



BIO TECHNOLOGY

CAREER PATHS:

- ▶ Pharmaceuticals
- ▶ Genetic Engineering
- ▶ Organ Transplants
- ▶ Tissue Culture
- ▶ Food Science
- ▶ Human Genome Mapping
- ▶ Forensics Science
- ▶ Educator

Get the Skills Necessary
To Compete!



COLLEGE OF THE CANYONS

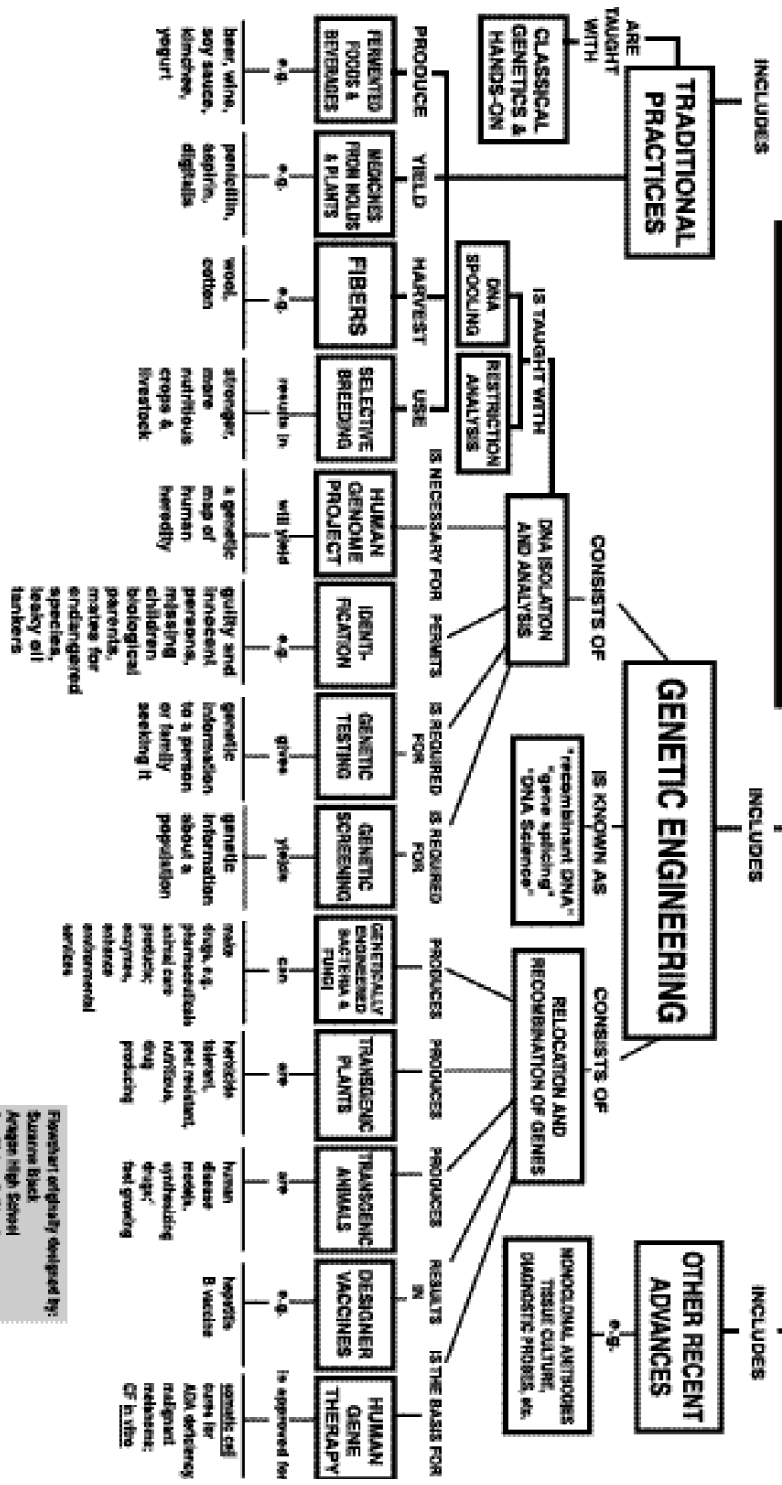


26455 Rockwell Canyon Road,
Santa Clarita, CA 91355

BIOTECHNOLOGY

"The use of biological processes to solve
problems and improve our quality of life."

