

Using Online Materials/Videos to Design a Linear Algebra Course for Biology Majors
Sarah Hews, Hampshire College

Linear algebra is an important course for biology majors but it is usually designed for math majors (emphasizing proofs) or engineers (focusing more on matrix algebra and algorithms). Furthermore, unnecessary prerequisites limit the opportunity for biology majors to fit it into their schedule. This talk shares an experiment using MIT's open courseware linear algebra videos to teach a linear algebra course without prerequisites that targeted biology majors. I will discuss the learning goals for this type of course, how I edited and adapted the videos under the creative commons license using Camtasia, the student perspectives and learning outcomes, and the next steps to make linear algebra more widely accessible for biology majors.