



Dear Class of 2023,

I hope that everyone is enjoying the season and looking forward to summer! Before you know it it will be mid-August and the next step of your journey to becoming a Pharmacist will begin! Listed below are some tips and suggestions from Dr. Harrison (course director for biochemistry) and Dr. Ahlschwede (goes by "Dr.A" who teaches pharmaceutics and various calculations courses).

Math is an important skill for completing your pharmacy education. If it has been a while since you reviewed your algebra skills or if you never had good algebra skills and wanted to get prepared for "Pharmacy Math", you may want to go to Khan Academy (<https://www.khanacademy.org/math/algebra-home/algebra2>) and work problems. Which problems? Well, I recommend doing problems in the "Algebra II" section. Naturally, accuracy in calculations is more important than speed, but being able to rapidly manipulate equations matters. So repetition is a good way of improving both speed and accuracy.

On a more practical note, I would like to strongly recommend that **you obtain a copy of the required pharmaceutics/calculations textbook**: Pharmaceutical Calculations 15 th edition, Howard C. Ansel, Wolters Kluwer: Lippincott Williams & Wilkins. ISBN-13: 978-1496300713. It is available on Amazon.

In any event, you should learn how to do the following problems that are found at the end of the first two chapters: Chapter 1 (all problems) and Chapter 2 (all problems).

For our interprofessional "Fundamentals in Physiology" course you may want to look over the human physiology and other topics in the Health and Medicine section of Khan Academy.

While there is no prerequisite knowledge for Biochemistry other than organic chemistry concepts (like oxidation and reduction), student who know the structure and properties of amino acids and the nomenclature of carbohydrates will have an advantage over their classmates.

Enjoy the summer!

David Harrison, Ph.D. and Kristen Ahlschwede, Ph.D.