

NORTH MONTCO TECHNICAL CAREER CENTER BIOTECHNOLOGY (Dual Credit)

Biotechnology is a diverse and challenging field with excellent opportunities for advancement and career growth in pharmaceutical and biotechnology companies, as well as research and clinical laboratories. Students enrolled in the Biotechnology program will explore diverse career choices in academic, clinical and industrial settings. Specialized areas include pharmaceutical, medical, agricultural, environmental and legal. Students comply with safety guidelines while learning standard laboratory techniques of microbiology, preparing media and solutions, and maintaining inventory and supplies. Specialized training is then provided in cell culture, protein purification, recombinant DNA technology, and forensics. This is a laboratory intensive program that integrates technical competency with employability skills and related academic content. **The biotechnology program is dual credit with Montgomery County Community College and students can earn 8 college credits.** (Speak to a guidance counselor or the instructor for more information.)

UNITS OF STUDY (GENERAL DUTY LIST)

- Safety
- Microbiology
- Recombinant DNA Technology
- Upstream Processing/Tissue Culture
- Separation Methods
- Downstream Processing/Protein Purification
- Immunology
- Forensics
- Quality Control/Assurance and Regulatory Compliance
- Support Work

PHYSICAL CRITERIA

- Manual dexterity
- Good eye/hand coordination
- Physical stamina

WHAT YOU WILL NEED

- Independence/initiative
- Critical thinking/problem solving ability
- Intellectual curiosity
- Motivation/perseverance
- Maturity/enthusiasm
- Attention to detail
- Observational skills
- Organizational skills
- Communication proficiency

UNIFORM/EQUIPMENT LIST (With approximate costs)

- White lab coat (provided)
- 3-Ring Binder (\$5)
- Marble composition book (\$2)
- Safety glasses (provided)
- Calendar/daily planner
- Blue or black ink pens
- USB flash drive (also know as a jump drive or memory stick) (\$10-\$20)
- College textbooks (provided)
- College tuition (at dual credit rate)

POTENTIAL CAREER OPPORTUNITIES*

Entry-level jobs include:

Media Prep Technician	Laboratory Assistant
Research and Development Associate	Biomanufacturing Technician
Forensics Analyst	Laboratory Technician

*** Career opportunities require graduation from high school with technical training and the usual option of pursuing post-secondary education at a 2- or 4- year college/university. Biotechnology is an excellent choice for pre-med and pre-vet students, as well as those considering biomedical engineering or graduate school in the Life Sciences.**

North Montco Technical Career Center
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215-368-1177 • www.nmtcc.org

Northern Montgomery County Technical Career Center does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities and provides equal access to youth groups. Inquiries may be directed to the Administrative Director-the Title IX Coordinator/Section 504/ADA Title II Coordinator at 1265 Sumneytown Pike, Lansdale, PA 19446.