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John R Swallow* (joswallow@davidson.edu), Department of Mathematics, Davidson College, P. O. Box 1719, Davidson, NC 28036. *A Computational Approach to Elementary Galois Theory with Mathematica.*

We discuss the interplay between conceptual and computational mathematics in a course on elementary Galois theory taught to undergraduates at Davidson College. This interplay affects decisions concerning how to present material, how to assign problems, and how to suggest strategies for proofs and problem solutions, and we explain the resolution of some of these concerns in a text for the course and an associated *Mathematica* package, both of which continue to undergo revision. (Received September 07, 2000)