

Preface

This book is based on a set of lecture notes for a one-semester course in general physical chemistry (CHM 3400 at Florida State University) taught by me in the Spring of 2009. This course was designed specially for students working towards a Baccalaureate degree in Chemical Science. The course, entitled *General Physical Chemistry*, consisted of three lectures weekly and one recitation hour meeting weekly.

The course consisted of an elementary exposition of general physical chemistry and included topics in thermodynamics, phase and chemical equilibria, cell potentials, chemical kinetics, introductory quantum mechanics, elements of atomic and molecular structure, elements of spectroscopy, and intermolecular forces.

In the field of physical chemistry, especially thermodynamics and quantum mechanics, there are subtleties and conceptual difficulties, often ignored in even more advanced treatments, which tend to obscure the logical consistency of the subject. While the emphasis in this course is not on mathematical rigor, conceptual difficulties are not “swept under the rug”, but brought to the fore.

An essential feature of the course is weekly assignment of homework problems, reflecting more or less the topic contents. These problems were graded and discussed by the assigned teaching assistant in the recitation session.

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