Graph Theory is a field of mathematics that encompasses tools and techniques for modeling and solving real world problems. In this talk, we explore graph coloring and some of its applications, and show how graph theory can be useful in problem solving. In one of our problems, six professors are suspects in a library theft. We’ll use their testimony together with some graph theory to identify the guilty party. We will also discuss related current research, some of which involves undergraduates. This talk is designed for a general audience.

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In addition to teaching at Wellesley College, Professor Trenk has taught high school students both as a full-time teacher and in summer programs, and more recently has organized math enrichment activities for elementary school children. Professor Trenk was awarded the Wellesley College Pinanski Prize for Excellence in Teaching in 1995.