

1135-O5-722 **Benjamin Linowitz*** (benjamin.linowitz@oberlin.edu), 10 North Professor St, Oberlin, OH 44074. *Teaching a first year seminar on cryptography using IBL.*

During the fall of 2016 I taught a course on elementary number theory / cryptography as part of Oberlin College's first year seminar program. The course assumed no previous mathematical background on the part of the students and even conferred credit towards the college's writing requirement. A novelty of the course was that it was taught using a variety of active learning techniques like IBL. There was no assigned textbook and there were no lectures, for instance. Instead, the students spent every class in small groups working on a series of carefully scaffolded worksheets and presenting their solutions to the class. (The first worksheet begins with the definition of an integer dividing another integer. The last worksheet goes over the RSA cryptosystem.) In this talk I will discuss the structure of the course and what I learned about teaching number theory to first year students and non-math majors. (Received September 13, 2017)