"There are science and the
application of science, bound
together as the fruit of the
tree which bears it."
—L. Pasteur, 1871



PowerPoint originally developed by:
Doreen Black
Angen High School
San Mateo, California

Whether you plan to enter the workforce, transfer to a 4 year school, or want to refine your lab skills, make sure you have the skills to make your portfolio competitive.

What is Biotechnology?

" Biotechnology is the use of biological processes to solve problems and improve the quality of life"

Biotechnology is everywhere! To give you a clearer picture of this vast realm of science look at the flowchart on the back of this brochure.

How do I become a biotechnologist?

No one career path is for everyone, but by following this program many students have realized their career goals.

HIGH SCHOOL PREPARATION

Start with a strong foundation in high school. Try to excel in all of your studies and pay particular attention to your progress in the math and science. These subjects should be enjoyable to you as they will form the basis of your career choice. Here are some comments on the specific courses.

- **Biology:** Try to learn the language of biology as this is central to many biotech programs.
- **Chemistry:** Strive to understand this complex field as biotech is very rich in chemistry. Also try to refine your lab technique.
- **Math and Physics:** The more the merrier and strong analytical and problem solving skills will place you at the front of the class.
- **English:** Yes English. To succeed you will need strong writing and reading skills.

COLLEGE OF THE CANYONS AND YOU!

Training in biotechnology can lead to many different career paths. For each career path, biotechnology at College of the Canyons can play a role:

- **Certificate course of study:** A 19 unit study series culminating in a project based biotechnology course.
- **Transfer Program:** BioSci 230 transfers to UC and CSU schools and meets requirement for entry into molecular biology courses. The additional lab skills gleaned in 231 puts you in good position to continue your studies.
- **Pre-professional training:** Biotechnology has enormous entry and exit potential. Through internships, resume and interview workshops and research programs, students of biotechnology can get valuable on the job experience. **What better way to see if you like a given professional than to try working in a real lab setting!**
- **Small class sizes.** Specific attention is given to your career goals. State of the art equipment, training and a wide spectrum of applications all at \$11 per unit!

THE MOST SUCCESSFUL STUDENTS ARE THOSE THAT TAKE THE INITIATIVE TO DECIDE THEIR CAREER PATH. MAKE COLLEGE OF THE CANYONS AND BIOTECHNOLOGY PART OF THOSE PLANS AND MAKE THE CALL!

* CLUES:

The CLUES program is an acronym for the California Lutheran University Enriched Science program. This biotechnology outreach program has served as the template for College of the Canyons program and COC gratefully acknowledge CLU's help in initiating and establishing this program.

COURSE LISTING:

Required courses:

Biology 107:
Molecular and Cell Biology4 units

Biology 230:
Introduction to Biotechnology5 units

Biology 231:
Advanced Topics in Biotechnology5 units

Chemistry 201:
General Chemistry 16 units

Math 140:
Introductory Statistics4 units

Highly Recommended:

English 090:
Writing Skills3 units

Chemistry 202:
General Chemistry 25 units

Biology 221
Introduction to Microbiology5 units

Biotechnology is very interdisciplinary. The more science, math and computer courses you take, the more competitive your portfolio will be.

This program is designed to be completed in 3 semesters. *A possible program of study would be as follows:*

- | | |
|---|---|
| ▶ SEMESTER 1: Biology 107 Chemistry 201 | ▶ SEMESTER 2: Biology 230 Math 140 English 090 |
| ▶ SEMESTER 3: Biology 231 Chemistry 202 | |

CONTACT INFORMATION:

For more information on the biotechnology program and College of the Canyons admittance requirements call:

Jim Wolf
Phone: (661) 362-3092 or
Email: wolf_j@mail.coc.cc.ca.us