BIOL 585

Term: SPRING 2016 Course No. & Section: BIOL 585-01

Course Title: ISSUES IN BIOTECHNOLOGY

Professor: DR. KAM DAHLQUIST

Course Description (principal topics covered):

Objectives:

- To read and critically evaluate the primary scientific literature in biotechnology
- To learn about and follow the ethical code of conduct for the scientific community
- To form opinions about the ethical, legal, and social implications of biotechnology research consistent with your values
- To integrate what you are learning in this class with other classes and other realms of life

Contents:

We will explore the science behind and the ethical, legal, and social implications of various areas of biotechnology. Topics may include: privacy of genomic information, race and genomics, embryonic stem cell research, somatic cell nuclear transfer, gene therapy, clinical trials, health care in developing nations, and proper scientific conduct. We will use a variety of media to explore these topics, including the primary scientific literature, biography, novels, and movies.

Prerequisites/Recommended Background:

Upper division Biology, Biochemistry, or Chemistry major
BIOL 201 (Cell Function) & BIOL 202 (Genetics)
Organic Chemistry (both semesters)
Senior-level standing

Required Texts/References:

The Cheating Culture: Why More Americans Are Doing Wrong to Get Ahead by David Callahan, ISBN: 0156030055
Papers from the primary literature TBA

Course Work/Expectations:

Attendance at all sessions is required
Weekly readings and participation in discussion
Weekly written reflections on the readings and discussion
Two class presentations in which student teams will present and lead discussion
Capstone project where students will write a paper that reviews the scientific literature in an area of biotechnology, discusses the ethical, legal, and/or social implications of the technology, and makes policy recommendations

Comments:

Fulfills 2 credit seminar or research course for Biology majors
Fulfills the Oral Communication flag for the University Core Curriculum
Fulfills the Writing Flag for the University Core Curriculum