

Review of the book **Practical Curves** by **David Eisenbud** and **Joe Harris**
Submitted to the AMS series Graduate Studies in Mathematics.

Dear editors, I read this book from beginning to end with the exception of the exercises and the historical appendix, for lack of time. I also did not have the time to check all the proofs, but I am confident they are correct, in view of the renowned expertise of its distinguished authors.

Without any doubt I recommend that the GSM series publishes this book after the obvious changes (insert missing pictures, correct small typos) are made.

The main comment I wish to make is that the book is beautifully written, with a great combination of rigour and brightness. The title is quite appropriate, this is a book on the theory of curves and their moduli which presents facts, including several fundamental theorems, by highlighting statements, examples and applications, rather than proofs. As a consequence of this (very welcome) approach, the statements are given without excessive generality, in a clear and ready-to-use way. Examples are often given before theorems to present key points in simple cases and facilitate the comprehension of the general theory, which is often intricate and deep.

The topic, algebraic curves, has been of prime interest over the last 50 years, hence there are other books on it, some are user-friendly as the present one, some are more focused on the theoretical aspects. As far as I know none of them has the same breadth. The range of topics treated here is truly wide, from the classical geometric theory to modern commutative algebra and moduli theory.

The prerequisites are quite advanced, so this this would be an excellent textbook for a graduate course, but not for an undergraduate one. Finally, the topics treated here have connections to other areas of mathematics than algebraic geometry, therefore I believe that a course based on this book will attract scholars from various disciplines.

I am attaching a copy of the manuscript where I noted typos and small errors to be corrected.