CourseSource: Evidence-Based Teaching Resources for Undergraduate Biology Education
(https://www.coursesource.org/)

Inspired by national reports like BIO 2010 and Vision and Change, which call for reformation in undergraduate biology education, CourseSource provides tools for faculty teaching life sciences who want to increase student learning. The developers of CourseSource recognize the tremendous time and effort it takes to change a biology curriculum. Moreover, they understand that some faculty want the freedom and flexibility to modify aspects of their course rather than changing everything all at once. Designed with these concerns in mind, CourseSource offers a variety of useful resources that allow you to improve your teaching style your way and at your own pace. More importantly, the resources hosted on the website have been peer reviewed by real faculty working in a variety of contexts.

Whether you teach introductory biology, genetics, or bioinformatics, CourseSource has materials that will help you grow your communication skills, engage your students, and inoculate excitement into the content. Faculty can browse the resources using a variety of categories that include class size, Vision and Change core concepts, lesson length, and pedagogical approach. These categories can also be used as filters to narrow down resources. Included are everything from simulations to education essays, and even unexpected materials like a guide for using Wikipedia in the classroom, tips for teaching biology in prisons, and a “how to” guide for producing recorded interviews.

Clicking on a resource, like “A First Lesson in Mathematical Modeling for Biologists: Rocs,” reveals a follow-up page that presents an “At a Glance” overview of the activity. Tabs along the top of the page give the user the freedom to look at the materials themselves, and to access supporting materials, information about the authors, comments from other users, and additional references and resources. Metadata can also be found, including the number of times each particular resource has been downloaded. For the experienced reformers, faculty are invited to register on the site and upload their materials for others to use.

Other life sciences education websites exist, with archives of resources that sit useless and used less over time, but CourseSource differs from all these in one very important way: curation. The resources offered have been carefully vetted, curated, and tailored by practicing faculty who understand the day-to-day challenges of teaching in higher education. These down-to-earth materials will empower you to transform the lives of your students, setting them up for success in future courses and ultimately in their careers.

Remy Dou
Clinical Assistant Professor
Florida International University
redou@fiu.edu