

## Numerical Linear Algebra for Financial Engineering

### Student Feedback, 2012-2015

This course is the most exciting linear algebra course I have ever taken. Without all the tedious and unnecessary calculations and proofs, it cuts right to the point: when and how we can use linear algebra in finance applications. The course content is well organized in a most efficient way. This 8-lecture course wastes no time. My idea of linear algebra was literarily refreshed.

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This course was wonderful. In undergrad, Linear Algebra is usually taught from a purely abstract point of view and often its applications can be lost on students (myself included). Dan's teaching style, and the excellent curriculum really brought the subject to life. It was the perfect mix of theory and application!

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NLA for Financial Engineering Applications was the third Pre-MFE Seminar I've taken (previously completed C++ and Advanced Calculus). The material presented was both challenging and enlightening. Although I've previously learned many of the numerical and mathematical topics taught, this course presented them in such a way that left me with a deeper level of comprehension and understanding on how they might be applied to finance.

Additionally, Dr. Stefanica's abilities and teaching style are beyond reproach. As an authority figure he epitomizes the very best this field has to offer. The additional material taught in class provides further background and a deeper understanding one would not gain from merely reading the textbook. Whether through real-world application of the material, noteworthy stories from financial history or how to conduct one's self with academic and professional integrity, Dan's comprehensive instruction and personal touch is undeniably one of the greatest benefits of studying financial engineering at Baruch.

Lastly, the usefulness of the learning resources provided can't be overstated. The textbook for the course is well-organized and concise, and provides an excellent index of outside sources which helped tremendously as reference material. John and Alan, the teaching assistants, were very attentive and open to answering any questions I had about the material or Financial Engineering in general. The online forum was incredibly useful - 24/7 availability of communication with the rest of the class left me with more than enough tools to answer any questions I had.

Overall the course was both enlightening and enjoyable. Dr. Stefanica has managed to create and foster a learning environment based on cooperation and populated by the exceedingly bright. This course is a 10/10.

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I strongly recommend the NLA Pre-MFE course. It is really helpful to prepare me to apply for the MFE program. The format of this course is very efficient. The combination of mathematics and finance is very beneficial to me, whose undergraduate major is Finance. The content of this course nearly covers all the basic knowledge of linear algebra. In addition, the use of linear algebra in finance field is introduced every class. As for the instruction, I benefit a lot by Professor Dan's teaching. He made every theorem clear by proving each theorem and lemma. In addition, teaching assistants are also helpful in each of my homework. It is an excellent learning experience and I had never taken such a class. It is amazing. I learn a lot from this course. I think it will also be helpful in my future application for the MFE program and future career.

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For any serious MFE applicant NLA is highly recommended. If you have learned linear algebra before attending the seminar you will be impressed by how it is applied in finance. If you have not the math part covers only the topics that are readily applied in finance and you should be able to grasp it with decent efforts. Some basic linear algebra programming knowledge will be extremely helpful. Professor Stefanica is really excellent in teaching and communicating with students. If you do well in the seminar it will definitely increase your chance of being admitted by any MFE program, especially Baruch MFE.

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The seminar proved to be extremely useful for me. The way the contents is arranged follows very clear logic, thus making understanding more fluent and deep. The textbook is extremely worth reading, and can serve as tool-book for original ideas in financial mathematics. The professor is extremely talented at teaching, he provided sparkling ideas and also answered students' questions in the most efficient and clear way. TAs are strict and awesome. The learning experience was truly great.

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Course format, content, and structure were excellently designed. I would like to distinguish a very important aspect of the course - the quality of oral classroom instruction. Only through clear and sequential presentation of the material I was able to learn the subject. Homework and programming assignments were an inseparable part of the learning process and they complemented the lecture material very well. They were also greatly structured. Teaching assistants, John and Matthew, were very helpful and they made themselves available through forum incredibly well and responded in a timely manner. Overall, this was one of the best courses in applied mathematics that Baruch MFE program can offer.

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Professor Dan Stefanica is a great teacher. He devoted a lot in this course. I love the way he organizes the materials of the lecture. I'm looking forward to his new book from the lecture material. Our TAs, John and Mathew, are the most helpful and devoting TAs I have ever seen. They managed to organize the solution of every HW. That was really helpful for us.

Great course! Great lecture! Great people!

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First I would like to express my sincerely gratuities to the instructor Dan and TAs, John and Matthew. Thank you for taking time to answer my questions and encourage me to pursuit my dream! Second, I would like express my appreciation to this seminar. I learned so much from this seminar. I cannot express how excited I was each time I went out of the class! I wished this seminar could be longer!

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Thank you Professor Stefanica for your especially organized lectures. I did learn a lot in this seminar. Thank you to our great TAs, especially to John, who spent plenty of time on our homework and forum.

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This was my first course at Baruch and I really recommend it for those switching from engineering fields to attend to understand applicability of linear algebra for finance. I never took Linear Algebra in college so initially it was hard to understand but with enough reading/homework it's not hard to catch up. Overall this class has been the most valuable towards my future degree. John and Mathew were great with homework and any questions we had about finance. The online forum is a really good idea for knowledge sharing. Besides the 3 hrs drive to Baruch every Wednesday from work my overall experience was very positive 😊

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The seminar was extremely helpful. I am happy I took it. A lot of homeworks, but I felt I learned a lot while working through homeworks. Both TAs and the forum was extremely helpful as well. (Special thanks to John and Mathew (TAs)!)

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Lectures and lecture notes are superb. Though I have lecture notes, I will be eagerly awaiting them in printed form! I think such book is much needed - it will fill in the existing gap/void on the subject. Thanks to Prof. Stefanica for such an insightful and thought-provoking class!