

Scientists Teaching Science Online Summer Course
6/6/2016 to 8/14/2016

Agenda

Course opens unofficially 5/30/2016

- *Week One: 6/6/2016*
 - **Active Learning and Expert Learners:** discussion of learning styles; assigned readings on current research findings about teaching and learning. *Assignments:* personal essay on teaching experience; discussion board posts.
- *Week Two: 6/13/2016*
 - **Learning Environments and Assessments:** discussion on rigor and improving academic outcomes in higher education; assigned readings on improving student outcomes. *Assignments:* first draft of Teaching Philosophy Statement; discussion board posts.
- *Week Three: 6/20/2016*
 - **Cultural Awareness and Diversity:** discrimination and bias in teaching; assigned readings about experiencing bias in science careers; inclusive classrooms; discussion about experiencing and handling bias/discrimination. *Assignment:* discussion board post.
- *Week Four: 6/27/2016*
 - **Inquiry-Based Science Education:** differences between traditional laboratory activities and inquiry-based investigations; assigned readings on inquiry-based teaching in a college biology class. *Assignments:* NONE.
- **Break (July 4 – July 10)**
- *Week Five: 7/11/2016*
 - **Writing Course Objectives:** Bloom's Taxonomy and student learning objectives; assigned readings about writing learning objectives. *Assignments:* discussion board posts; 10 learning objectives for a proposed class.
- *Week Six: 7/18/2016*
 - **Creating Valid Assessments & Alternative Assessments:** using rubrics and test blueprints; effective multiple choice and essay questions; designing and evaluating students without using tests for small and large classes; assigned readings on how to write valid assessment items. *Assignment:* 5 sample test questions based on previous objectives.
- *Week Seven: 7/25/2016*
 - **Teaching Online:** teaching and learning online; challenges, advantages, and common mistakes; course management systems; engaging students. *Assignment:* online quiz.

- *Week Eight: 8/1/2016*
 - **Elements of Curriculum Design:** instruction on the steps involved in designing an entire course, a training session, or a single lesson. *Assignment:* final copy of Teaching Philosophy Statement to include educational theories/strategies from course.
- *Week Nine: 8/8/2016*
 - **Writing a Syllabus & Reflections on Teaching:** purpose of a syllabus; legal requirements of teaching; student/academic honor codes; student study habits; assigned reading on plagiarism and the purpose of a syllabus. *Assignment:* model syllabus.
- Additional requirements include assigned readings and participation in **ONE** 45 minute live, online discussion. The instructor will schedule several sessions of live, online discussions and ask you to attend **one** of these over the course of the class.