UC Berkeley OLLI

Fall 2025: Biology & Society Course syllabus

Instructor:

- Eric J. Simon, Ph.D.
- <u>ericjsimon@berkeley.edu</u> (feel free to email any time)

Course Description:

- This course introduces participants to the scientific study of life with particular emphasis on real-world applications and the societal, social, ethical, and legal consequences of biological advances. Important biological principles will always be placed within the context of issues that affect all of us and the wider society (hence the name: Biology & Society!).
- This course is designed for non-scientists with little to no previous college-level science experience (or, at least, none recently!). No previous knowledge or experience with the subject of biology is assumed. If you have a strong background in biology, you may find some of the material to be review, but hopefully not too much of it!
- All participants are encouraged to consider and discuss the broader implications of the topics under discussion. Many of them are at the leading edge of scientific advances and so the ethical and legal debates regarding how and if such advances should be implemented are ongoing. Ample time will be given for discussion and all participants are encouraged to share their thoughts on these important and relevant topics.

Course schedule:

- All sessions are on Zoom for 2 hours on Thursdays from 1:30-3:30PM Pacific time.
- Each class will consist of a 50 minute lecture, a 10 minute break, a 45 minute lecture, and a final 15 minute Q&A and discussion.
- The following is a tentative list of topics. The topics to be discussed may be changed depending on the interest and feedback of class participants.
 - 1. Thu Sep 15th: An introduction to biology, science, and evolution
 - 2. Thu Sep 22nd: The biology of cancer
 - 3. Thu Sep 29th: DNA profiling and genomics
 - Thu Oct 6th: Genetic engineering and GMOs Thu Oct 13th: <u>No class</u>
 - 5. Thu Oct 20th: Emerging viruses
 - 6. Thu Oct 27th: The Modern Synthesis: Genetics and Evolution

Instructor biography:

Eric J. Simon, Ph.D., is a professor in the Department of Biology and Health Science at New England College in Henniker, New Hampshire. There, he specializes in teching biology to non-science-major students. In addition to teaching, Dr. Simon is an award-winning nature photographer who leads educational trips for both undergraduates and lifelong learners to such destinations as Belize, the Galapagos, Tanzania, Cuba, the Amazon river, and Patagonia. Dr. Simon received a B.A. in biology and computer science and an M.A. in biology from Wesleyan University, and a Ph.D. in biochemistry from Harvard University. Dr. Simon is the author of a widely used series of college biology textbooks with over 2 million books in print that help



teach biology to students in over 40 countries. Prof. Simon also teaches online lifelong learners at a variety of institutions.