

Course Information

BioSc172 – Introduction to Biotechnology
Contra Costa College
3 unit course

Fall 2014
Katherine Krolikowski

Course Description: This course will teach students about all aspects of the biotechnology field, with content appropriate for a wide range of students and professionals. Topics will include the biology, business, and legal/ethical issues surrounding biotechnology; cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechnology company structure, and the regulations affecting the field.

Class Meetings: 3 hours each week online. Lectures, web page explorations, and videos.

Contact: Katie Krolikowski Office: B-4, Phone: (510) 215-3990, Email: krolikowskiccc@gmail.com

Desire2Learn: Course resources will be made available via Desire2Learn. To get to Desire2Learn, go to: <https://desire2learn.4cd.edu> You will be prompted for your InSitePortal/WebAdvisor ID and password. After logging in, you can choose 2014SP-BIOSC-172-6765 from the "My Courses" menu.

ItunesU: Lectures are delivered as podcasts at iTunesU. *Username:* biotech *Password:* biotech123

Office Hours: On D2L "Online office hours" within "Course Information Start Here". I will not have a scheduled response hour, but will check once a day Monday-Friday. You can answer each others' queries here, too! You can also schedule a "live" time to meet with me via email. I also have in-person office hours: M (**At The HUB**, PS107 11AM-12PM *or* 1PM-2:30PM), Tu (My Office, B4 10:00 AM-11:00AM), W (Biotech lab, B-22, B4 3:30-4:30PM), Th (My Office, B4 12:30-2PM)

Required Materials: *Book:* Introduction to Biotechnology, Thieman, and Palladino, *Email account:* you must be able to check this at least four days during the week. *Access to a computer:* 10 hours a week.

Evaluations:

Quizzes = 300 points (20 points each)

Discussion Participation = 150 points (10 points each topic)

Assignments = 200 points (13.3 points each topic)

Reports = 150 points (2 reports, 75 points each)

In -person exams = 200 points (1 midterm, 1 final; 100 points each)

Total for course = 1000 points

A: 90-100%, **B:** 79-89%, **C:** 65-78%, **D:** 50-64%, **F:** below 50%

Attendance: For success in this course, you must participate fully 3 hours each week with online "in-class" activities. These include listening to lectures, following the lecture guide, visiting web pages and watching movies. Also expect 6 hours of "out of class" activities per week. These include reading, preparing for quizzes, preparing assignments and reports. Discussion participation is also required, so making time in your schedule to participate actively during the set time for discussion is very important. Reports will require more than one week to complete, so you will need to plan your schedule to allow you both to submit good work.

General Notes: Write-ups and homework assignments are to be your own work. Working through the material in groups is encouraged, but it is essential that the material turned in is entirely your own. Spelling, grammar, writing style and attention to the format of the exercise are important.

I highly encourage you to learn actively by participating in discussions and online activities, and by taking advantage of office hours, phone, email, and discussion communication with your professor.

SLO's: Students will increase understanding and knowledge of the biotechnology field, including: the fact of continued innovation (R&D) going on, awareness of ethical questions - innovation vs social concerns, structure of biotechnology companies, R&D, Process Development, QA/QC. Students will demonstrate an understanding of regulation in biology. Students will increase understanding and knowledge of basic biological concepts of biotechnology including: Molecular biology/genetic engineering, Applications of biotechnology, Central dogma. Recombinant DNA - transgenic----> controls protein, what is a protein.

Course Web Page: Some course materials will also be made available at the course web page:

Go to: <http://www.cccbiotechnology.com> Choose: Dr. K's Website Choose: BioSc172 -

Introduction to Biotechnology Password (if needed): biotechnology172

DSPS Statement (approved by the ASC 11/19/01) *"The Rehabilitation Act of 1973, Section 504, requires Contra Costa College to make all programs accessible to qualified individuals with learning, physical, or psychological disabilities. Students who would like to receive accommodations for their learning, physical, or psychological disabilities should contact the Disabled Students Programs & Services (DSPS) office (SSC-109) and schedule an appointment. (510) 215-3969."*