

Introduction

For instructors

Authors (your colleagues) write books driven by passion, or, as an editor once told me “when you feel the urge..then write this review ..”. However, books are also a commercial enterprise; most of us have nine month salaries. Students purchase books recommended by the instructor. Therefore, selling a book requires to catch the teacher rather than the students; sadly enough, at least in the US, that’s true. Big publishers do this by massive advertisements and free copies mailed to instructors (I have a stack in my office). Does that make the book really good? (I haven’t even had the time to read any of those on my stack.) As you can imagine, a small publisher simply doesn’t have these resources. **Therefore, I am afraid, as an instructor you would also need to pay for this textbook. Use your grant or your library system.** This book will have to sell solely because of its quality. As an **instructor**, if you like, send us an e-mail note when you purchase the book and we add **additional materials** to the CD which are not included on the standard student CD such as additional homework assignments, example syllabus, more exams, solutions to homework and exams, etc. If this is requested after purchasing the book you would need to cover shipping costs.



Here is the “urge”: when I started to prepare my first stat thermo lecture, I encountered that a number of sections of most books I found were close to impossible to read. I am an experimentalist and I was rusty on stat thermo, but that observation holds true for sure for most students. There are a few more didactic texts out there, but these do not completely cover the graduate curriculum. I write this in 2014 and sure, I may have overlooked a pearl. The main issue are **missing derivations** and **missing worked examples**. Therefore, I started to write this textbook basically in preparing my class. Stat thermo is, of course, not a new topic, i.e., you will find similar examples and derivations (probably dating back to Boltzmann himself) anywhere. The difference is the presentation style and that I do not expect a deep math background of your students, which is a safe assumption even in grad school. I realize that this book may be used to complement traditional outlines rather than as a stand-alone book. However, as an instructor **it will save you time** with finding examples, making homework, PowerPoints, preparing the class, and making exams.

That the results are already included here (I provide a free-problems-only version at www.LatheCity.com as well as unsolved exercises are included) do usually not impact exams very much unless you offer open book exams. Also, homework can always be modified a little. (PC word files and PDF files are on the CD.) In addition, students have to find the question or a similar one in this book among many examples, i.e., they naturally start to study problems. That was our (?) goal to begin with. (By the way, as we all recognized, every student has in the meanwhile a copy of the “teacher” solutions book of Atkins, or whatever undergrad book you may use.) This text will, however, help your students and will save yourself a lot of time.



Together with this book, I do also offer **PowerPoints** for instructors or for self-studying students. The PowerPoints on the instructor CD include typed derivations, which alone will already save you a lot of time. Why do instructors use a book? Instructors use books mainly to save time in the class preparation and presentation. Am I correct here? **You will save time with this text.**