

TECHNICAL & VOCATIONAL PROGRAMS

Biotechnology

A 20 10 0 Associate in Applied Science

(Instructional Service Area Agreement with Pitt CC)

Biotechnology prepares individuals as skilled laboratory technicians in various fields of biological and chemical technology. The curriculum objectives are designed to prepare graduates to serve as Research Assistants to a biologist or chemist, Laboratory Technicians/Instrumentation Technicians, and Quality Control/Quality Assurance Technicians. Employment opportunities include research and development, manufacturing, pharmaceuticals, forensic laboratories, sales, and customer service.

General Education Courses

		<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
<i>Communications</i>						
ENG 111	Expository Writing	ENG 090/RED 090]	F1	3	0	3
ENG 112	Argument Based Research	[ENG 111]	S1	3	0	3
or						
ENG 113	Literature Based Research	[ENG 111]	S1	3	0	3
or						
ENG 114	Professional Research and Reporting	[ENG 111]	S1	3	0	3
<i>Natural Science/Mathematics</i>						
		<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
BIO 111	General Biology I	[ENG 090/RED 090/MAT 070]	F1	3	3	4
BIO 112	General Biology II	[BIO 111]	S1	3	3	4
*PHY 110	Conceptual Physics	[MAT 070]	F1	3	0	3
*PHY 110A	Conceptual Physics Lab		F1	0	2	1
or						
*PHY 151	College Physics I	[MAT 161, 171 or 175]	F1	4	2	4
MAT 161	College Algebra	[MAT 080 or 090]	S1	3	0	3
or						
MAT 175	Precalculus	[MAT 080 or 090]	S1	4	0	4
<i>Social/Behavioral Science:</i>		<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
Choose 3 semester credit hours from the following list.						
PSY 150	General Psychology	[ENG 090/RED 090]	F1	3	0	3
POL 120	American Government	[ENG 090/RED 090]	F1	3	0	3
SOC 210	Introduction to Sociology	[ENG 090/RED 090]	F1	3	0	3
<i>Humanities/Fine Arts:</i>		<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
Choose 3 semester credit hours of approved courses from the CAA Course List.						
Humanities/Fine Arts elective can not be a first level foreign language or communications class.						
_____		[Varies]	S1	3	0	3

Other Required Courses

<i>Courses:</i>		<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ACA 111	College Student Success		F1	1	0	1
CIS 110	Introduction to Computers	[ENG 090/RED 090/MAT 070]	S1	2	2	3

Major Courses: Core (Completed at Pitt Community College) Second Year

<i>Courses:</i>	
BTC 181	Basic Lab Techniques
CHM 131	Introduction to Chemistry
CHM 131A	Introduction to Chemistry Lab
CHM 132	Organic and Biochemistry
BIO 275	Microbiology
BTC 281	Bioprocess Techniques
BTC 285	Cell Culture
BTC 286	Immunological Techniques
BTC 250	Molecular Genetics
BTC 270	Recombinant DNA Tech
BTC 288	Biotech lab Experience
or	
COE 112	Co-op Work Experience I
*Student must take PHY 110/110A or PHY 151	



College of The Albemarle
 Associate in Applied Science
 Biotechnology (A 20 10 0)
 Graduation Check Sheet – 2009-2011 Catalog

Listed below are the requirements for your degree program. It is your responsibility to keep this sheet up-to-date and review it with your advisor to know what you need to graduate. Complete the Graduation Application one semester prior to the intended date of graduation.

Title	Seq	Class	Lab	Crd	Grade	Sem
I. GENERAL EDUCATION COURSES						
Completed at College of The Albemarle						
Communications						
ENG 111 Expository Writing [P=ENG090/RED090]	F1	3	0	3	_____	_____
ENG 112 Argument Based Research [P=ENG111]						
-or-						
ENG 113 Literature Based Research [P=ENG111]	S1	3	0	3	_____	_____
-or-						
ENG 114 Professional Research and Reporting [P=ENG111]						
Natural Science/Mathematics:						
BIO 111 General Biology I [P=ENG090/RED090/MAT070]	F1	3	1	4	_____	_____
BIO 112 General Biology II [P=BIO111]	S1	3	1	4	_____	_____
*PHY 110 Conceptual Physics [P=MAT070]	F1	3	0	3	_____	_____
*PHY 110A Conceptual Physics Lab	F1	0	1	1	_____	_____
-or-						
*PHY 151 College Physics I [MAT161, 171 or 175]	F1	4	0	4	_____	_____
MAT 161 College Algebra [P=MAT080 or 090]	S1	3	0	3	_____	_____
-or-						
MAT 175 Precalculus [P=MAT080 or 090]	S1	4	0	4	_____	_____
Social/Behavioral Science: Choose 3 semester credit hours from the following list:						
PSY 150 General Psychology [P=ENG090/RED090]						
POL 120 American Government [P=ENG090/RED090]	F1	3	0	3	_____	_____
SOC 210 Introduction to Sociology [P=ENG090/RED090]						
Humanities Elective: Choose 3 semester credit hours of approved courses from the CAA course list.						
_____ [P=Varies]	S1	3	0	3	_____	_____
Humanities/Fine Arts elective can not be a first level foreign language or communications class.						
II. OTHER REQUIRED HOURS						
ACA 111 College Student Success	F1	1	0	1	_____	_____
CIS 110 Introduction to Computers [P=ENG090/RED090/MAT070]	S1	2	2	3	_____	_____

III. Major Courses: Core

(Completed at Pitt Community College

SECOND YEAR

BTC 181 Basic Lab Techniques

CHM 131 Introduction to Chemistry

CHM 131A Introduction to Chemistry Lab

CHM 132 Organic and Biochemistry

BIO 275 Microbiology

BTC 281 Bioprocess Techniques

BTC 285 Cell Culture

BTC 286 Immunological Techniques

BTC 250 Molecular Genetics

BTC 270 Recombinant DNA Tech

BTC 288 Biotech lab Experience

-or-

COE 112 Co-op Work Experience I

*Students must take PHY 110/110A or PHY 151