Books for 104b

The class is not based on a specific textbook. Instead it is draws from a number of different books, articles and class notes I took when I was learning this material myself. So instead of trying to find a compromise textbook I decided to show you the four books that I found most useful in preparing the course. If you flip through the various books, you will probably be able to tell which sections of the class came from which book.

All of the books listed below have been placed on reserve in the library, so have a look at them and if you really, really like one of them particularly, you may consider buying it, but you will do perfectly fine without buying any of them.

To pique your interest, here are a few blurbs on my top four books.


This is a nice introduction to protein structure, both short and easy to read. If you are interested in protein structure, it’s a nice book to have, but it is very fuzzy on the molecular forces that shape protein structure. You will see a lot of the graphics from this book in the course’s section on protein structure. Price is ~$50, but this book is used by several other courses and I suspect that you will be able to pick up used copy from a fellow student.
Ken Dill & Sarina Bromberg, *Molecular Driving Forces*, Garland publishing Inc.

This is a fantastic resource for the thermodynamics of any chemical or biological system. A true jewel, that came out a year ago. I wish this book had been available when I had to learn thermodynamics for the first time. If you are serious about biophysical chemistry or structural biology or statistical thermodynamics, then this book is for you. The price is of the book has gone up considerably since I bought my copy a year ago, but you can find used copies on Amazon for ~$60.

Cantor & Schimmel, *Biophysical Chemistry  Part III: The behavior of biological macromolecules*
Cantor Schimmel is the granddaddy of Biophysical Chemistry textbooks. The book is getting a bit old (published 1980), but it still is the standard textbook and you will find that most hard-core biophysical chemists will have a well-worn copy of this book in their office. So if biophysical chemistry will play a big role in your future, you may want to think about this one. Also, there has been a major drop in the books price. You can now get it for ~$60.

Gregory Petsko & Dagmar Ringe, *Protein Structure and Function*, Blackwell Publishing

Written by Brandeis’ very own dynamic duo, Greg Petsko and Dagmar Ringe, this book takes a different approach than most textbooks. Instead of presenting one continuous text, the book is set up as a series of stand alone, bite-sized sections about specific topics. A great book, if you quickly want to look up a specific topic, e.g. how G-proteins work or what symmetries are common among enzymes etc. Also ~$50 on amazon, but as with the Branden and Tooze there are a lot of copies of the book on campus so you may be able to pick up used one for cheap.