

BIOMANUFACTURING COURSE

4 credit hour laboratory course developed with grant funding. Sixteen (16) credit hour Certificate Program revised to include Biomanufacturing course.

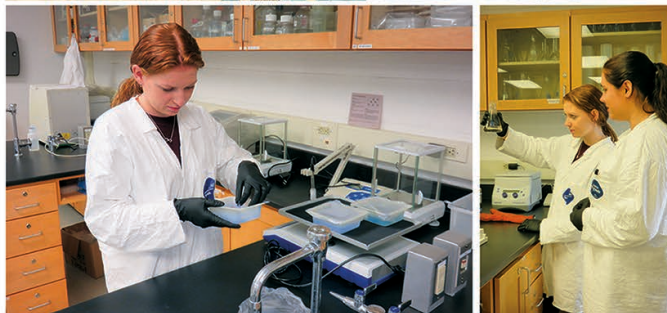
Revised Certificate Course of Study:

- Biotechnology Methods and Techniques
- Cell and Tissue Culture
- Biomanufacturing
- Chemistry I

Revised Biomanufacturing course provides a comprehensive introduction to the manufacturing of protein products. Students use mammalian cells to produce proteins products by applying biomanufacturing techniques such as upstream and downstream processing and quality control of protein production. Students are introduced to current Good Manufacturing Practices regarding documentation and data collection.

CAPACITY BUILDING EQUIPMENT

- Upstream & Downstream Processing Equipment
- Applikon Bioreactors
- Chromatography Systems
 - Akta Pure FPLC
 - Buck HPLC
- Biochemistry Analyzer
- Instrument SOPs developed



PROGRAM HIGHLIGHTS

- Development of 4 credit hour Biomanufacturing course
- Build capacity to enhance active learning for all courses in the biotechnology program
- 67 students served in one or more biotechnology courses *
 - 11 students completed AA degree/certificate
 - 8 placements (5 employed, 3 transfers)
- Build industry partnerships

INDUSTRY PARTNERS

- Lampire Biological Laboratories
- NMS Labs
- PA Biotechnology Center of Bucks County
- Onconova Therapeutics
- Atrin Pharmaceuticals

*Includes students progressing through certificate or degree completion

