutions. He regularly conducted exercise classes with progressively challenging problems that not only reinforced key concepts from lectures but also introduced advanced topics. Whenever I asked questions during these sessions, Mr. Wu always offered thoughtful and detailed explanations. Thanks to Mr. Wu's guidance, my understanding of linear algebra had been significantly improved, enabling me to apply these mathematical principles to other courses such as Theoretical Mechanics and Quantum Mechanics. This foundational support was instrumental to my ideal performance in both midterm and final examinations. I sincerely appreciate Mr. Wu's dedicated efforts throughout this semester.

- (From Shouheng Lv) Assistant Wu Chengyang is very active in teaching Linear Algebra. He is extremely patient in answering students' questions. The preparation for the exercise classes is thorough and the content is very rich. The homework grading is done carefully and efficiently.