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### **What Should Be in an Intermediate Mechanics Text?**

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I shall survey the coverage of several popular intermediate mechanics texts — texts for a typical junior-level course in classical mechanics. I shall then discuss the difficult choices that must be made by the author of such a book and the teacher using it. Should it include Lagrangian mechanics? (My answer is a definitive “Yes.”) Should it include Hamiltonian mechanics (“Yes,” but perhaps a little less emphatically.) and if so when? What about chaos theory? Collision theory? Continuum mechanics? And relativity?