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**Exploring social justice issues in a thermal physics course** SHANNON MAYER, University of Portland — Recent advances in biomedicine, genetics, telecommunications, and the semiconductor industry illustrate the extent to which basic research and the resulting technological innovations transform our society. Moreover, the challenges we face as a nation, and a planet, as a result of industrial pollution, fossil-fuel consumption, and nuclear weapons development and proliferation are all indicators of the capacity for technical innovation to have significant consequences for society. Our collective response to these challenges is vital. Moreover, since these critical issues have scientific underpinnings, it is crucial that we have scientists and engineers with an informed scientific worldview and technical expertise to be participants in the conversation. This paper describes efforts to use case studies in an upper-division course in thermal physics to explore social justice issues. The activities presented provide a starting-point for encouraging science and engineering students to develop a habit of thought that incorporates consideration of social justice issues into the decisions they make in the engineering workplace, research laboratory, political or public arena, as well as in their personal lives.

Shannon Mayer  
University of Portland

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