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**Susan J Colley\*** ([sjcolley@math.oberlin.edu](mailto:sjcolley@math.oberlin.edu)), Department of Mathematics, Oberlin College, Oberlin, OH 44074-1019. *A Course on Computational Algebra and Algebraic Geometry.*

We describe a course for upper-division mathematics majors that introduces ideas of commutative ring theory and elementary algebraic geometry by making computational algorithms, particularly Gröbner basis techniques, the centerpiece. Thus this is a course where students use computer algebra packages and learn about the mathematics that underlies them. As such, the material holds appeal to students both because of the elegance of the mathematical ideas and because of the very current nature of the subject. There is considerable material available that is accessible to undergraduates, so the course makes an excellent alternative to more traditional courses in ring and field theory. (Received September 07, 2000)