This talk will examine the structure and learning goals behind a first-year history of mathematics seminar taught in an inquiry-based style. As part of Oxford College’s new Discovery Seminar program for incoming first-year students, this seminar seeks to introduce students to mathematical “ways of knowing”. Rather than learning about historical developments in mathematics, students instead confront problems from various eras in mathematical history and work in small groups to devise solutions. Groups then present their solutions to each other and compare and contrast not only their solutions, but also the approaches that they took. This problem-based approach allows students to become more critically engaged in their mathematics, as well as discern patterns in what problem solving techniques are fruitful. The desired learning outcome is for students to think about mathematics differently, using these historical problems as a springboard to begin their own mathematical journeys. (Received September 17, 2019)