Eisenbud and Harris' new book *Practical Curves* is an important addition to the Algebraic Geometry literature and like the authors' previous books such as *3264 and all that*, *Commutative Algebra* and *Algebraic Geometry: A First Course*, will be an instant classic. There are many textbooks on algebraic curves and Riemann surfaces. These fall into two categories, books that develop the basic theory (such as Forster's book) and more advanced books such as Arbarello, Cornalba, Griffiths and Harris (ACGH) and Harris and Morrison's book on Moduli Spaces. The first set of books do not develop the detailed geometry of algebraic curves far enough. Whereas the latter books are often too hard for beginning graduate students. When I teach this material, I am left trying to combine books from the first set with those from the second, and I always lose most of the class. Eisenbud and Harris' new book bridges the gap perfectly. Most of the book is based on a course Harris teaches at Harvard and has been extremely influential and successful. I will certainly start using the new book when it is available.

The book develops the modern theory of algebraic curves and amply demonstrates the theory with a wealth of examples. In fact, the authors study in detail curves up to genus 6 in successive chapters. When I teach, I often do a similar analysis and students often ask me for a reference. Now I will be able to send them to one place as opposed to exercises in ACGH or Hartshorne. There is a wealth of really well-chosen exercises. The exercises will be one of the most valuable aspects of this book.

Briefly, after a discussion of basics of curves theory such as Riemann-Roch and Riemann-Hurwitz, the authors start studying the geometry of curves in greater detail. They discuss the construction of Hilbert schemes and moduli spaces without going into too much detail but enough to motivate the reader to study the more advanced topics. They develop Brill-Noether Theory and the mathematics surrounding Green's Conjecture. In short, the book serves the double purpose of preparing the 1st or 2nd year graduate student in algebraic geometry and related fields to read the more advanced books and also introduces them to two most active areas in the study of curves. After working through this book, students should be ready to tackle the current literature surrounding these two active areas.
The book ends with a chapter written by Gray discussing the history of algebraic curves up to the end of the 19th century. I found this chapter very interesting. This is a much more detailed and extensive discussion than the bogus historical discussions found in most textbooks. This is an especially nice aspect of the book.

The book is written in a conversational style which makes the subject accessible. This is a nice aspect of the book that distinguishes it from dry textbooks. The authors, however, do get somewhat wordy at times. Throughout the book, the authors have included Cheerful Facts that discuss further topics, generalizations/counterexamples in higher dimensions or over other fields. They give references to the literature. This will be useful for motivated students to explore the subject further.

There is a fairly extensive list of references. In Chapter 19, Gray has done an excellent job of surveying some cornerstone manuscripts of the 18th and 19th century (as well as earlier works). The authors have not tried to be encyclopedic in their references for more recent work. Given the extent of the field, this might not be possible. There are certainly references that can be added. For example, some of the recent developments in tropical geometry and proofs of Brill-Noether statements using tropical geometry could be mentioned. More of the recent work on Green's Conjecture can be cited.

Graduate Studies in Mathematics would be an excellent series for this book and you should obviously not miss the opportunity to publish this book in that series. I will certainly be using this book in my courses and I am sure many others will, too.