



Bio-Manufacturing

CERTIFICATE PROGRAM



12 WEEK INTENSIVE CAREER PREPARATION EARNING 9 UNITS OF COLLEGE CREDIT

SKYLINE COLLEGE CENTER FOR WORKFORCE DEVELOPMENT
3300 COLLEGE DR SAN BRUNO CA 94066 WWW.SKYLINECOLLEGE.EDU/WORKFORCE

INTENSIVE 12 WEEK BIOMANUFACTURING CAREER PREPARATION

A CA COMMUNITY COLLEGE ASSOCIATION FOR OCCUPATIONAL EDUCATION "EXCELLENCE IN PARTNERSHIP" WINNER

Biototechnology is a term used to cover the utilization of living things in industry, the environment, medicine and agriculture.

Biotechnology is used in the production of foods and medicines, the reduction of wastes and the creation of renewable energy sources.

Bio-Pharmaceutical Manufacturing training prepares graduates for work in Biotechnology and Pharmaceutical Manufacturing.

These positions include Bio-processing Technicians, Labeling and Packaging Operators, Instrument and Media Prep Technicians and positions in manufacturing pharmaceuticals. Graduates perform tasks such as preparing buffer solutions, operating filtration and column chromatography, cleaning and preparing glassware, operating autoclaves and performing under sterile conditions and utilizing Good Manufacturing Practices (GMPs). Starting salaries range from \$30k - \$40k per year.

The Program includes a twelve-week daytime biotechnology classroom and laboratory format that meets on MWF from 9:00 a.m. - 2:00 p.m. Additional instruction in Mathematics will be offered by arrangement. Upon completion of this 12-week certificate program, students may compete for a 12-week paid work experience at a local biotechnology company. The twelve-week Classroom & laboratory section will include topics in chemistry (measurement systems, molecules, acids and bases, volume and density and safe laboratory practices), mathematics, mechanical systems, microbes, Good Manufacturing Practices and regulations. Students will be expected to complete and document laboratory activities



appropriately, access and document information on a computer and communicate information effectively with a team.

Skyline's Center for Workforce Development and the Science Math and Technology Division partner to deliver the bio-manufacturing certificate program. The Science, Mathematics, & Technology Division offers courses required for General Education, technical, and majors-level to assist

students in achieving their individual educational goals, prepare students for transfer to four-year institutions, and help students in career planning and development. The division dean is *Michael Williamson* who led the development of the curriculum for the bio-manufacturing program.

The program is team taught by instructors *Nick Kapp*, Ph.D. (Biochemistry) and *Mousa Ghanma*, M.S. (Medical Biology). Contextualized math is taught by *Evan Leach*. The Center for Workforce Development is directed by *William Watson*. The Program Services Coordinator for this program is *Adolfo Leiva*. The Science, Math and Technology Division and the Center for Workforce Development enjoy the leadership of Skyline College Vice President of Instruction, *Regina Stanback-Stroud* and Skyline College President, *Dr. Victoria Morrow*. San Mateo County Workforce Investment Board President is *William Allen*. Additional support for this program is provided by San Mateo County Workforce Development 's *Fred Slone*, *Emma Gonzales*, *Eduardo Kiryczun*, and *Claudia Andrade*.

Students admitted to this program should be prepared for an intensive, high quality educational experience. Over 90% of students admitted to this program complete the program successfully and approximately 80% of those successfully complete for placements at Bay Area Biotechnology companies. 100% of recent program graduates rated their overall experience at Skyline College as "Excellent" and designated an "Excellence in Teaching Award" for instructor Mousa Ghanma. Students must first establish eligibility for the program by contacting San Mateo County Workforce Development at 650-802-3349.