



CURRICULUM GUIDE 2015-2016

MOLECULAR BIOLOGY RESEARCH TECHNIQUES

Certificate of Accomplishment in Molecular Biology Research Techniques

Requirements for Certificate of Accomplishment:

- a) Complete satisfactorily the courses listed for the particular certificate.
- b) Complete at least 50% of the required units at Ohlone College.
- c) Maintain a 2.0 grade point average.

MOLECULAR BIOLOGY RESEARCH TECHNIQUES

This certificate is designed for biology students planning to transfer to a university, to get the hands-on skills in DNA cloning, sequencing, PCR, and other molecular biology techniques that will qualify them to work in research laboratories.

Student Learning Outcomes

1. Demonstrate an understanding of key theoretical concepts in molecular biology and biotechnology.
2. Demonstrate the ability to keep a legal scientific notebook compatible with biotechnology industry standards.
3. Demonstrate the use of instrumentation and techniques common to the molecular biology laboratory.
4. Practice proper laboratory safety.

BIOL-101A	Principles of Biology--Molecular and Cellular	5
BIOT-110A	DNA and Protein Purification and Analysis	3
BIOT-111A	Genomic and cDNA Library Construction and Analysis	1
BIOT-111B	PCR Primer Design and Optimization and Reverse Transcription PCR	$\frac{1}{10}$