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Teaching Crystallography in a Materials Science Program. Maureen M. Julian, Dept. of Materials Science and Engineering, Virginia Tech, Suite 302 Collegiate Square, Blacksburg, VA 24060 USA.

I propose to discuss several ideas I use in my textbook, 'Foundations of Crystallography, from lattices to electron density maps', a work in progress. I use case studies drawn from Materials Science and Engineering examples in polymers, metals and ceramics. The emphasis is on understanding the basics by working in two-dimensions. For example the 2-D point group trees and space group trees can be completely constructed. Advanced computer exercises are used, in our case the program is MATLAB. The 3-D structures are drawn in MATLAB and can be viewed in perspective as well as the projections. I use symmetry illustrations from prehistoric ornamental art as well as molecular drawings. Sample student reports will be available as well as my own text.