



**Designing Effective Lessons** examines the components of effective inquiry-based biology lessons and explores a model of how to use them to create lessons.

### Course Objectives

- Apply the principles of backward design to plan or revise a lesson
- Explore ways to improve the classroom learning environment
- Apply your learning to teaching cell biology, ecology, and other biology topics



Exemplary practice video in online course

### Course Syllabus

#### Session 1: A Model for Lesson Design

Identify the common components of effective lessons and use the approach called “backward design” to plan an activity on cell biology.

#### Session 2: An Environment for Learning

Explore the role that classroom environment plays in learning, identify strategies for developing a supportive learning environment, and apply these strategies to topics in ecology.

### Additional Course Information

15 contact hours

4th in a series of 4 online courses (high school / biology)

Other courses in the series:

1st course: **Inquiry in Science Education**<sup>†</sup>

2nd course: **Teaching About Genetics**<sup>†</sup>

3rd course: **Teaching About Evolution**<sup>†</sup>

A full survey course (45 contact hours), **Teaching High School Biology**, is also available.

<sup>†</sup> recommended before taking this course

We recommend 2-session courses be taken in order. If this is not possible, it's important to have a basic knowledge of the content and methodology described in the preceding courses.

#### About Teachers' Domain High School Courses:

Unlike the elementary and middle school courses, all high school courses assume a basic knowledge of the subject matter. These courses emphasize teaching strategies and methodology, particularly inquiry, and the use of technology and rich media in lessons. Science topics within these courses are those that are often found to be challenging to teach and learn. These topics are used to facilitate the study of methodology.

For information about all Teachers' Domain Professional Development courses, visit [www.TeachersDomain.org/courseinfo](http://www.TeachersDomain.org/courseinfo)

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