

Scheduling math classes is finicky business. Certain classes can't occur simultaneously, instructors have preferences, and so on. Given these constraints, there are a number of questions you might ask: What is the minimum number of time slots needed? How opinionated can instructors be?

Secretly, you can translate these questions into problems about graph colorings, which is exactly what we'll do! Along the way, we'll see some nifty graph constructions and prove that the registrar has a really hard job.

