

Course: BIOT 104

Also Listed As:

Term Effective: 200730, CURRICULUM APPROVAL DATE: 09/25/2006

Short Title: BIOTECHNOLOGY SEMINAR

Full Title: Seminar in Biotechnology

<u>Contact Hours/Week</u>	<u>Units</u>	<u>Number of Weeks</u>	<u>Total Contact Hours</u>
Lecture: 1	1	17	Lecture: 17
Lab: 0			Lab: 0
Other: 0			Other: 0
Total: 1			Total: 17

Credit Status: D - Credit - Degree Applicable

Grading Modes: L - Standard Letter Grade

Repeatability: N

Schedule Types: 02 Lecture and/or discussion

Course Description:

This course will survey careers in biotechnology and ethical issues in biotechnology.

## ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 200730

UC TRANSFER:

Not Transferable

PREREQUISITES:

COREQUISITES:

### STUDENT LEARNING OUTCOMES:

1. Describe different career options in biotechnology.

ILO: 3, 1

Measure: Class discussion, oral presentation, written summaries of field trips and/or speakers

2. Identify education level and skills required for different careers in biotechnology.

ILO: 3

Measure: Written project detailing qualifications for at least 10 different biotechnology careers

3. Demonstrate the ability to prepare a resume for a position at a biotechnology firm.

ILO: 3

Measure: Written project: sample resume

4. Prepare a list of at least three current biotechnology job opportunities within fifty miles of Gavilan College.

ILO: 3

Measure: Written project

5. Identify and discuss potential ethical issues in biotechnology.

ILO: 1,3,4

Measure: Class discussion, written summaries of field trips and/or speakers

### TOPICS AND SCOPE:

Curriculum Approval Date: 09/25/2006

2 Hours

Introduction to Biotechnology: What careers are available in biotechnology in the Bay area and beyond. (Weekly assignments will include reading of textbook, and preparation of a summary sheet of different biotechnology careers covered. Each summary sheet will include education and skill requirements, salary, and job availability, as well as potential ethical issues. Students will present information to the class, individually or as part of a team, depending on class size.)

2 Hours

Genetic Engineering Biotechnology careers: Education and skill requirements; employment opportunities; ethical issues (Assignment: read textbook, preparation of summary sheet, and presentation of information to the class.)

2 Hours

Agricultural Biotechnology careers: Education and skill requirements; employment opportunities; ethical issues. (Assignment: read textbook,

preparation of summary sheet, and presentation of information to the class.)

2 Hours

Pharmaceutical and Industrial Biotechnology Careers: Education and skill requirements; employment opportunities; ethical issues. (Assignment: read textbook, preparation of summary sheet, and presentation of information to the class.)

2 Hours

Biochemistry/Biomedical and Biomedical Engineering Biotechnology Careers: Education and skill requirements; employment opportunities; ethical issues. (Assignment: read textbook, preparation of summary sheet, and presentation of information to the class.)

2 Hours

Forensics Biotechnology Careers: Education and skill requirements; employment opportunities; ethical issues. (Assignment: read textbook, preparation of summary sheet, and presentation of information to the class.)

3 Hours

Survey of Biotechnology Education programs (Certificates and Degrees); Employment searches; resume preparation; interview skills. (Assignments will include preparation of a resume and preparation of a list of at least three biotechnology job opportunities within a fifty mile radius of Gavilan College.)

1 Hours

Final Exam

#### METHODS OF INSTRUCTION:

Methods of instruction will include traditional lecture with student presentations, guest lecturers and field trips to biotechnology firms.

#### METHODS OF EVALUATION:

The types of writing assignments required:

Written homework

Term papers

The problem-solving assignments required:

None

The types of skill demonstrations required:

Class performance

The types of objective examinations used in the course:

None

Other category:

None

The basis for assigning students grades in the course:

Writing assignments: 85% - 90%

Problem-solving demonstrations: 0% - 0%

Skill demonstrations: 10% - 15%

Objective examinations: 0% - 0%

Other methods of evaluation: 0% - 0%

#### REPRESENTATIVE TEXTBOOKS:

1. Wetfeet Staff, "The Wetfeet Insiders Guide to Careers in Biotechnology and Pharmaceuticals", Wetfeet Publishing, 2003
  2. Daugherty, Ellyn, Biotechnology, "Science for the New Millenium", Paradgm Publishing, 2007 or other appropriate college level text.
- Reading level of text: 1. 15 grade 2. College level grade. Verified by: 1. Dana Young 2.Shuk Auyeung

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: A

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: D

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000344528

Sports/Physical Education Course: N

Taxonomy of Program: 043000